

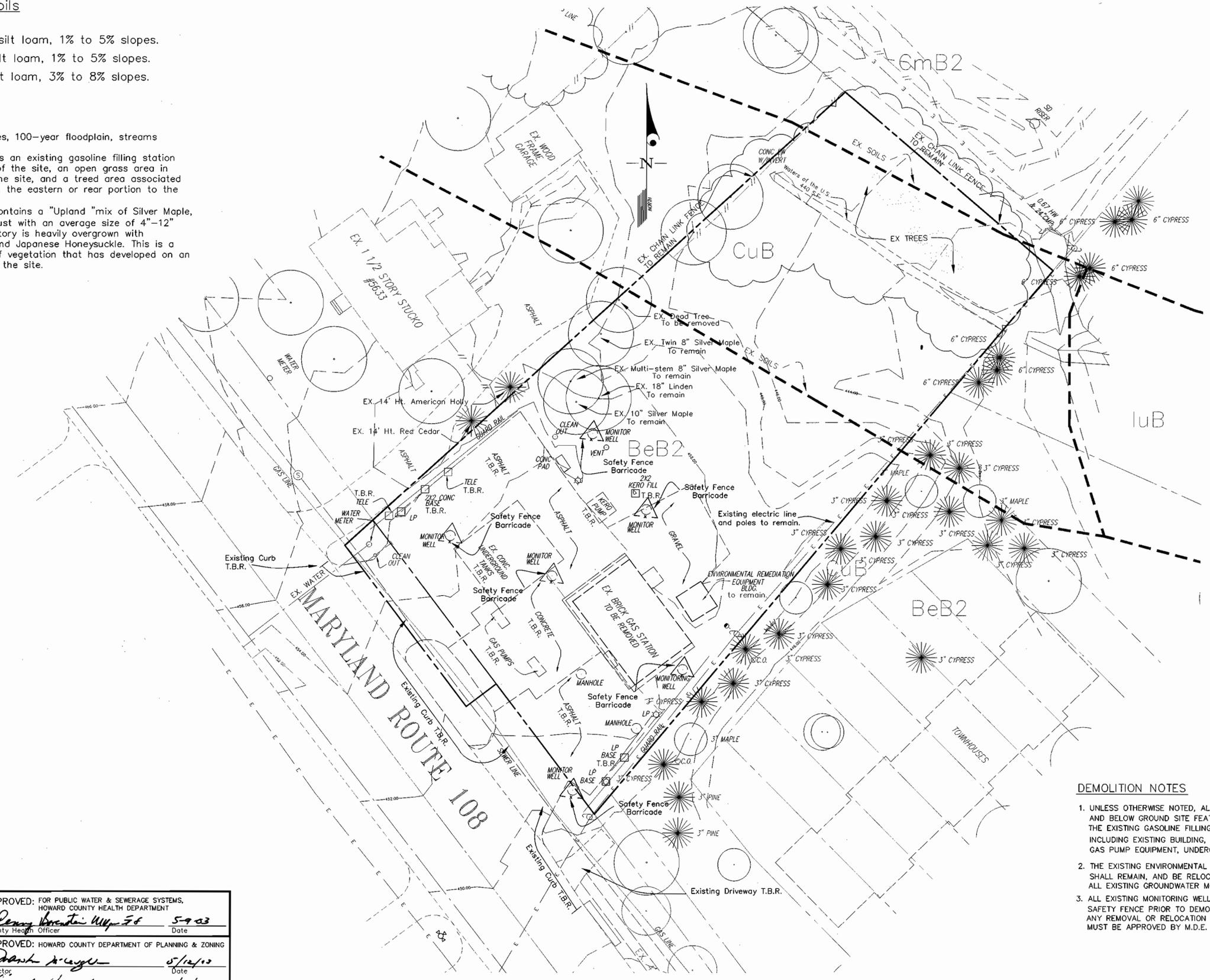


**Howard County Soils**

Symbol	Name
BeB2	Beltsville silt loam, 1% to 5% slopes.
CmB2	Chillum silt loam, 1% to 5% slopes.
CuB	Comus silt loam, 3% to 8% slopes.

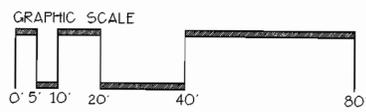
**GENERAL NOTES**

- There are no steep slopes, 100-year floodplain, streams or wetland on the site
- The existing site contains an existing gasoline filling station in the western portion of the site, an open grass area in the central portion of the site, and a treed area associated with a drainage swale in the eastern or rear portion to the property.
- The existing tree area contains a "Upland" mix of Silver Maple, Mulberry, and Black Locust with an average size of 4"-12" in diameter. The understory is heavily overgrown with Multi-flora rose Briar, and Japanese Honeysuckle. This is a relatively young group of vegetation that has developed on an unmaintained portion of the site.



**DEMOLITION NOTES**

- UNLESS OTHERWISE NOTED, ALL ABOVE GROUND AND BELOW GROUND SITE FEATURES ASSOCIATED WITH THE EXISTING GASOLINE FILLING STATION SHALL BE REMOVED INCLUDING EXISTING BUILDING, ASPHALT/CONCRETE PAVING, GAS PUMP EQUIPMENT, UNDERGROUND STORAGE TANKS, AND LIGHT POLES.
- THE EXISTING ENVIRONMENTAL REMEDIATION EQUIPMENT BUILDING SHALL REMAIN, AND BE RELOCATED ON-SITE. ALL EXISTING GROUNDWATER MONITORING WELLS SHALL REMAIN.
- ALL EXISTING MONITORING WELLS SHALL BE BARRICADED WITH ORANGE SAFETY FENCE PRIOR TO DEMOLITION AND DURING ALL CONSTRUCTION. ANY REMOVAL OR RELOCATION OF EXISTING MONITORING WELLS MUST BE APPROVED BY M.D.E.



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*Penny Brantley* 5-9-03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Dan Kuylen* 5/12/03  
Director Date

*Linda Hamrick* 5/12/03  
Chief, Division of Land Development Date

*John Dammann* 5/17/03  
Chief, Development Engineering Division Date

**GLWGUTSCHICK LITTLE & WEBER, PA.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
2-04-03	Revised per H.C. comments	KAF	

PREPARED FOR:  
COLUMBIA LAND CORPORATION  
2127 YORK ROAD  
TIMONIUM, MARYLAND 21093  
ATTN: MR. SCOTT DAVIDSON  
TELE: 410-560-0312

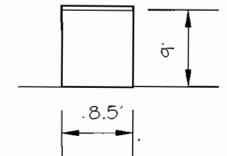
**Existing Condition Plan, Demolition Plan, & Soils Map**  
**MONTGOMERY RUN SERVICE CENTER**  
Gasoline Service Station and Convenience Store  
PARCEL 287  
Liber 4076, folio 0636  
ELKRDGE ELECTION DISTRICT No. 1  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1:20	B-2	02006
DATE	TAX MAP	SHEET
OCT, 2002	31-37	2-OF-9

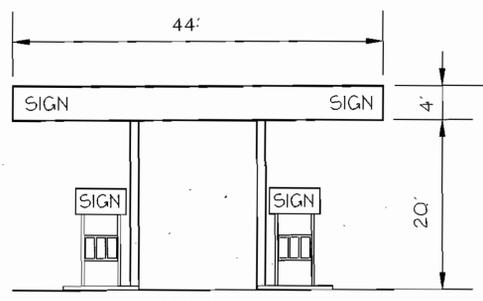


Environmental Equipment Bldg.  
**REAR ELEVATION**  
Not to Scale

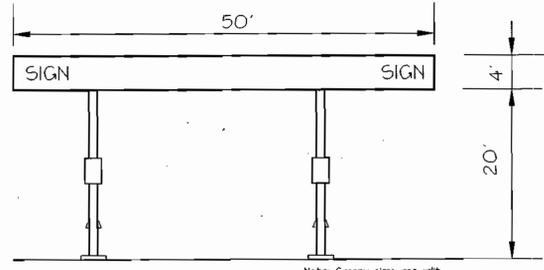
Environmental Equipment Bldg.  
**FRONT ELEVATION**  
Not to Scale



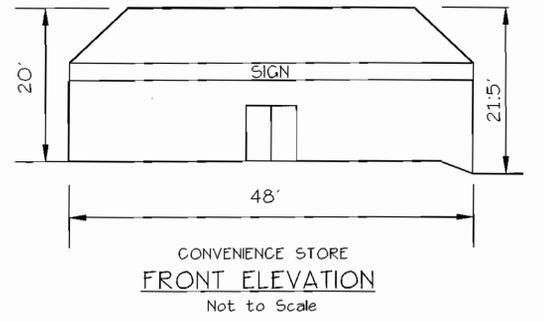
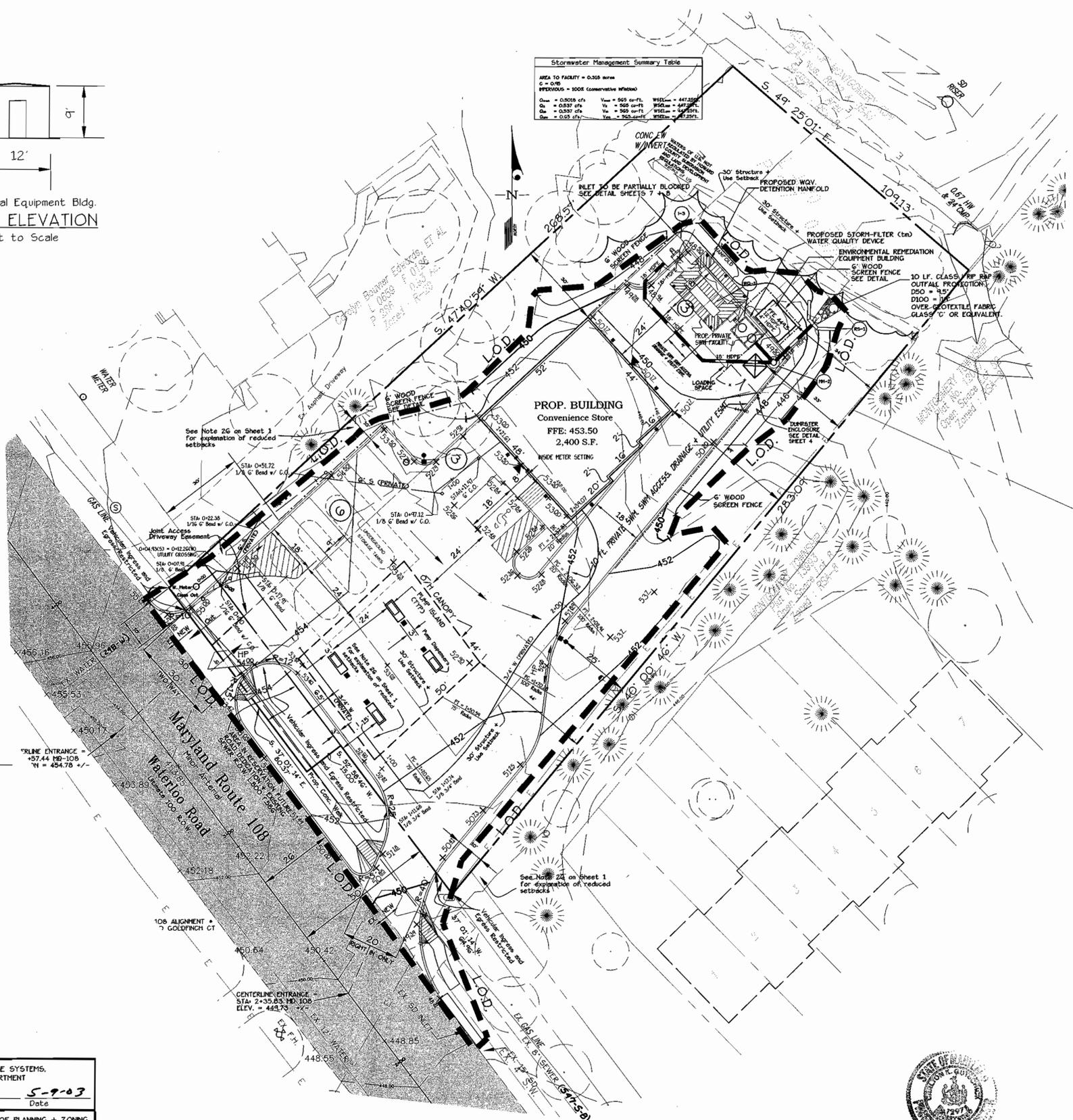
Environmental Equipment Bldg.  
**SIDE ELEVATION**  
Not to Scale



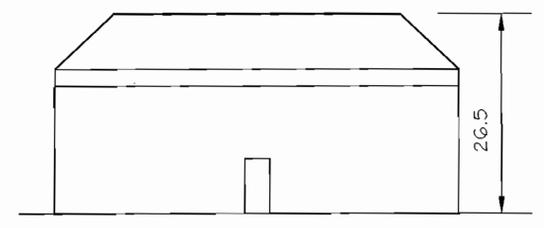
CANOPY  
**FRONT ELEVATION**  
Not to Scale



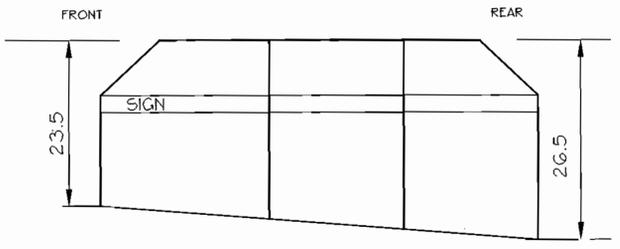
CANOPY  
**SIDE ELEVATION**  
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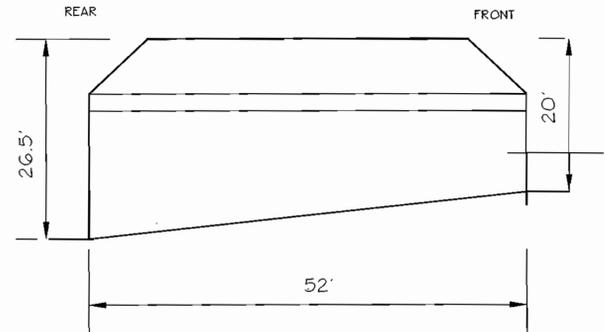
CONVENIENCE STORE  
**FRONT ELEVATION**  
Not to Scale



CONVENIENCE STORE  
**REAR ELEVATION**  
Not to Scale



CONVENIENCE STORE  
**RIGHT SIDE ELEVATION**  
Not to Scale



CONVENIENCE STORE  
**LEFT SIDE ELEVATION**  
Not to Scale

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Denny Kocinski* M.D. P.E. 5-9-03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*Mark Dwyer* 5/14/03  
Director Date

*Cindy Harvath* 5/16/03  
Chief, Dept. of Land Development Date

*Chad DeMunn* 5/16/03  
Chief, Development Engineering Division Date

Note: All existing monitoring wells shall be barricaded with orange safety prior to demolition and during all construction. Any proposed removal or relocation of monitoring wells shall be approved by M.D.E. (See Demolition Plan for well locations)



**GLW GUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK  
BURTNSVILLE, MARYLAND 20866  
TEL: 301-421-4024 BAL: 410-586-1820 DC/VA: 301-988-2524 FAX: 301-421-4186

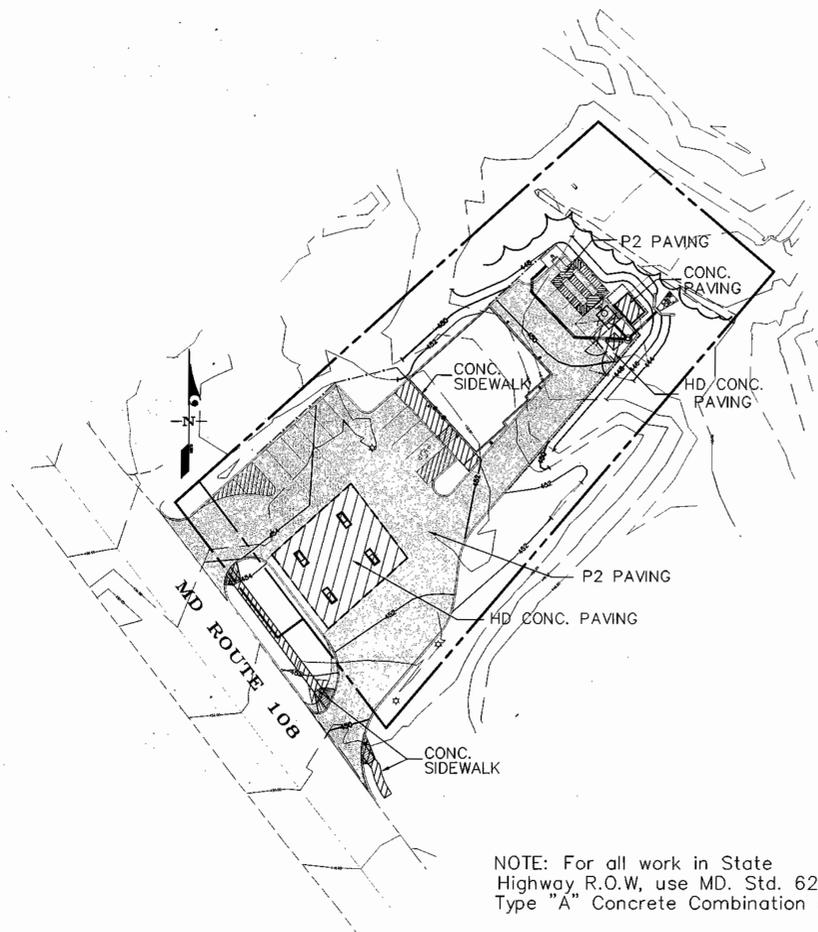
DATE	REVISION	BY	APPR.
2-5-03	Revised per H.C. comments		

PREPARED FOR:  
COLUMBIA LAND CORPORATION  
2127 YORK ROAD  
TIMONIUM, MARYLAND 21093  
ATTN: MR. SCOTT DAVIDSON  
TELE: 410-560-0312

**SITE DEVELOPMENT PLAN**  
**MONTGOMERY RUN SERVICE CENTER**  
Gasoline Service Station and Convenience Store  
PARCEL 287  
Liber 407b, Folio 062b  
ELKRIDGE ELECTION DISTRICT No. 1  
HOWARD COUNTY, MARYLAND

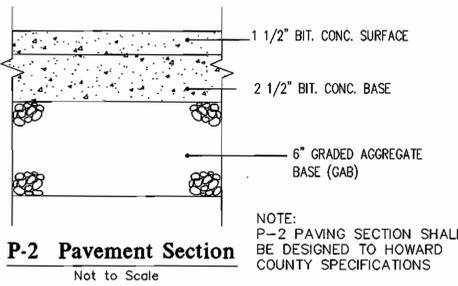
SCALE	ZONING	G. L. W. FILE No.
1"=20'	B-2	02006
DATE	TAX MAP	SHEET
OCT, 2002	31-37	3 OF 9

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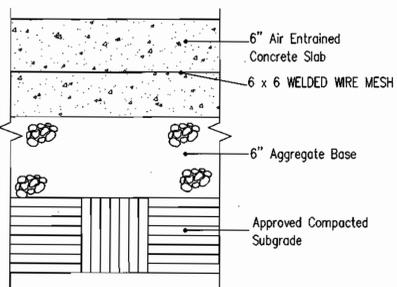


**PAVING PLAN**  
Scale: 1" = 40'

NOTE: For all work in State Highway R.O.W. use MD. Std. 620.02, Type "A" Concrete Combination and Gutter

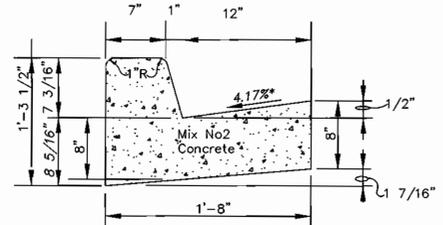


**P-2 Pavement Section**  
Not to Scale

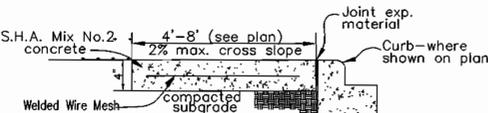


**Heavy Duty Concrete Pavement**  
Not to Scale  
Materials and construction procedures shall be in accordance with the Md. D.O.T. Standard Specifications Section 520.

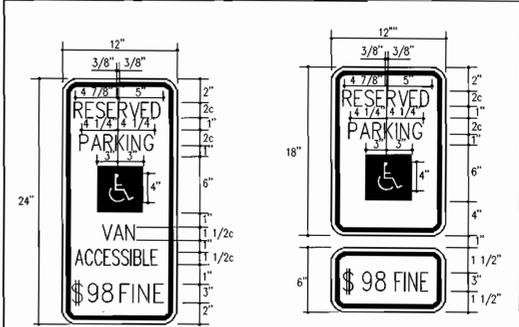
NOTE: For all work in State Highway R.O.W. use MD. Std. 620.02, Type "A" Concrete Combination and Gutter



**Standard 6" Combination Curb & Gutter**  
N.T.S.

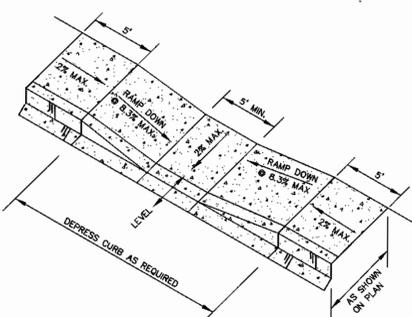


**Typical Sidewalk Detail**  
Not to Scale

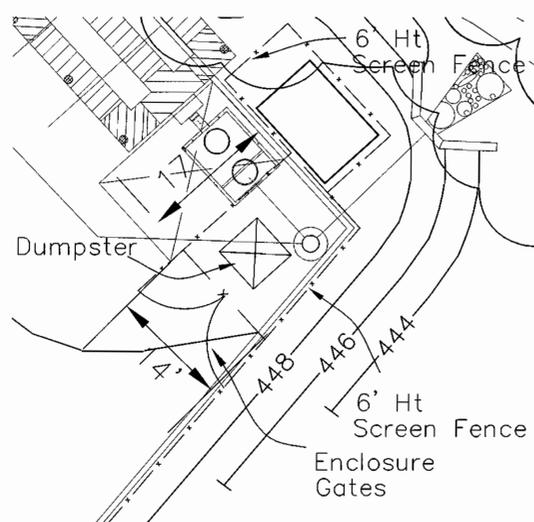


- General Notes:**
- Signs shall meet design standards of the Federal Highway Administration and conform to the State of Maryland Standard Highway sign booklet detail R7-8.
  - One sign is required per space placed as shown on site plan.
  - Spaces indicated on site plan as "VAN" accessible shall be signed accordingly.
  - Colors: Legend and Border - green  
Symbol - white on blue background  
background - white

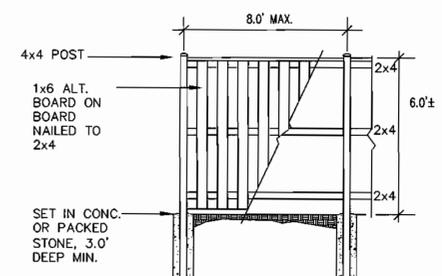
**Handicap Parking Signs Detail**  
Not to Scale



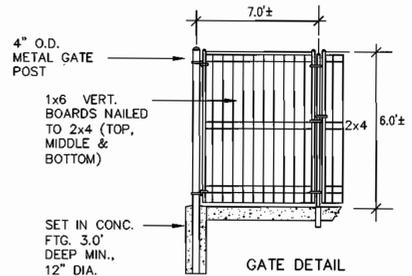
**Handicap Ramp Detail (Type 1)**  
Not to Scale



**Dumpster Detail**  
1"=10'



**Dumpster Enclosure & Screen Fence Detail**  
Not to Scale



**Dumpster Enclosure Gate Detail**  
Not to Scale

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*Perry Brantley* 5-9-03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*David J. Taylor* 5/14/03  
Director Date

*Michelle Stanek* 5/14/03  
Chief, Division of Planning and Development Date

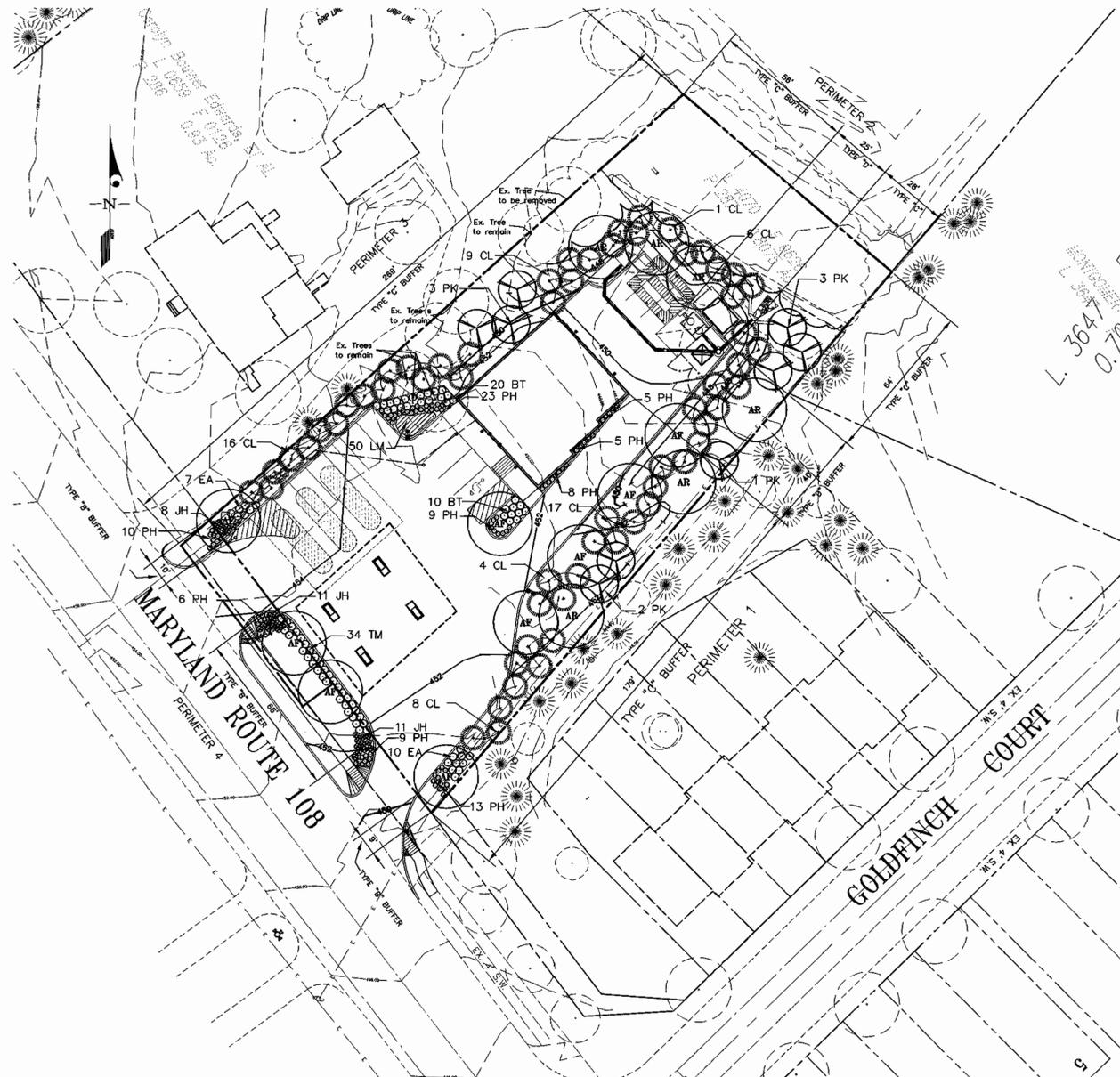
*John J. Williams* 5/14/03  
Chief, Development Engineering Division Date



<b>GLW GUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186	PREPARED FOR: COLUMBIA LAND CORPORATION 2127 YORK ROAD TIMONIUM, MARYLAND 21093 ATTN: MR. SCOTT DAVIDSON TELE: 410-560-0312		<b>SITE PLAN DETAILS</b> <b>MONTGOMERY RUN SERVICE CENTER</b> <i>Gasoline Service Station and Convenience Store</i> PARCEL 287 Liber 4076, Folio 0626		SCALE AS SHOWN	ZONING B-2	G. L. W. FILE No. 02006
	DES. BJM DRN. BJM CHK. BJM DATE: 2-04-03 REVISION: Revised per H.C. Review Comments	KAF BY:	APPR:	DATE: OCT, 2002	TAX MAP 31-37	SHEET 4-OF-9	

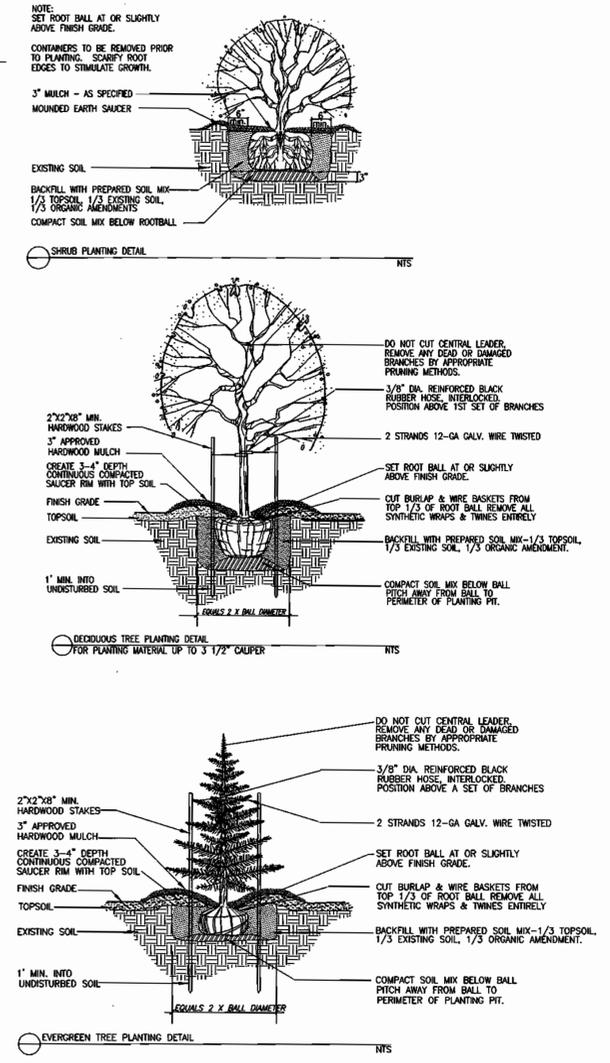
LANDSCAPING NOTES

- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and the Howard County Landscape Manual.
- Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
- Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
- No substitution shall be made without written consent of the owner or his representative.
- All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
- The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
- All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.
- Landscape surety shall be posted with the Developer's Agreement.
- At the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plants may be made without prior review and approval from the Department of Planning and Zoning. Any deviations from the approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revision are made to the applicable plans.



Key

- Shade Tree
- Flowering Tree
- Evergreen Tree
- Shrubs
- Groundcover



SCHEDULE A PERIMETER LANDSCAPE EDGE Category	Adjacent to Roadway		Adjacent to Perimeter			
	Buffer Non-residential Front	Buffer Non-residential	Buffer Non-residential	Buffer Non-residential	Buffer Loading	Buffer Loading
Landscape Buffer Type	B	C	C	C	D	D
Linear Feet of Roadway/ Perimeter Frontage	85'	243'	84'	269'	40'	25'
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	No	YES 28 L.F.	YES 84 L.F.	YES 40 L.F.	No	YES 25 L.F.
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	No	YES 55 L.F.	No	YES 116 L.F.	YES 40 L.F.	YES 25 L.F.
Number of Plants Required						
Shade Trees	2	4	0	3	0	0
Evergreen Trees	2	8	0	6	0	0
Shrubs	0	0	0	0	0	0
Number of Plants Provided						
Shade Trees	2	7	2	2	1	0
Evergreen Trees	0	22	4	25	7	3
Other Trees (2:1 subst.)	0	5	0	3	1	0
Shrubs (10:1 subst.)	56	10	0	15	0	0
(describe plant substitution credits below if needed)						

Landscape Plan  
Scale: 1"=30'

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING
Number of Parking Spaces = 13 Spaces (Provided)
Number of Trees Required = 1 Trees @ 1 per 20 spaces
Number of Trees Provided = 1 Shade Trees Other Trees (2:1 substitution)
NOTE:

Bond Requirement - Surety for Schedule A:  
 Schedule 'A' Number of Shade Trees for bonding: 14 x \$300 = \$ 4,200.00  
 Schedule 'A' Number of Evergreen Trees for bonding: 61 x \$150 = \$ 9,150.00  
 Schedule 'A' Number of Flowering Trees for bonding: 9 x \$150 = \$ 1,350.00  
 Schedule 'A' Number of Shrubs for bonding: 81 x \$30 = \$ 2,430.00  
 Schedule 'B' Number of required Shade Trees for bonding: 1 x \$300 = \$ 300.00  
 TOTAL Estimate for Surety: \$17,430.00

COMMENTS:  
 Landscape surety will be posted with the Developer's Agreement.  
 Landscape surety is required because of BA-99-39E & V, Decision and Order Condition No. 3 and Applicant's Exhibit No. 7.

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATION

I/we certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Landscape Manual. I/we further certify that upon completion a letter of landscape installation, accompanied by an executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

*James Davidson* 4/30/03  
 Developer's/Owner's Name Date



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
*Denny Brantley* 5-9-03  
 County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Frank A. Gault* 5/14/03  
 Director Date

*David Hammett* 5/12/03  
 Chief, Division of Development Date

*Michael J. ...* 5/16/03  
 Chief, Development Engineering Division Date

<b>GLWGUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT: 410-860-1820 DC/VA: 301-989-2524 FAX: 301-421-4166	PREPARED FOR: COLUMBIA LAND CORPORATION 2127 YORK ROAD TIMONIUM, MARYLAND 21093 ATTN: MR. SCOTT DAVIDSON TELE: 410-560-0312	LANDSCAPE PLAN, DETAILS, NOTES AND SCHEDULES <b>MONTGOMERY RUN SERVICE CENTER</b> Gasoline Service Station and Convenience Store PARCEL 287 Liber 4076, Folio 6626 ELKCRIDGE ELECTION DISTRICT No. 1	SCALE 1"=30' DATE OCT, 2002	ZONING B-2 TAX MAP 31-37	G. L. W. FILE NO. 02006 SHEET 5-0F-9
	2-5-03 DATE Revised per H.C. Comments	REVISION KAF BY APPR.	HOWARD COUNTY, MARYLAND		

STANDARD 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 VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES
I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPE WHERE:
A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

CONSTRUCTION AND MATERIAL SPECIFICATIONS
I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND, OTHER SOILS MAY BE USED IF RECOMMENDED BY A PEAK AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
A. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS (OR SEE SEEDING NOTES).

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:
A. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

1. 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.
2. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.
3. TOPSOIL HAVING SOLUBLE SALT GREATER THAN 500 PARTS PER MILL SHALL NOT BE USED.

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.

B. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION - SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS (OR SEE SEEDING NOTES).

V. TOPSOIL APPLICATION
A. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.

D. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS FROZEN OR MUDDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDING PREPARATION.

VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW.

A. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

1. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
2. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.

3. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.

PERMANENT SEEDING NOTES

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

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES
1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FEET) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING.

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE OF 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING.

SEEDING: FOR THE 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 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 APPLYING 2 TONS PER ACRE OF 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 SEEDINGS.

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 (UNLESS PREVIOUSLY LOOSENED).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOO.

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

NOTE: THESE SEEDING NOTES ARE THE MINIMUM REQUIRED FOR SEDIMENT CONTROL. REFER TO PROJECT SPECIFICATIONS FOR SEEDING REQUIREMENTS OF OTHER AREAS OF THE SITE.

SEDIMENT CONTROL NOTES

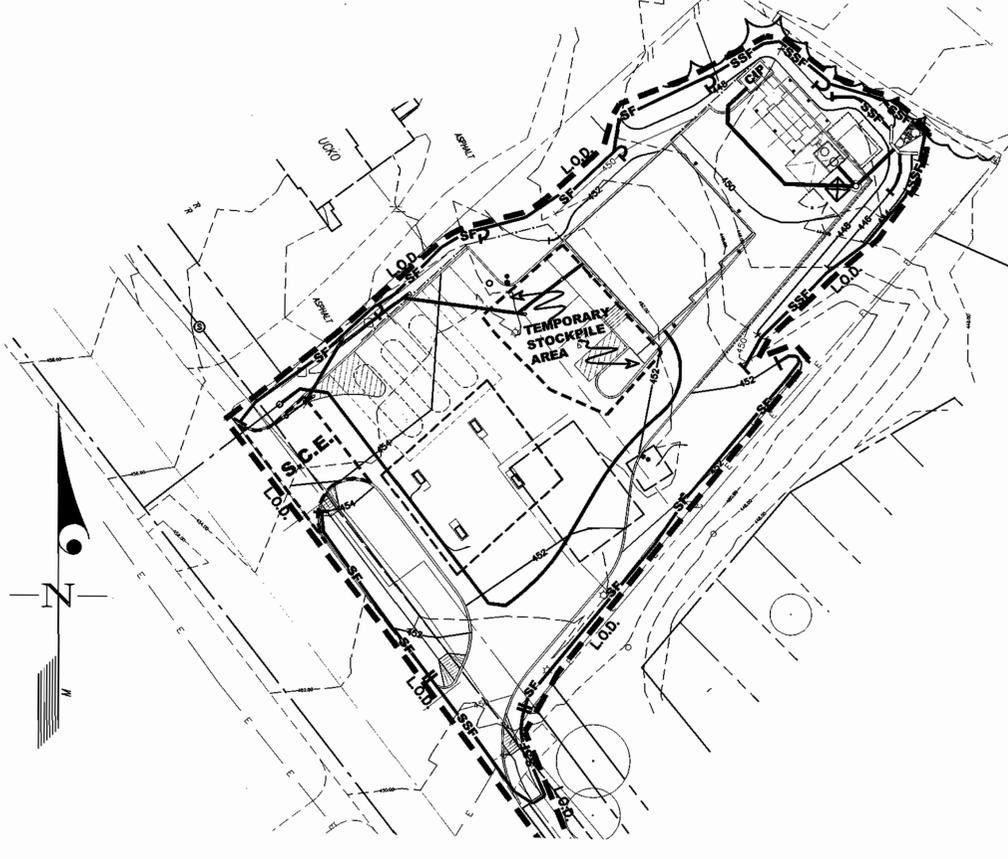
1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (410) 315-1855.

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

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

4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

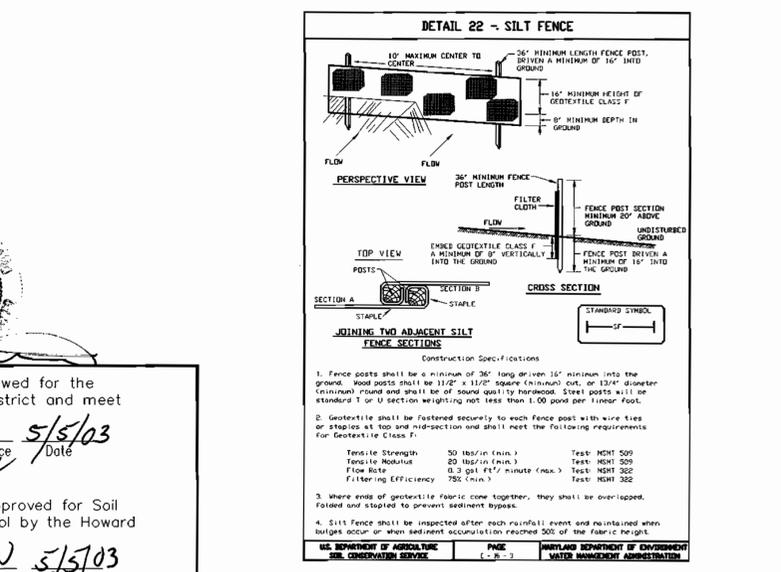
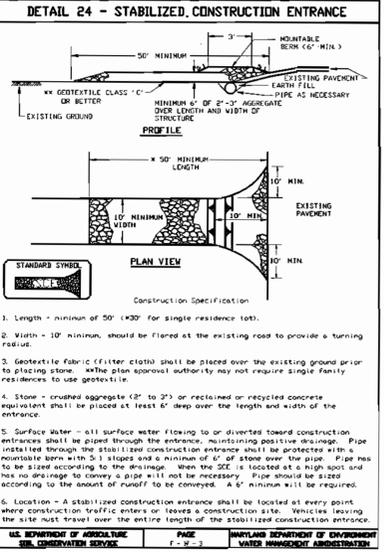
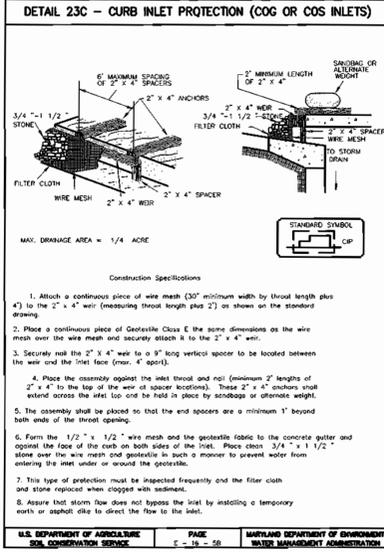
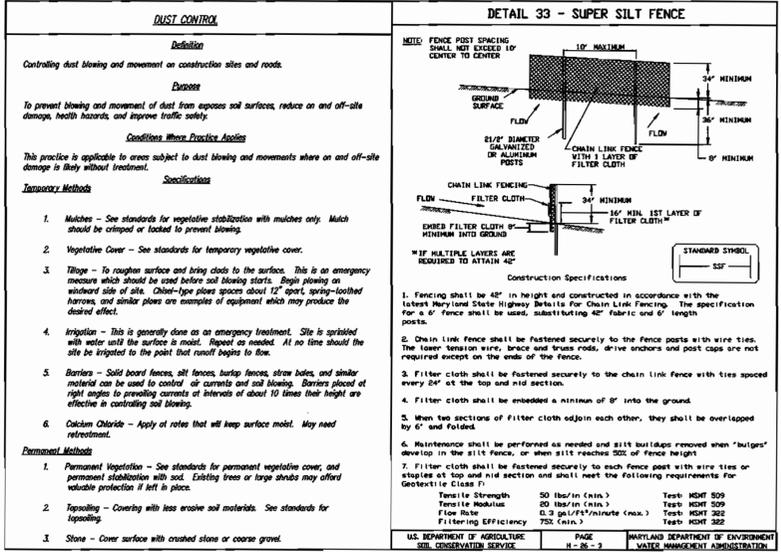
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOO, TEMPORARY SEEDINGS AND MULCHING (SEC. 01). TEMPORARY STABILIZATION, WITH MULCH ALONE, CAN LIMITED TO 3 PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY, WHICHEVER IS SHORTER.



SEDIMENT CONTROL PLAN VIEW SCALE: 1"=30'

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN PERMITS AND ARRANGE FOR PRE-CONSTRUCTION MEETING WITH THE SEDIMENT CONTROL INSPECTOR (1 DAY).
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND PERIMETER SILT FENCE AND SUPER SILT FENCE. (1 WEEK).
3. UPON APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR, MASS GRADE SITE (1 WEEK).
4. CONSTRUCT BUILDING (4-5 MONTHS).
5. INSTALL UTILITIES (1 MONTH).
6. STORM DRAIN TO REMAIN BLOCKED UNTIL APPROVAL OF THE SEDIMENT CONTROL INSPECTOR IS OBTAINED. SEE THE 'STORM FILTER CHECKLIST' FOR SEQUENCING RELATED TO INSTALLATION OF THE QUALITY DEVICE.
7. COMPLETE FINE GRADING, INSTALL CURB AND GUTTER, SIDEWALKS AND BASE PAVE. STABILIZE AREAS WITH GRASS SEED AND MULCH (2 WEEKS).
8. INSTALL LANDSCAPING. (2 DAYS). INSTALL SURFACE COURSE PAVING AND PARKING LOT STRIPING (3 DAYS).
9. WHEN PERMISSION HAS BEEN GRANTED BY THE SEDIMENT CONTROL INSPECTOR AND ALL AREAS DRAINING TO THE SEDIMENT CONTROLS HAVE BEEN STABILIZED, REMOVE ALL REMAINING SEDIMENT CONTROLS AND STABILIZE ALL REMAINING AREAS WITH GRASS SEED AND MULCH (2 DAYS).



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING.

DEVELOPER'S/BUILDER'S CERTIFICATE: I/we certify that all development and/or 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 Maryland Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project.

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.

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.
This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

GLWGUTSCHICK LITTLE & WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS. 3509 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK, BURTNSVILLE, MARYLAND 20866.

Table with columns: DES. B.J.M., DRN. B.J.M., CHK. B.J.M., DATE, REVISION, BY, APPR.

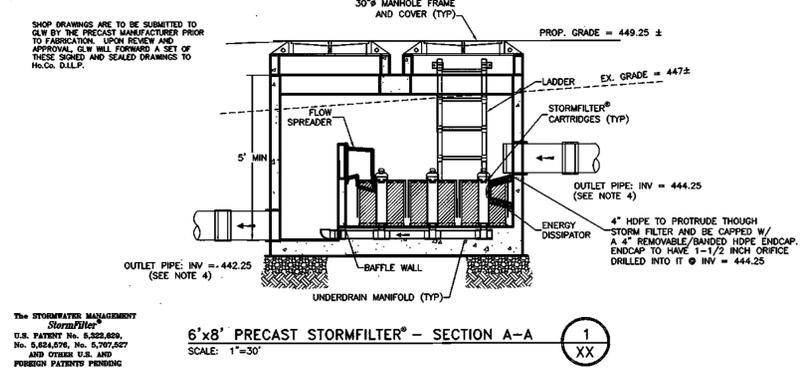
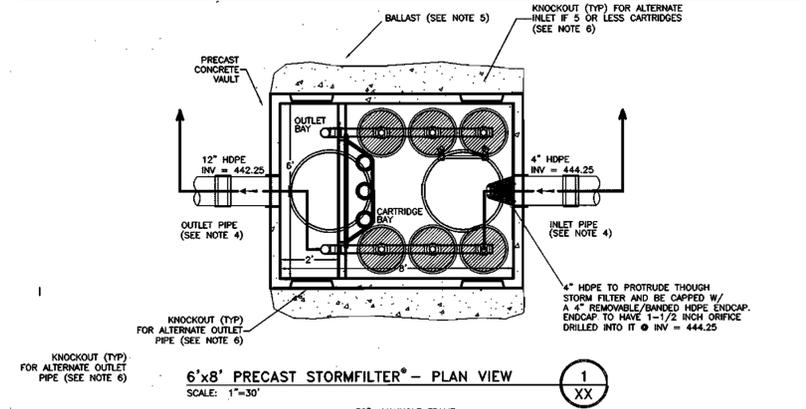
PREPARED FOR: COLUMBIA LAND CORPORATION, 2127 YORK ROAD, TIMONIUM, MARYLAND 21093. ATTN: MR. SCOTT DAVIDSON, TELE: 410-560-0312.

SEDIMENT & EROSION CONTROL PLAN, DETAILS, NOTES AND SCHEDULES. MONTGOMERY RUN SERVICE CENTER. Gasoline Service Station and Convenience Store. PARCEL 287, Libor 4070, Folio 0626. ELKCRIDGE ELECTION DISTRICT No. 1.

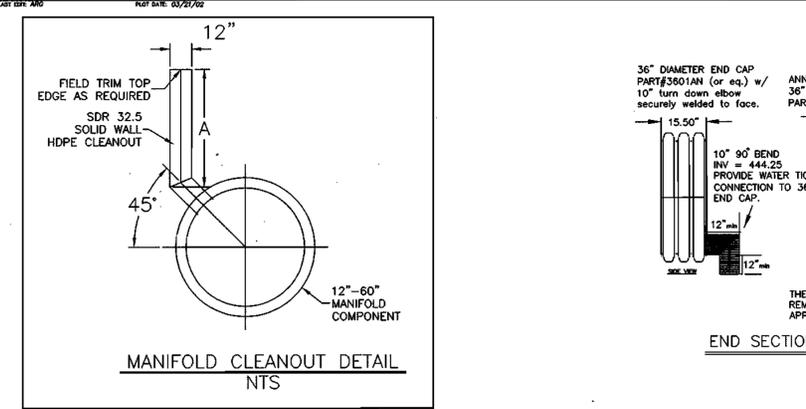
Table with columns: SCALE, ZONING, G. L. W. FILE NO., DATE, TAX MAP, SHEET.

GENERAL NOTES	
1.) STORMFILTER BY STORMWATER MANAGEMENT, PORTLAND, OREGON (503-240-3393).	
2.) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATION AND MAINTENANCE GUIDELINES FOR DETAILS.	
3.) PRECAST CONCRETE VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C885.	
4.) INLET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.	
5.) ANTI-FLOTATION BALLAST TO BE SPECIFIED BY ENGINEER. BALLAST TO BE SET ALONG ENTIRE LENGTH OF BOTH SIDES OF VAULT. BALLAST MATERIALS TO BE PROVIDED BY CONTRACTOR.	
6.) PRECAST STORMFILTER EQUIPPED WITH KNOCKOUTS AT ALT. INLET/OUTLET LOCATIONS. CORINGS AVAILABLE WHEN SPECIFIED.	
7.) DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL VAULT DIMENSIONS AND CONFIGURATION WILL BE SHOWN ON THE PRODUCTION SHOP DRAWING.	

6' X 8' PRECAST STORMFILTER DATA	
DESIGN WATER QUALITY FLOW (cfs)	
PEAK FLOW (cfs)	
RETURN PERIOD OF PEAK FLOW (yrs)	
# OF CARTRIDGES REQUIRED	
MEDIA TYPE	
CROSS-SECTION 3" MIN. I.E. MATERIAL DIAMETER	ADJUSTABLE LID
INLET PIPE #1	LADDER
INLET PIPE #2	ANTI-FLOTATION BALLAST (USE N/A IF NOT REQUIRED)
OUTLET PIPE	WIDTH
	HEIGHT
NOTES/SPECIAL REQUIREMENTS:	



6' X 8' PRECAST STORMFILTER PLAN AND SECTION VIEW STANDARD DETAIL	
SCALE: 1"=30"	PROJECT NO.
DATE: 02/21/02	DESIGNER FILE NAME: 020602

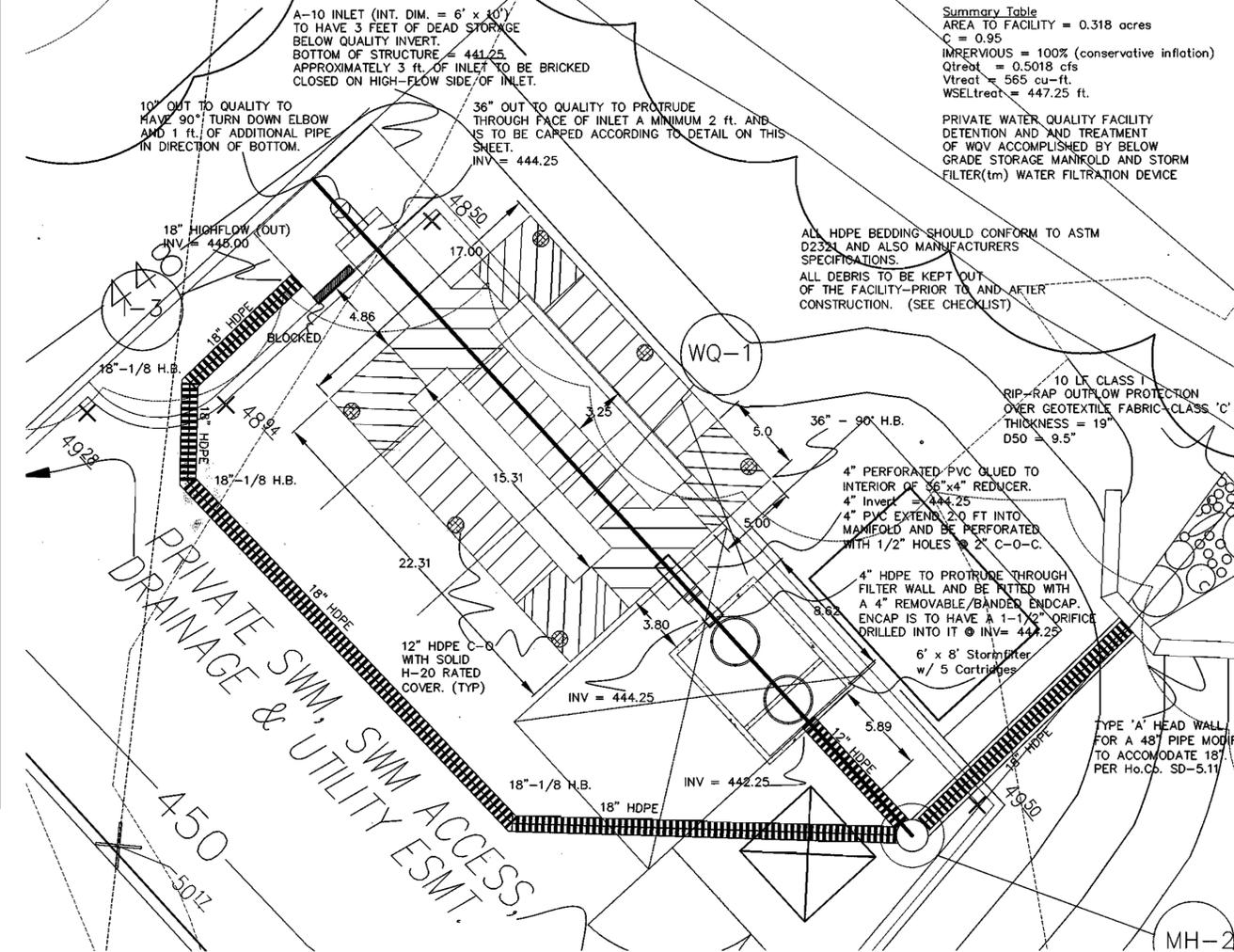


APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*Penny Brantley* Mgr. Date: 5-9-03

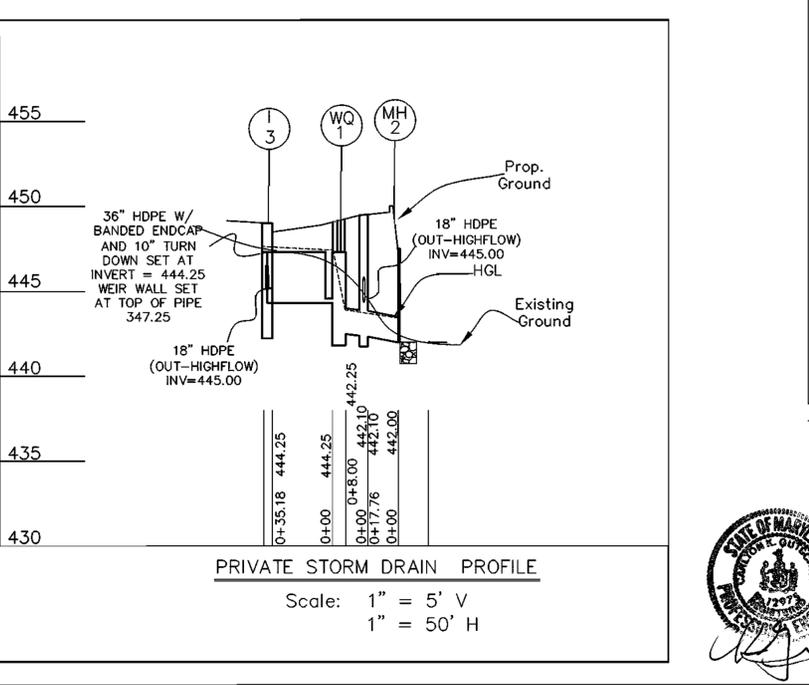
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Janice D. Wynn* Director Date: 5/12/03

*Glenn Hamilton* Chief, Division of Development Date: 5/12/03

*David Dammann* Chief, Development Engineering Division Date: 5/12/03



STANDARD PRECAST STORMFILTER PLAN VIEW (SCALE: 1"=5')



PREPARED FOR:  
COLUMBIA LAND CORPORATION  
2127 YORK ROAD  
TIMONIUM, MARYLAND 21093  
ATTN: MR. SCOTT DAVIDSON  
TELE: 410-560-0312

STORMWATER MANAGEMENT DETAILS & NOTES  
**MONTGOMERY RUN SERVICE CENTER**  
Gasoline Service Station and Convenience Store  
PARCEL 287  
Liber 4070, folio 0626

SCALE: 1" = 5' V  
1" = 50' H

- CONSTRUCTION SPECIFICATIONS FOR STORMFILTERS
- Stormwater Management to submit Operation and Maintenance Manual to contractor upon request.
  - Perlite Media: Perlite media shall be made of natural siliceous volcanic rock free of any debris or foreign matter. The expanded perlite shall have a bulk density ranging from 6.5 to 8.5 lb/ft<sup>3</sup> and particle sizes ranging from 0.06 to 0.50 inches.
  - Doors: Doors shall have hot-dipped galvanized frame and covers. Covers shall have diamond plate finish. Each door to be equipped with a recessed lift handle and a locking latch with 3/8" pentanehead hold-down bolts. Pentanehead wrench to be provided for each set of doors, upon request. Doors shall meet H-20 loading requirements for incidental traffic minimum.
  - Frames and Covers: Frames and covers shall be gray cast iron and shall meet AASHTO H-20 loading requirements.
  - CONTRACTOR PROVIDED COMPONENTS:
    - Specifications for all contractor-provided components are minimum requirements. If a higher standard is shown on the plans or described in another section of the technical specifications, then the higher standard shall govern.
    - A. Sub-Base: Sub-base shall be six-inch minimum of 2-inch minus rock, 95% compaction. Compact undisturbed sub-grade materials to 95% of maximum density at +/- 2% of optimum moisture content. Unsuitable material below sub-grade shall be replaced to engineer's approval.
    - B. Concrete: Concrete shall be 3000 psi minimum at 28-day strength, 2-inch round rock, 4-inch slump maximum, placed within 90 minutes of initial mixing.
    - C. Silicone Sealant: Shall be pure RTV silicone conforming to Federal Specification Number TT 5001543A or TT 5002300 or Engineer approved.
    - D. Grout: Shall be non-shrink grout meeting the requirements of Corps of Engineers CRD-C588. Specimens molded, cured and tested in accordance with ASTM C-109 shall have minimum compressive strength of 6,200 psi. Grout shall not exhibit visible bleeding.
    - E. Backfill: Backfill shall be 2-inch minus rock at 95% compaction.
  - PRECAST CONCRETE VAULT
    - A. Vault floor shall slope 1/4 inch maximum across the width and slope downstream 1 inch per 12 foot of length. Vault top finish grade shall be even with surrounding finish grade surface unless otherwise noted on plans.
    - B. Contractor to grout all inlet and outlet pipes flush with vault interior wall. Contractor to grout internal baffle walls.
    - C. Sanded PVC fittings shall be used on all PVC inlet and outlet pipes.
    - D. Contractor responsible for inspecting and/or completing installation of flow spreaders and energy dissipators.
  - ANTI-FLOTATION BALLAST: Ballast shall be to the dimensions specified by the engineer and noted on the data book. Ballast shall run the entire length of the long side of the vault, both sides. Ballast shall not enclose the inlet and/or outlet piping. Provide 12" clearance from outside diameter of pipes.
  - CLEAN UP: Remove all excess materials, rocks, roots, or foreign material, leaving the site in a clean, complete condition approved by the engineer. All filter components shall be free of any foreign materials including concrete and excess sealant.
  - FILTER CARTRIDGES:
    - A. Filter cartridges shall not be installed until the project site is clean and stabilized. The project site includes any surface that contributes storm drainage to the StormFilter. All impermeable surfaces shall be clean and free of dirt and debris. All catch basins, manholes and pipes shall be free of dirt and sediments.
    - B. Contractor to notify Stormwater Management (800-548-4667) two weeks before filter cartridges are required on site. Stormwater Management will deliver and offload filter cartridges complete with filter media. Plugs will be provided for all manifold fittings not equipped with a filter cartridge.
    - C. Contractor to install filter cartridges.
    - D. Filter Cartridges: Tape shall be cleanly and completely removed from manifold fitting openings. Plug pieces shall be glued and inserted into all manifold fittings to be equipped with a filter cartridge. Filter cartridges shall be threaded onto the spool pieces until they contact the vault floor. Plugs shall be inserted without glue in all manifold fittings not equipped with a filter cartridge.

SEQUENCE OF CONSTRUCTION AND INSPECTOR'S CHECK-OFF LIST FOR STORMFILTER

STAGE	DEVELOPER'S ENGINEER'S APPROVAL	INSPECTOR APPROVAL
	INITIALS/DATE	INITIALS/DATE
1. PRE-CONSTRUCTION MEETING*		
2. SEDIMENT CONTROL INSTALLATION		
3. EXCAVATION FOR BMP FILTRATION STRUCTURE		
4. INSTALLATION OF FILTER BMP & ASSOCIATED STORMDRAINAGE AND MANHOLE SYSTEM		
A. OBTAIN APPROVAL OF SUBGRADE AND INSTALL GRAVEL BASE		
C. INSTALLATION OF FILTER UNIT		
D. INSTALLATION OF PIPING AND STORM DRAIN CONNECTIONS		
E. INSTALLATION OF INTERNAL COMPONENTS		
5. BACKFILLING OPERATION AND COMPACTION		
6. INSTALLATION OF H-20 RELIEVING SLAB (IF REQUIRED)		
7. INSTALLATION OF MANHOLE FRAMES AND COVERS		
8. SITE IS PERMANENTLY STABILIZED AND ALL DEBRIS IS REMOVED FROM UNITS		
9. INSTALL FILTER MEDIA		
10. SUBMIT RECORD DRAWING AND DOCUMENTATION		
11. FINAL INSPECTION		

\*MANDATORY NOTIFICATION/Approval of DEP Inspector prior to proceeding with next stage. Call MWS prior to 12:00 noon on the preceding day to arrange for notification/inspection. 1. SET AND BENCH SHALL NOT BE ALLOWED TO OPEN THE STORMFILTER UNTIL THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.

2. ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.

3. THE STORMFILTER MUST BE PASSED OUT AND CLEANED AT THE END OF THE CONSTRUCTION OF THE PROJECT PRIOR TO INSTALLATION OF RESIDS.

OPERATION AND MAINTENANCE SCHEDULE FOR STORMFILTER

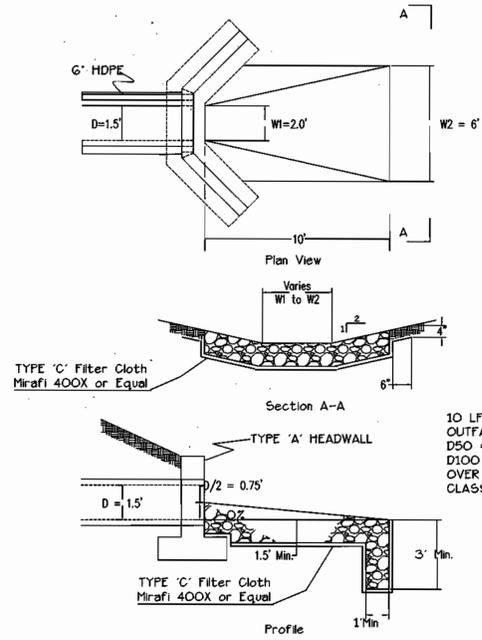
FACILITY COMPONENT REQUIRING MAINTENANCE	MAINTENANCE ACTIVITY IS REQUIRED	WHEN MAINTENANCE ACTIVITY IS REQUIRED	EXPECTED FACILITY PERFORMANCE AFTER MAINTENANCE
STORM FILTER STRUCTURE AND STORAGE MANHOLE	TRASH AND DEBRIS REMOVAL & SEDIMENT REMOVAL	FLOATABLE OBJECTS OR OTHER DEBRIS IS PRESENT IN THE FILTER OR MANHOLE SYSTEM.	FILTRATION CAPACITY IS MAXIMIZED.
PIPING FITTINGS AND CONTROL DEVICES	ENSURE ALL FITTINGS ARE SECURE AND THAT ALL CONTROLS ARE UNLOCKED. FLUSH WITH WATER.	DRAINAGE SYSTEM IS OBSTRUCTED BY DEBRIS OR SEDIMENT.	SYSTEM FLOWS FREELY.
STORM FILTER CARTRIDGES	REPLACE CARTRIDGES AND REMOVE ALL DEBRIS AND SEDIMENT WITHIN THE SYSTEM.	MEDIA BECOMES SATURATED AND IS NO LONGER REMOVING POLLUTANTS ON AN ANNUAL BASIS OR AFTER A SPILL.	SYSTEMS POLLUTANT REMOVAL CAPACITY IS MAXIMIZED.



GLWGUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONVILLE OFFICE PARK  
BURTONVILLE, MARYLAND 20886  
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
2-5-03	Revised per H.C. Comments		

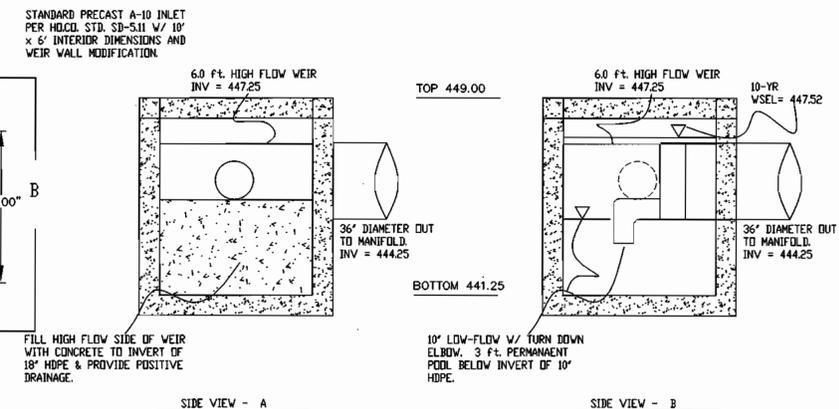
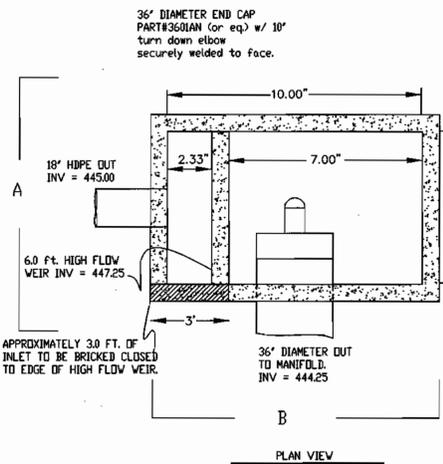
SCALE: AS SHOWN  
DATE: OCT, 2002  
ZONING: B-2  
TAX MAP: 31-37  
SHEET: 7-OF-9  
G. L. W. FILE No.: 02006



Outlet Protection Detail (RS1)  
N.T.S.

ROCK OUTLET PROTECTION I

- The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines & grades. Any fill required in the subgrade shall be compacted to a density of approx. that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the rip rap of filter.
- Geotextile shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining 2 pieces of geotextile shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.
- Stone for the rip rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in a manner that will ensure that it is reasonably homogeneous w/ the small stones & spalls filling the voids between the larger stones. Rip rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.
- The stone shall be placed so that it blends in w/ the existing ground. If the stone is placed too high then the flow will be forced out of the channel & scour adjacent to the stone will occur.



INLET 1-3 DETAILS

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Perry Hunter* 5-9-03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*Frank D. Lytle* 5/12/03  
Director Date

*Lucia Hamito* 5/12/03  
Chief, Planning and Development Date

*Michael J. ...* 5/12/03  
Chief, Development Engineering Division Date

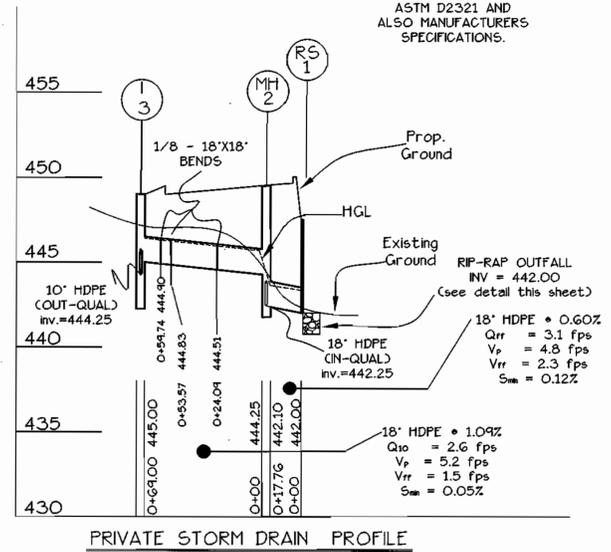
FOR ALL PROFILES ON THIS SHEET  
HORIZONTAL SCALE: 1" = 50'  
VERTICAL SCALE: 1" = 5'

No.	TYPE	WIDTH	TOP ELEVATION	INVERT ELEVATION	STANDARD DETAIL	NOTES	
I-3	A-10 INLET	10'-0"	449.00	449.00	445.00	444.25	HoCo. SD-4.02 BOTTOM = 441.25
MH-2	4' MAN HOLE	4'-0"	449.75	444.25	442.10	---	HoCo. G-5.12
RS-1	4' MAN HOLE	4'-0"	---	447.00	---	---	HoCo. SD-5.11 MODIFIED H.W. FOR 48" PIPE

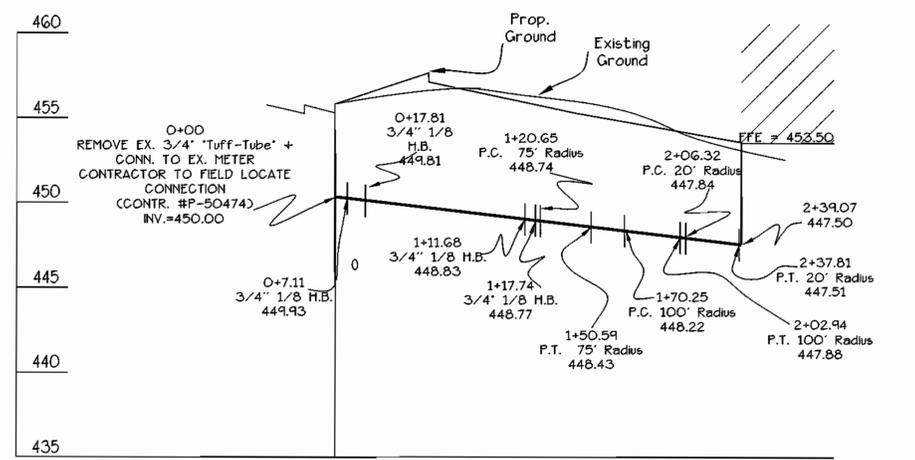
SIZE	TYPE	QUANTITY (L.F.)	REMARKS
12"	HDPE	7.00	ADS or Equivalent
18"	HDPE	83.00	ADS or Equivalent

NOTE: SEE SWM DETAIL SHEET FOR SWM PIPING REQMTS.

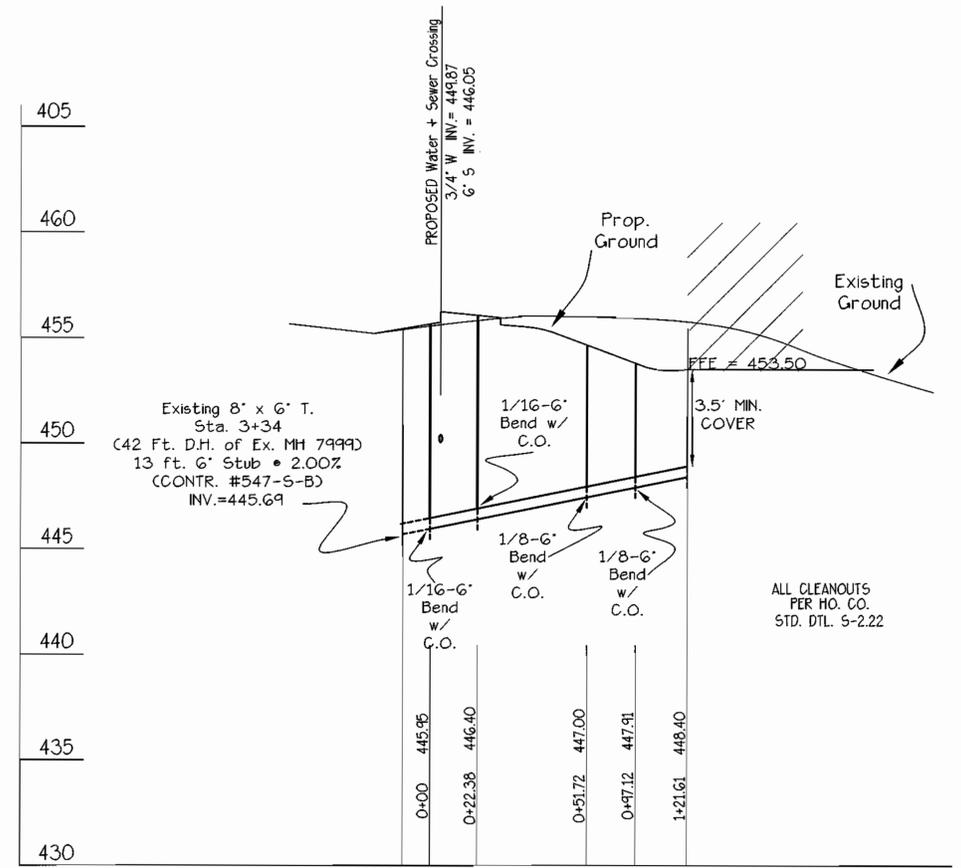
ALL HDPE BEDDING SHOULD CONFORM TO ASTM D2321 AND ALSO MANUFACTURERS SPECIFICATIONS.



PRIVATE STORM DRAIN PROFILE



PRIVATE WATER PROFILE

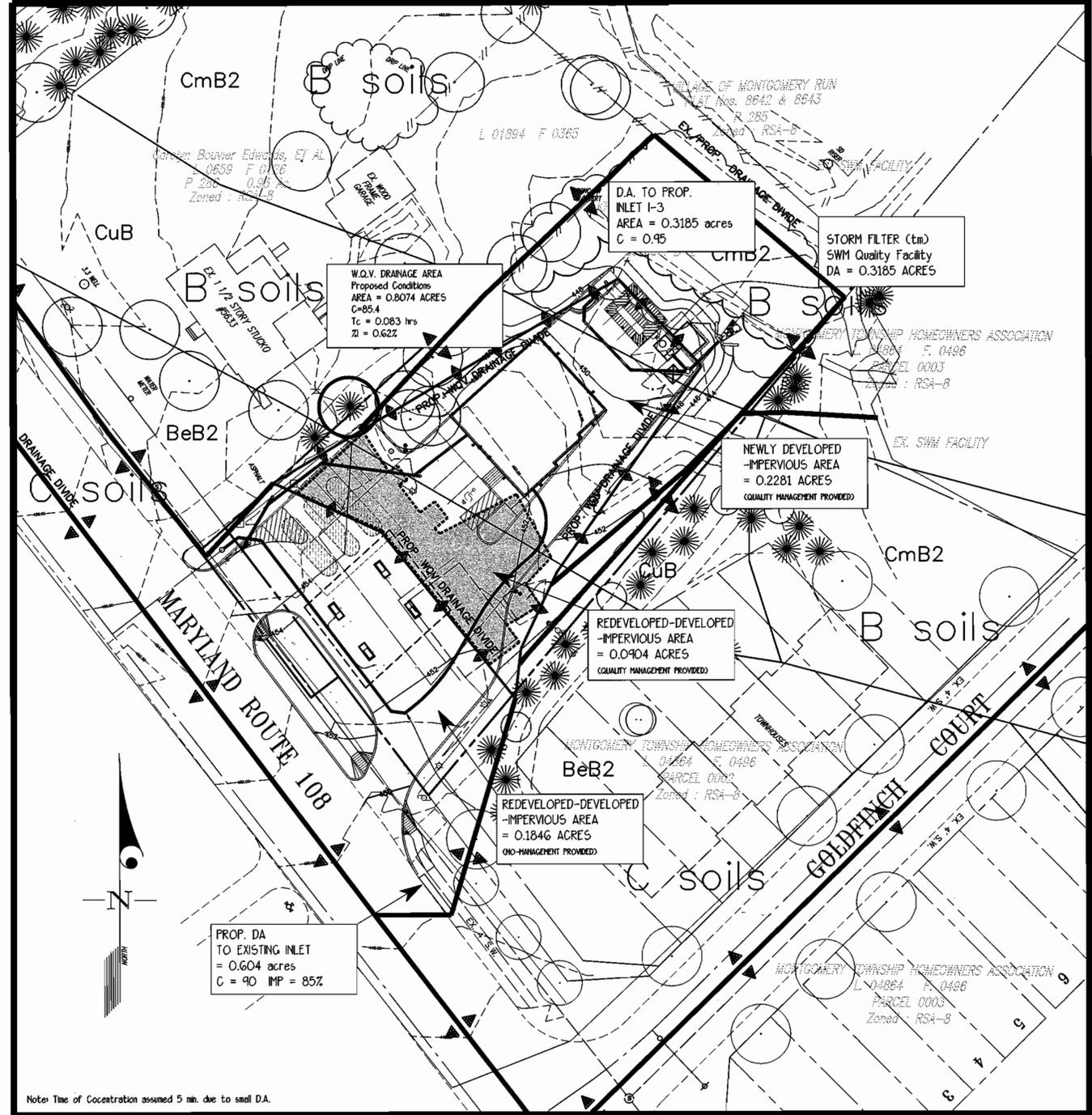
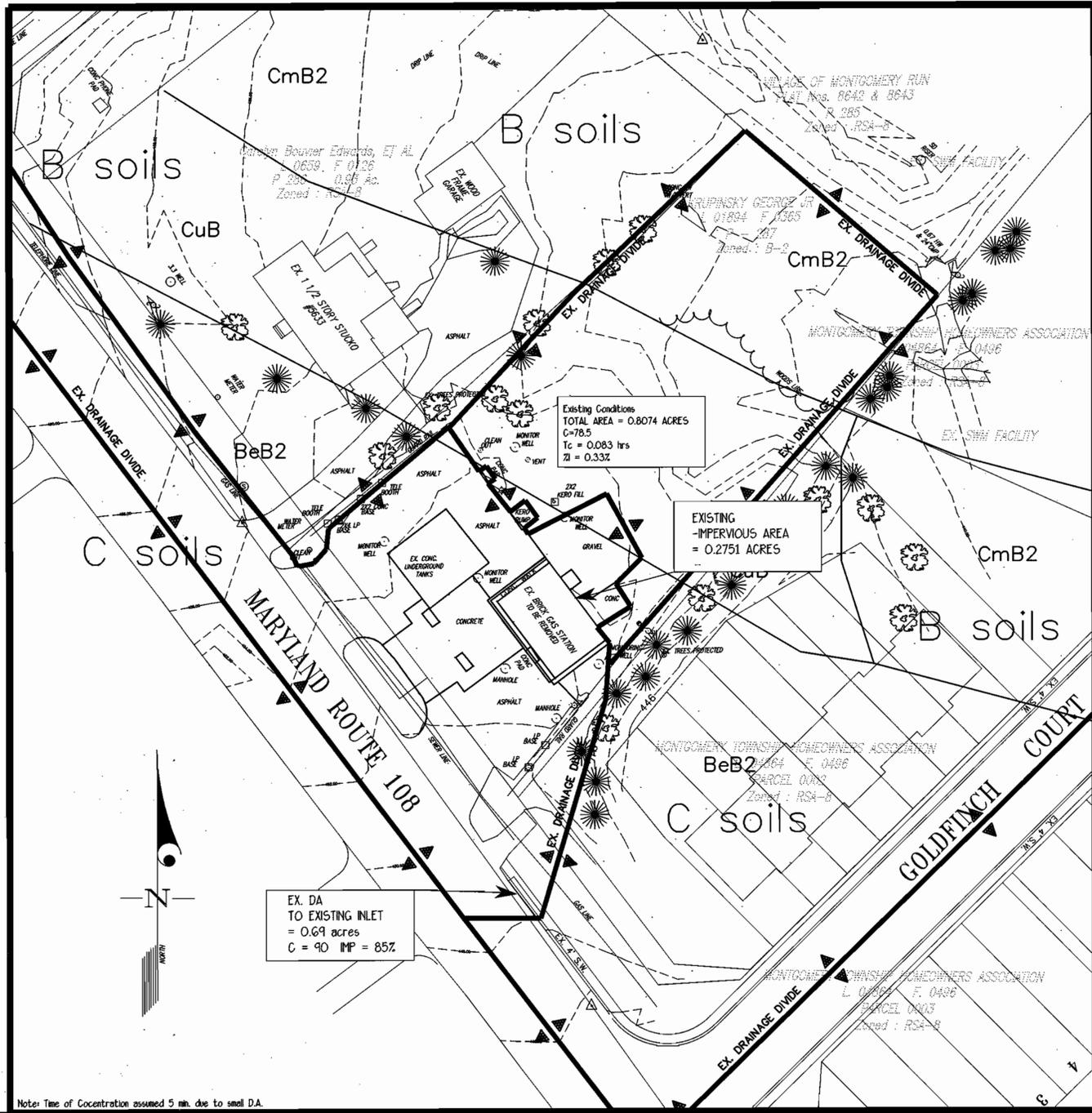


PRIVATE SEWER PROFILE



<b>GLWGUTSCHICK LITTLE &amp; WEBER, P.A.</b> CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 FAX: 301-421-4186			PREPARED FOR: <b>COLUMBIA LAND CORPORATION</b> 2127 YORK ROAD TIMONIUM, MARYLAND 21093 ATTN: MR. SCOTT DAVIDSON TELE: 410-560-0312			<b>PROPOSED STORM DRAIN + UTILITY PROFILES</b> <b>MONTGOMERY RUN SERVICE CENTER</b> Gasoline Service Station and Convenience Store PARCEL 287 Liber 4070, folio 0626 HOWARD COUNTY, MARYLAND			SCALE AS SHOWN	ZONING B-2	G. L. W. FILE No. 02006
2-9-03 Revised per H.C. comments			DATE REVISION BY APPR.			DATE OCT, 2002	TAX MAP 31-37	SHEET 8-OF-9			

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APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*Benny Brantley* 5-9-03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Kevin J. Veyler* 5/12/03  
Director Date

*Andy Shanks* 5/14/03  
Chief, Division of Land Development Date

*Bill Dammann* 5/17/03  
Chief, Development Engineering Division Date



**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-889-2524 FAX: 301-421-4186

DATE	REVISION	BY	APP'R.
2-5-03	Revised per H.C. comments		

PREPARED FOR:  
COLUMBIA LAND CORPORATION  
2127 YORK ROAD  
TIMONIUM, MARYLAND 21093  
ATTN: MR. SCOTT DAVIDSON  
TELE: 410-560-0312

**STORMWATER MANAGEMENT & STORM DRAIN DRAINAGE AREA MAP**  
**MONTGOMERY RUN SERVICE CENTER**  
Gasoline Service Station and Convenience Store  
PARCEL 287  
Liber 4076, Folio 0226  
ELKRIDGE ELECTION DISTRICT No. 1  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	B-2	02006
DATE	TAX MAP	SHEET
OCT, 2002	31-37	9-OF-9

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 the Department of Public Works, Bureau of Engineering, Construction Inspection Division at (410) 313-1880 at least 48 Hours 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.
- The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five (5) working days prior to starting any excavation work.
- Proposed Use: Gasoline station and convenience store.
- All plan dimensions are to face of curb or face of building unless otherwise noted. Spot elevation along curb lines are for flow line, unless otherwise noted.
- Existing topography is shown per field run survey information by Gutschick, Little, and Weber, P.A. and from design plans for construction. The original topographical survey was performed in 1997 and later updated in 2002.
- Coordinates and bearings are based upon the MD State plane system (NAD '83).
- Water and sewer service is public.
- Storm water management Water Quality is provided by on site Private Underground Storage Manifold and a Storm Filter(tm.) Water Quality Device. Water Quantity management is exempt (< 2 cfs discharge from site). No recharge shall be provided per MDE guidelines.
- All existing water is per Contract 248-W. All existing sewer is per Contract 547-S-B. All existing public storm drain is per P95-136.
- See trench bedding class 'C' for storm drains.
- Existing utilities shown herein were derived from available public records. The Contractor must hand dig test at all utility crossings and connection points to verify exact location.
- There are no known wetlands, streams or steep slopes on site. There is no floodplain on Site.
- This site is exempt from the Forest Conservation requirements of Section 16.1200 of the Howard County Code by Section 16.1202(b)(1)(C) for a single parcel which is less than 40,000 square feet.
- There are no known grave sites or cemeteries on this site.
- All outdoor lighting shall comply with zoning regulations section 134 which requires lights to be installed to direct/reflect light downwards and inwards on site away from all adjoining public streets and residential property. The site lighting indicated on these plans is a single, full cutoff, 200 watt fixture mounted on a 12-foot tall round, tapered, pole. All building mounted and under canopy lights shall be 200 or 400 watt full cutoff or full shielded fixtures.
- The Landscape 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 the required landscaping has been posted as part of the DPW developers agreement in the amount of \$17,430
- Department of Planning and Zoning Reference File Nos. B.A.99-39E+V, ZB-953M, and ZB-982M.
- Traffic study done by Lee Cunningham + Associates, Inc., October 2002.
- The subject property is zoned B-2 per the 10-18-93 Comprehensive Zoning Plan, and ZB Case No. 953M.
- Traffic control devices, markings, and signage shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- Trash collection will be provided by a private contractor.
- This project is subject to the Fifth Edition of the Subdivision and Land Development Regulations.

# SITE DEVELOPMENT PLAN

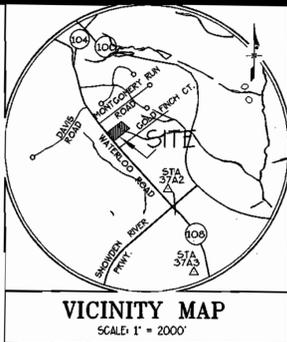
## MONTGOMERY RUN SERVICE CENTER

PARCEL 287  
 5651 WATERLOO ROAD  
 (MD ROUTE 108)  
 COLUMBIA, MARYLAND 21075

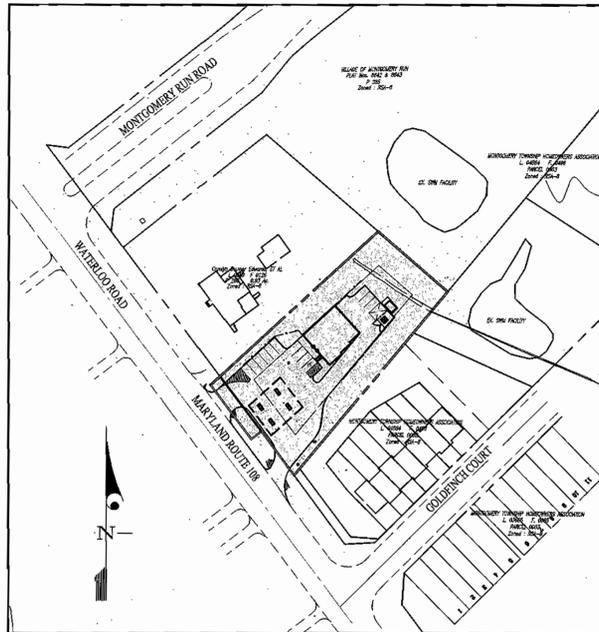
General Notes

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- A Special Exception was approved for redevelopment of an existing non-conforming use gasoline station, to a conforming use gasoline service station with a convenience store. Board of Appeals Case No. 99-39E + V, approved on May 17, 2001. Setback variances Approved:
  - Reduce the required 30 foot structure and use setback from a public street right-of-way to 3 feet for two fueling spaces and two fuel stacking spaces, to 6.5 feet for a canopy and to 15 feet for to pump islands.
  - Reduce the required 30 foot structure and use setback from a residential district to 10 feet for traffic circulation area and two parking spaces in a B-2 (Business-General) Zoning District.
 The Special Exception was granted, subject to the following conditions:
  - The special exception and variances shall apply to the development as depicted on the special exception and variance plan submitted June 20, 2000 to the Board of Appeals a Petitioner's Exhibits #7, and to no other structures and or uses.
  - The Petitioner shall obtain a Design Waiver for the proposed width of the service driveway, reduce the width of the convenience store building, or obtain a variance to move the building seven feet closer to the side lot line.\*
  - Landscaping on the site shall be installed per the special exception landscape plan submitted to the Board of Appeals on June 20, 2000 as Petitioner's Exhibit #7.
  - The hours of operations of the proposed gasoline service station and convenience store shall be from 6:00 a.m. to 11:00 p.m., Monday through Saturday and from 6:00 a.m. to 10:00 p.m., on Sunday.

\* The 18' wide service drive does not serve as a parking lot drive aisle and has no associated parallel or perpendicular parking and therefore does not require a Design Manual Waiver.
- There will be no business related vehicles parked on site.



KEY MAP  
 SCALE: 1" = 100'



Site Analysis Data Chart

- Gross Area: 0.8075 Ac.
- Zoning = B-2 Business General
- Proposed Use: Gasoline Station Convenience Store
- Gross Floor Area: 2400 S.F.
- Maximum Number of Employees = 3 Employees
- No. of standard parking spaces required: 8 Spaces  
 Gas Station: 3 Spaces  
 Convenience Store: 5 Spaces  
 (2400 SF = 2 spaces/1000 SF)
- Total Parking Spaces Provided: 12 Spaces
- No. of Loading Spaces Required: 1 Space
- No. of Loading Spaces Provided: 1 Space
- No. of Handicap Spaces Required: 1 Space.
- No. of Handicap Spaces Provided: 1 Space (1 van space).
- Total Building Coverage: 4,702 S.F. (13.4%)  
 Convenience Store = 2,400 SF  
 Canopy = 2,200 SF  
 Env. Remediation Bldg. = 102 SF
- Open Space Landscaped Area: 16,448 S.F. (46.7%)
- Total Paved Area: 14,024 S.F. (39.9%)
- Limit of Disturbed Area: 0.69 Ac. or 29,873 S.F.
- Department of Planning and Zoning Reference File Numbers B.A.99-39E+V, ZB-953M, and ZB-982M.

HO. CO. BENCHMARK INFORMATION

STATION 37A2: N. 171334.779G E. 417363.5518 ELEV.=403.716	STATION 37A3: N. 171033.0167 E. 417550.3996 ELEV.=385.636
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Sheet Index

- Cover Sheet
- Ex. Conditions + Demolition Plan, Soils Map
- Site Development Plan
- Site Plan Details
- Landscape Plan, Details, Notes, + Schedule
- Sediment + Erosion Control Plan, Details, Notes, + Schedule
- Stormwater Management Details, Notes, + Schedules
- Proposed Utility Profiles
- Storm Drain Drainage Area Map + Stormwater Management Drainage Area Map

LEGEND

---366---	EX. CONTOUR	[Hatched Box]	CONCRETE SIDEWALK
---300---	PROP CONTOUR	[White Box]	DUMPSTER OR UTILITY PAD
[Tree Symbol]	EX. TREES	[Thick Line]	PROPOSED BUILDINGS
[Dashed Line]	EX. STORM DRAIN	[Thin Line]	EX. ASPHALT PAVING
[Dashed Line]	PROP. STORM DRAIN	[Dotted Line]	TOP OF PAVING SPOT SHOT
[Dotted Line]	LIMIT OF DISTURBANCE	[Circle]	NUMBER OF PARKING SPACES
[Dotted Line]	EX. SANITARY SEWER	[Square]	PROP. LIGHT FIXTURES
[Dotted Line]	EX. WATERLINE	[Circle]	EX. LIGHT FIXTURES
[Dotted Line]	PROP. SANITARY SEWER	[Triangle]	HANDICAP CURB RAMP
[Dotted Line]	PROPOSED WATERLINE	[Arrow]	PATRON ENTRANCE
[Dotted Line]	EX. CURB + GUTTER	[Triangle]	EASEMENTS
[Dotted Line]	PROP. CURB + GUTTER		
[Dotted Line]	PROP. WOOD SCREEN FENCE		
[Dotted Line]	EXISTING STREAM CL.		

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT <i>Penny Banta</i> 5-9-03 County Health Officer Date
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING <i>Frank D. Coyle</i> 5/12/03 Director Date
<i>Andy Hanisch</i> 5/12/03 Chief, Division of Land Development Date
<i>Chad Williams</i> 5/12/03 Chief, Development Engineering Division Date



ADDRESS CHART	
PARCEL NUMBER	STREET ADDRESS
287	5651 Waterloo Road

WATER CODE: 607	SEWER CODE: 2780000
SUBDIVISION NAME: N/A	
SECTION/AREA: N/A	PARCELS: 287
PLAT No. N/A	ZONE B-2
TAX MAP 37	BLOCK 1
ELEC. DIST. 1	CENSUS TRACT 6011.02

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 TEL: 301-421-4024 FAX: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

12-1103	Rev. Site analysis	HJK
2-5-03	Revised per H.C. comments	KAF
DATE	REVISION	BY
		APP'R.

PREPARED FOR:  
 COLUMBIA LAND CORPORATION  
 2127 YORK ROAD  
 TIMONIUM, MARYLAND 21093  
 ATTN: MR. SCOTT DAVIDSON  
 TELE: 410-560-0312

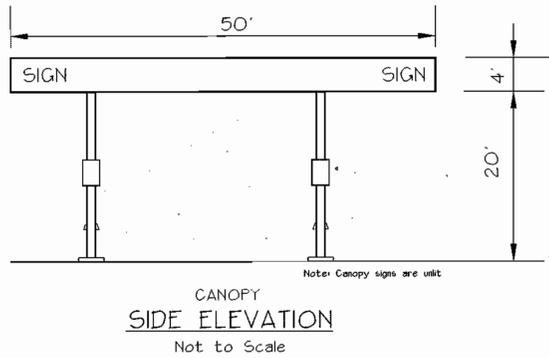
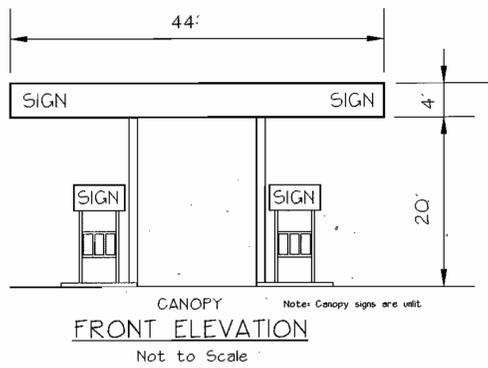
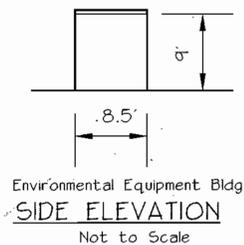
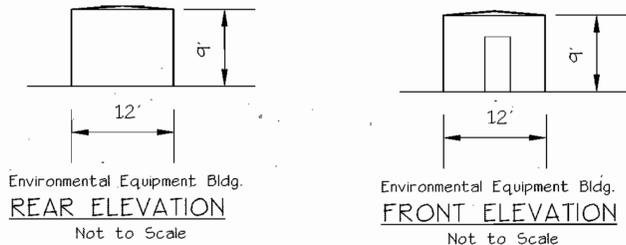
**COVER SHEET**

### MONTGOMERY RUN SERVICE CENTER

Gasoline Service Station and Convenience Store  
 PARCEL 287  
 Liber 4976, folio 0626  
 ELKCRIDGE ELECTION DISTRICT No. 1  
 HOWARD COUNTY, MARYLAND

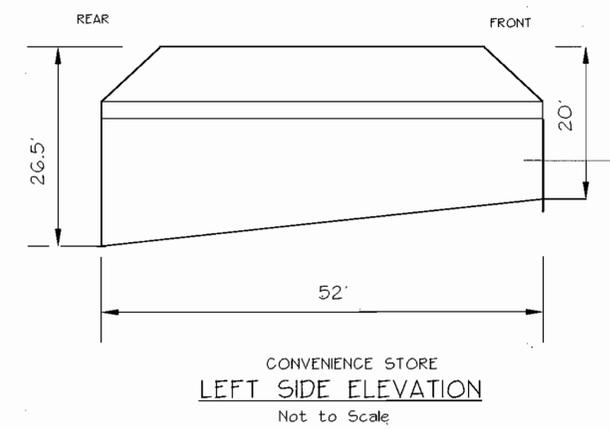
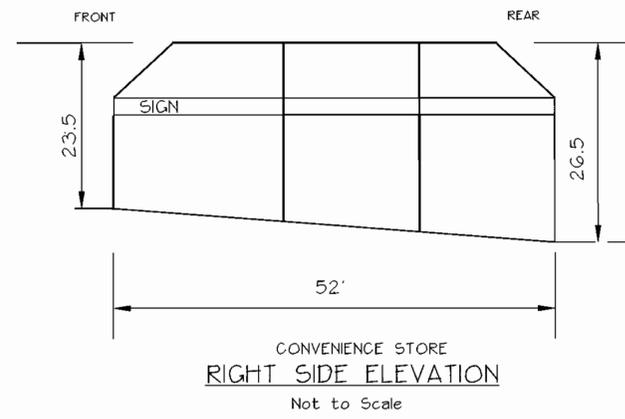
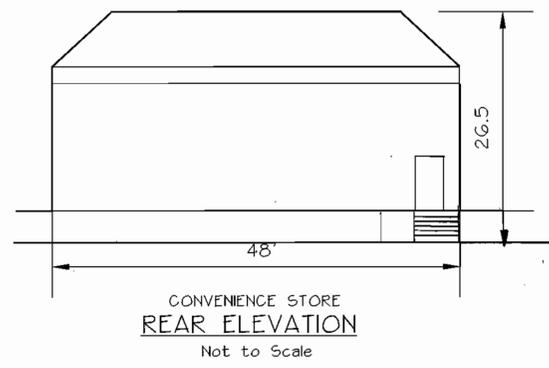
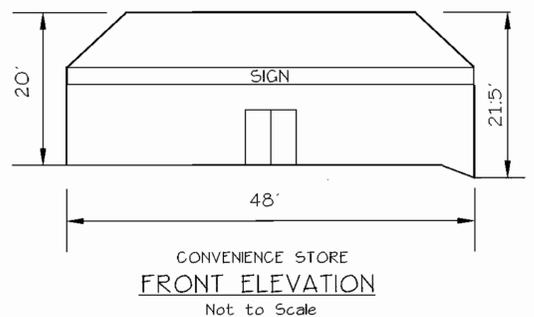
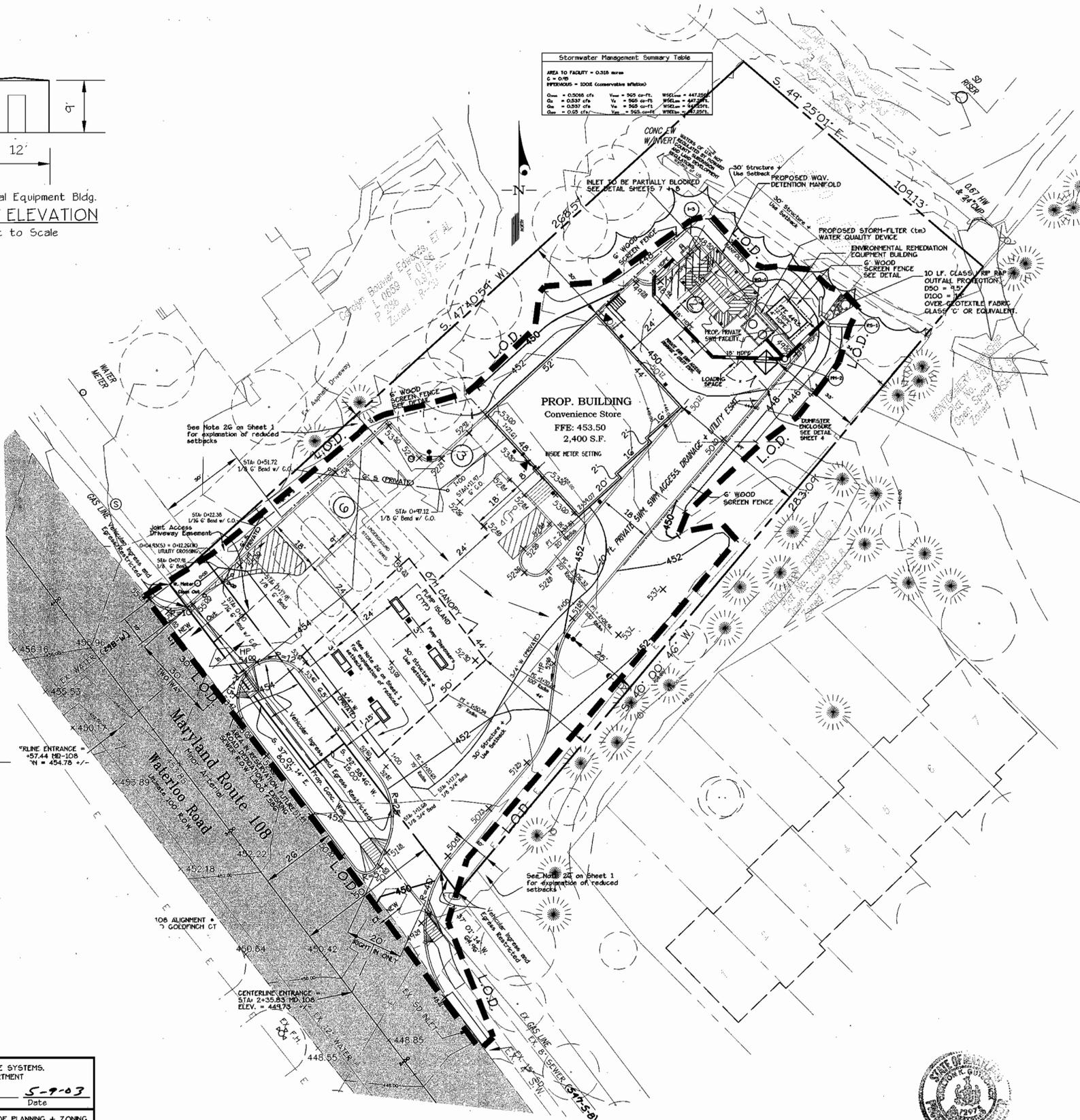
SCALE: AS SHOWN	ZONING: B-2	G. L. W. FILE No.: 02006
DATE: OCT, 2002	TAX MAP: 31-37	SHEET: 1-OF-9

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Stormwater Management Summary Table

AREA TO FACILITY = 0.318 acres			
C = 0.15			
PREVIOUS = 100% Conservative Infiltration			
Q <sub>10</sub> = 0.0048 cfs	V <sub>10</sub> = 925 cu-ft	W <sub>10</sub> = 447.252	
Q <sub>5</sub> = 0.0037 cfs	V <sub>5</sub> = 925 cu-ft	W <sub>5</sub> = 447.252	
Q <sub>2</sub> = 0.0037 cfs	V <sub>2</sub> = 925 cu-ft	W <sub>2</sub> = 447.252	
Q <sub>1</sub> = 0.0037 cfs	V <sub>1</sub> = 925 cu-ft	W <sub>1</sub> = 447.252	



APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Penny Borstein* M.D. F.C. 5-9-03  
County Health Officer Date

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*Mark D'Amico* 5/12/03  
Director Date

*Cindy Harris* 5/12/02  
Chief, Planning and Development Date

*John D'Amico* 5/12/03  
Chief, Development Engineering Division Date

Note: All existing monitoring wells shall be barricaded with orange safety prior to demolition and during all construction. Any proposed removal or relocation of monitoring wells shall be approved by M.D.E. (See Demolition Plan for well locations)



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DATE	REVISION	BY	APP'R.
12-11-03	Added landing & stairs, eliminate 1 parking space, Revised rear elevation	H.K.T.	
2-5-03	Revised per H.C. comments		

PREPARED FOR:  
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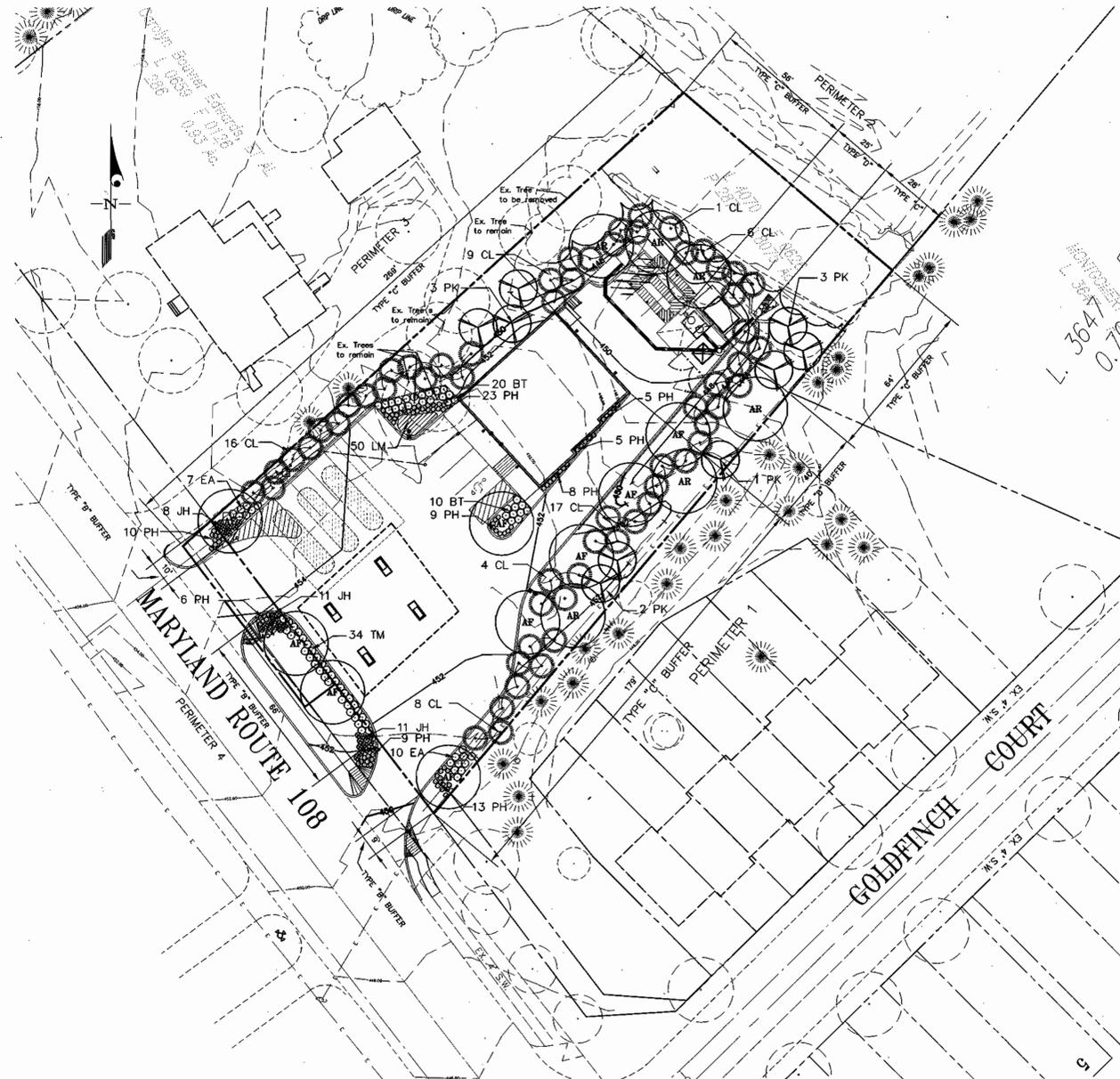
**SITE DEVELOPMENT PLAN**  
**MONTGOMERY RUN SERVICE CENTER**  
Gasoline Service Station and Convenience Store  
PARCEL 287  
Liber 4070, Folio 0626  
ELKRIE ELECTION DISTRICT No. 1  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=20'	B-2	02006
DATE	TAX MAP	SHEET
OCT, 2002	31-37	3 OF 9

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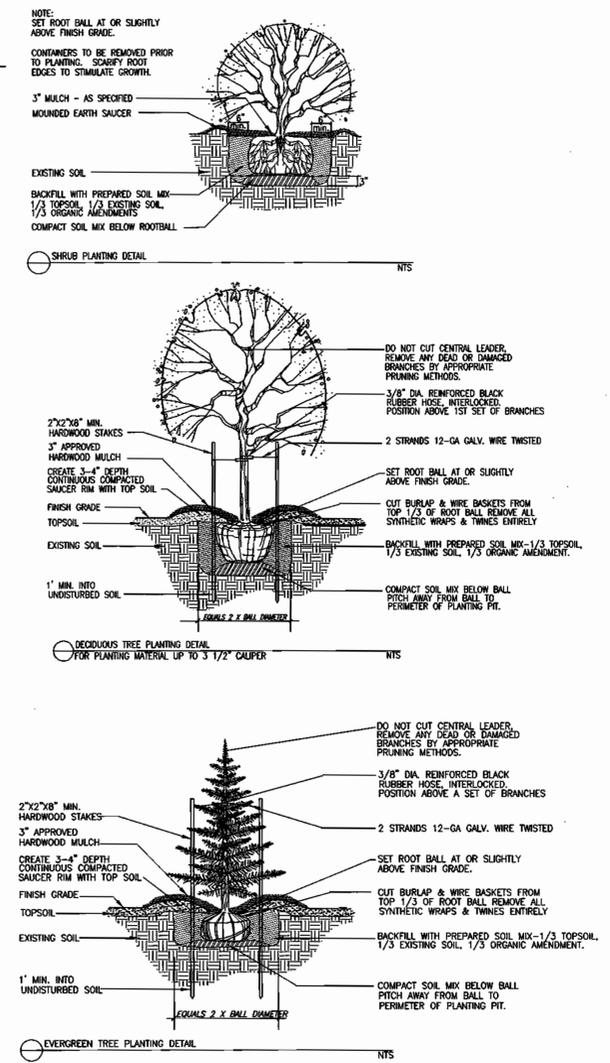
LANDSCAPING NOTES

- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and the Howard County Landscape Manual.
- Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if any relocations are required.
- Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
- No substitution shall be made without written consent of the owner or his representative.
- All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sodded in accordance with the project specifications.
- The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the plants.
- All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.
- Landscape surety shall be posted with the Developer's Agreement.
- At the time of plant installation, all shrubs and trees listed and approved on the Landscape Plan, shall comply with the proper height requirements in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plants may be made without prior review and approval from the Department of Planning and Zoning. Any deviations from the approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revision are made to the applicable plans.



Key

- Shade Tree
- Flowering Tree
- Evergreen Tree
- Shrubs
- Groundcover



SCHEDULE A PERIMETER LANDSCAPE EDGE Category	Adjacent to Roadway		Adjacent to Perimeter			
	Buffer Non-residential Front	Buffer Non-residential	Buffer Non-residential	Buffer Non-residential	Buffer Loading	Buffer Loading
Landscape Buffer Type	B	C	C	C	D	D
Linear Feet of Roadway/ Perimeter Frontage	85'	243'	84'	269'	40'	25'
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	NO	YES 28 L.F.	YES 84 L.F.	YES 40 L.F.	NO	YES 25 L.F.
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	No	YES 55 L.F.	No	YES 116 L.F.	YES 40 L.F.	YES 25 L.F.
Number of Plants Required						
Shade Trees	2	4	0	3	0	0
Evergreen Trees	2	8	0	6	0	0
Shrubs	0	0	0	0	0	0
Number of Plants Provided						
Shade Trees	2	7	2	2	1	0
Evergreen Trees	0	22	4	25	7	3
Other Trees (2:1 subst.)	0	5	0	3	1	0
Shrubs (10:1 subst.)	56	10	0	15	0	0
(describe plant substitution credits below if needed)						

Landscape Plan  
Scale: 1"=30'

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING
Number of Parking Spaces = 13 Spaces (Provided)
Number of Trees Required = 1 Trees @ 1 per 20 spaces
Number of Trees Provided = 1 Shade Trees Other Trees (2:1 substitution)
NOTE:

Bond Requirement - Surety for Schedule A:  
 Schedule 'A' Number of Shade Trees for bonding: 14 x \$300 = \$ 4,200.00  
 Schedule 'A' Number of Evergreen Trees for bonding: 61 x \$150 = \$ 9,150.00  
 Schedule 'A' Number of Flowering Trees for bonding: 9 x \$150 = \$ 1,350.00  
 Schedule 'A' Number of Shrubs for bonding: 81 x \$30 = \$ 2,430.00  
 Schedule 'B' Number of required Shade Trees for bonding: 1 x \$300 = \$ 300.00  
 TOTAL Estimate for Surety: \$17,430.00

COMMENTS:  
 Landscape surety will be posted with the Developer's Agreement.  
 Landscape surety is required because of BA-99-39E & V, Decision and Order Condition No. 3 and Applicant's Exhibit No. 7.

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATION

I/we certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Landscape Manual. I/we further certify that upon completion a letter of landscape installation, accompanied by a executed one year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

*James Davidson* 4/20/03  
 Developer's/Owner's Name Date



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
*Penny B... 5-9-03*  
 County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Mark D... 5/1/03*  
 Director Date

*Chris... 5/12/03*  
 Chief, Division of Land Development Date

*gmo 5/12/03*  
 Chief, Development Engineering Division Date

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DATE	REVISION	BY	APPR.
12-11-03	Added Landscaping & Stairs & eliminate 1 Parking space	HKT	
2-5-03	Revised per H.C. Comments	KAF	

PREPARED FOR:  
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 ATTN: MR. SCOTT DAVIDSON  
 TELE: 410-560-0312

LANDSCAPE PLAN, DETAILS, NOTES AND SCHEDULES  
**MONTGOMERY RUN SERVICE CENTER**  
 Gasoline Service Station and Convenience Store  
 PARCEL 287  
 Liber 4070, folio 0226  
 ELKRIE ELECTION DISTRICT No. 1  
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	B-2	02006
DATE	TAX MAP	SHEET
OCT, 2002	31-37	5-OF-9