

GENERAL NOTES

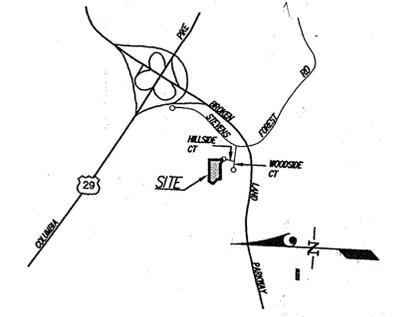
- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works at (410) 313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- The contractor shall notify the Howard County Department of Public Works, Bureau of Utilities at (410) 313-4900 at least five working days prior to starting any excavation work.
- Area of Parcel: 4.278 Ac. Disturbed Area: 5.3 Ac.
- 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.
- All plan dimensions are to face of curb unless otherwise noted.
- Existing topography was determined by GLW field survey dated December 1999 using the benchmarks shown on the key map on this sheet.
- Coordinates and bearings are based upon the MD State Plane System (NAD '27).
- Water and sewer shown is public and private as shown on the plan. Proposed public per contract # 24-3887-D.
- All existing water and sewer is shown per Contract No. 24-1482-D.
- Stormwater management quantity and quality control is being provided onsite.
- All existing public storm drain is per F-87-02.
- Stormwater management is provided in an on-site detention basin with a stormceptor for quality control. All SWM is to be privately owned and maintained. All proposed stormdrain is private.
- All curb radii are 5' unless noted otherwise.
- Utility information taken from approved final construction plans for development.
- Sidewalks adjacent to perpendicular parking shall be 6' wide. All other sidewalks shall be 5' wide, except where dimensioned otherwise. Provide 3' radius rounding at all angle breaks and intersections.
- Contractor shall utilize PVC pipe for all sewer house connections. Contractor shall utilize D.I.P. (Cl. 51) for 4" and 6" water house connections and D.I.P. (Cl. 50) for 8" water house connections.
- For all storm drain connections at existing stubs, the contractor shall remove the existing blocking and maintain the same grade and alignment.
- Use trench bedding class "C" for storm drains. See Howard County Standard G 2.01 for more information.
- Paved areas indicated are private except as noted.
- Project background: See Dept. of Planning & Zoning File Numbers: F-87-02, FDP-149-A-II, WP-01-43 (See Note 37).
- Recording reference: Plat No. 7044.
- All proposed ramps shall be in accordance with current A.D.A. standards. Maximum sidewalk cross slope shall be two percent. Provide a five-foot by five-foot level (2 percent max.) landing at the top and bottom of all ramps and building entrances and exits.
- All water meters shall be located inside buildings. The building is to be sprinklered.
- The proposed water and sewer house connection alignments indicated on the plans, from the proposed utility stubs to the building, are to be constructed by the building plumber and are approximate. The proposed stubs are located 5' from the building face.
- The proposed roof drain alignment connections indicated on the plans, from the stubs to the building, are to be constructed by the building plumber and are approximate. The proposed stubs are located 5' from the building face.
- Maintain 2% cross-slopes on sidewalks, per standard details. Where sidewalk is adjacent to building, slope away from building, and utilize expansion joint material and sealer in the joint between the sidewalk and the building wall.
- Sufficient sight distance per the Howard County Design Manual must be provided at all access points. Any landscaping that obstructs the line of sight must be relocated.
- An A.P.F.O. traffic study is included with this submission.
- There is no floodplain on this site.
- There are no wetlands on this site.
- Horizontal and vertical control are based on Howard County Street right-of-way Points.
- There are no known grave sites or cemeteries on this site.
- All outside lighting shall comply with Zoning Regulation Section 134 which requires lights to be installed to direct/reflect downwards and inwards on site away from all adjoining public streets and residential areas. See electrical drawings to be submitted with the building permit package.
- This site is exempt from the Forest Conservation Ordinance in accordance with Section 16.1202 (b) (1) (iv), a planned unit development.
- On October 13, 2000, a waiver petition was submitted and granted to waive section 16.155 (a)(1) of The Subdivision Regulations (which requires a signed SDP prior to Grading Permit) to allow an early grading permit under WP-01-43. The conditions of approval included 1.) Obtaining signature approval from The Howard Soil Conservation District on the grading exhibit prior to applying for a grading permit. The grading exhibit will confirm to the plans submitted with the waiver 2.) Grading cannot occur in wetlands or wetland buffers, stream buffers, steep slopes or forest areas; 3.) The scope of work is limited to sediment control and mass grading only; 4.) The approval of this waiver does not permit the installation of utilities or other site infrastructure that requires inspection by Howard County.

SITE DEVELOPMENT PLAN

VILLAGE OF OWEN BROWN

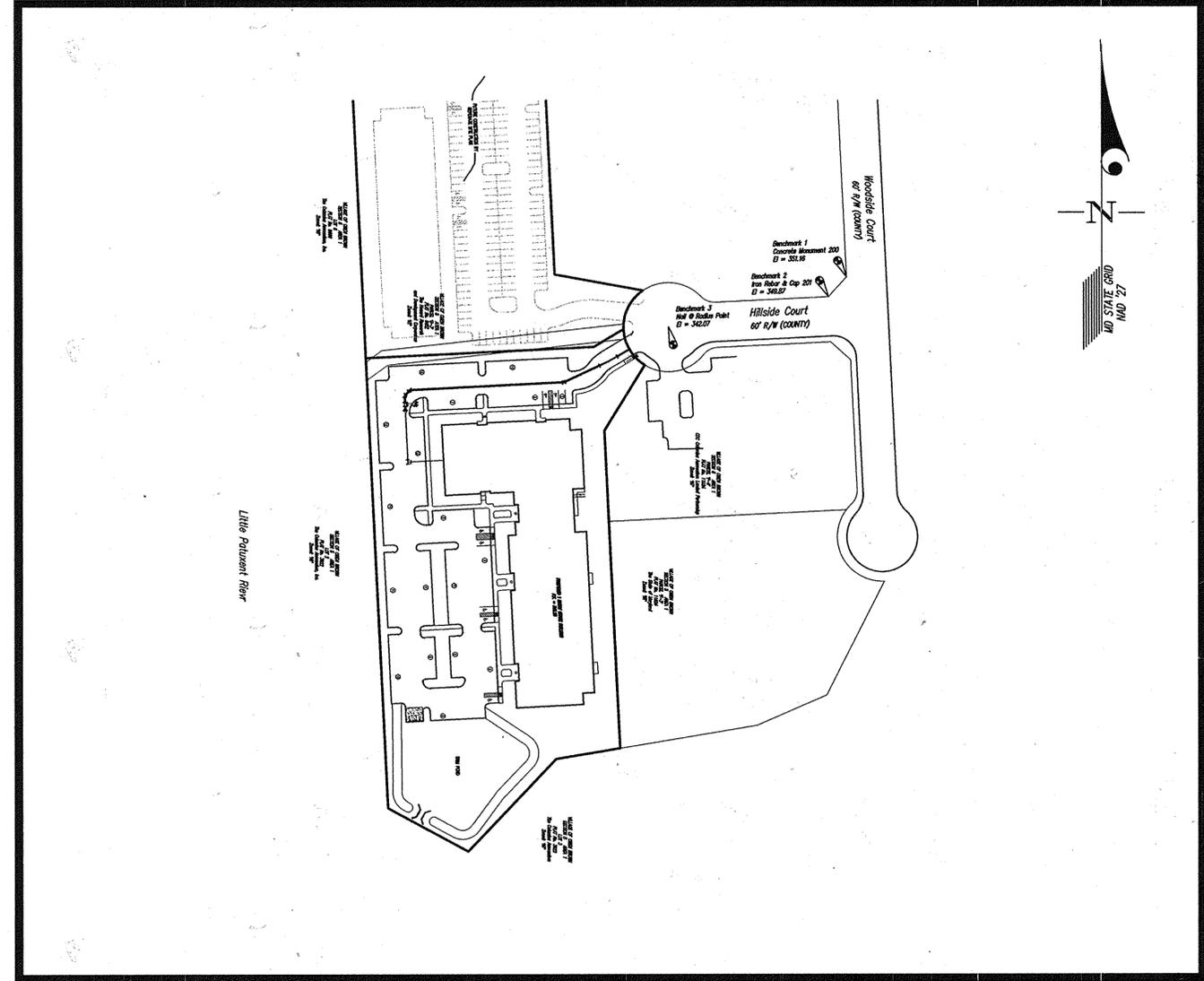
SECTION 5 AREA 1

PARCEL 'F-2'



VICINITY MAP
1"=2000'

- BENCHMARK**
- Concrete Monument 200 at Northernmost R/W corner Woodside Court & Hillside Court. EL. = 351.16
 - Rebar and cap at Northwest R/W corner Woodside Court & Hillside Court. EL. = 349.87



KEY MAP

SCALE: 1"=100'

SHEET INDEX

- Cover Sheet
- Site Development Plan
- Site Details/Paving Plan
- Landscape Plan
- Landscape Notes & Details
- Drainage Area Map
- Utility Profiles & Schedules
- Stormwater Management Details
- Stormwater Management & Storm Drain Details
- Stormwater management Specifications and Sails Information
- Sediment and Erosion Control Plan
- Sediment Control Notes and Details

SITE ANALYSIS

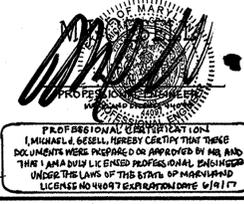
- Area of site: 186,350 sq. ft. or 4.278 ac.
- Disturbed Area: 5.3 ac.
- Present Zoning: New Town (Employment Center - Commercial)
- Proposed Use: Office; Indoor Commercial Recreation for youth Camp
- Leasable Floor space: 39,738 s.f. office; 2,940 s.f. indoor commercial recreation
Gross Floor Space: 44,078 s.f.
- Total number of Parking Spaces required: 95 spaces
(Based on General Office use @ 2 spaces/1000 s.f. leasable; indoor commercial recreation use @ 5.0 spaces/1,000 s.f.)
- Total number of Handicap Spaces required: 6
(Including 1 Van Accessible Space)
- Total number of Parking Spaces provided: 172
(includes 7 handicap spaces; provides a parking ratio of 4.03 sp./1000 s.f.)
- Total number of Handicap Spaces provided: 7
(including 2 Van Accessible spaces)
- Building coverage: 44,078 s.f.
- Floor/Area ratio (F.A.R.): 44,078/186,350 = 0.24

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE August 24, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature] 11/21/00
 Date
[Signature] 11/20/00
 Chief, Division of Land Development
[Signature] 11/14/00
 Chief, Development Engineering Division
 Date



BOHLER ENGINEERING
 301 DULANEY VALLEY ROAD, SUITE 301
 TOWSON, MARYLAND 21284
 Phone: (410) 821-7900
 Fax: (410) 821-7987
 Mb@BohlerEng.com



FOR REVISION 3 ONLY:

ADDRESS CHART	
LOT/PARCEL #	STREET ADDRESS
F-2	6315 HILLSIDE COURT

WATER CODE: E 13	SEWER CODE: S410000
SUBDIVISION NAME: VILLAGE OF OWEN BROWN	SECTION/AREA 5/1
PLAT 7044	ZONE NEW TOWN
TAX MAP 36	BLOCK 14
ELEC. DIST. 6	CENSUS TRACT 6067.01

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

DATE	REVISION	BY	APPR.
9/17/15	Revise use and parking calculations	RMS	

PREPARED FOR:
 Hillcroft Associates LLC.
 c/o Manekin Brothers Abeshouse
 The Stone Mill
 1340 Smith Avenue, Suite 200
 Baltimore, Maryland 21209
 Attn: Mr. Richard P. Manekin
 410-779-1208

COVER SHEET

VILLAGE OF OWEN BROWN

SECTION 5 AREA 1 ~ PARCEL 'F-2'

PLAT No. 7044
(HILLCROFT EXECUTIVE PARK)

HOWARD COUNTY, MARYLAND

SCALE AS SHOWN	ZONING NT	G. L. W. FILE No. 99115
DATE Nov. 01, 2000	TAX MAP - GRID 36 - 14	SHEET 1 OF 12

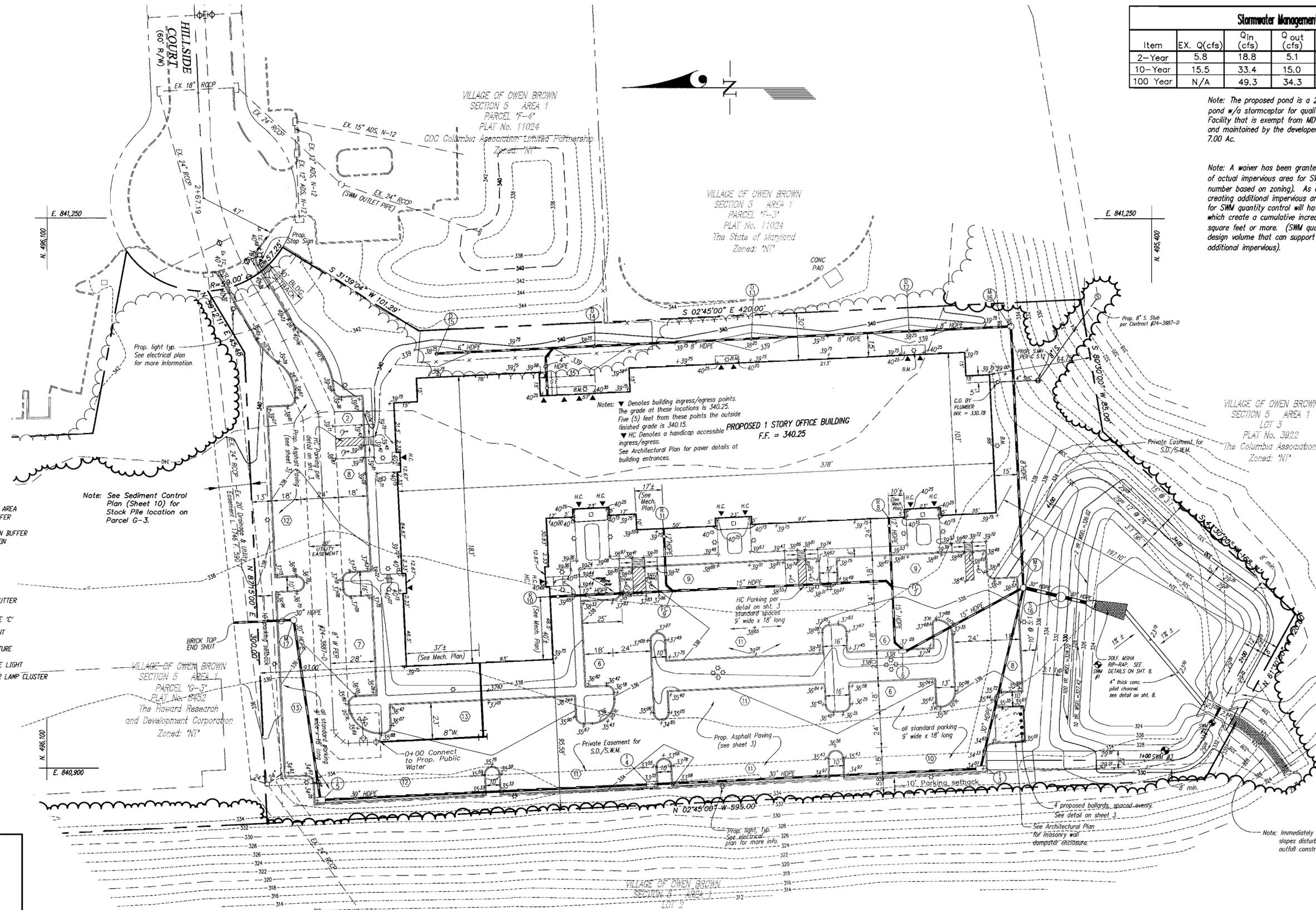
DRRAWINGS\99115\DESIGN\99115SPL.DWG DES. SEC DRN. JAU CHK.

GUILFORD ELECTION DISTRICT No. 6

Stormwater Management Pond Summary						
Item	EX. Q(cfs)	Q _{in} (cfs)	Q _{out} (cfs)	WSEL.	Stor. Req. (Ac.-Ft.)	Stor. Prov. (Ac.-Ft.)
2-Year	5.8	18.8	5.1	326.02	0.48	0.43
10-Year	15.5	33.4	15.0	327.42	0.68	0.76
100 Year	N/A	49.3	34.3	328.20	N/A	0.96

Note: The proposed pond is a 2/10 year management detention pond w/a stormceptor for quality control. It is a Class "a" Facility that is exempt from MD-378. It shall be privately owned and maintained by the developer, and the total drainage area is 7.00 Ac.

Note: A waiver has been granted for this project to allow the use of actual impervious area for SWM computations (in lieu of a number based on zoning). As a result, there is limited flexibility in creating additional impervious area in the future. A re-analysis for SWM quantity control will have to be submitted for any changes which create a cumulative increase in impervious area of 1,700 square feet or more. (SWM quality control has an excess of design volume that can support up to 26,500 square feet of additional impervious).



LEGEND

- 366 --- EX. CONTOUR
- 300 --- PROP. CONTOUR
- --- EX. TREELINE
- --- PROP. TREELINE
- --- EX. STORM DRAIN
- --- PROP. STORM DRAIN
- --- LIMIT OF DISTURBED AREA
- --- STREAM VALLEY BUFFER
- --- 100 YR FLOODPLAIN
- --- FB --- FOREST CONSERVATION
- --- W --- WETLANDS
- --- WB --- WETLANDS BUFFER
- --- EX. STREAM
- --- RIP-RAP
- --- SANITARY SEWER WATERLINE
- --- CONCRETE CURB & GUTTER
- --- LANDSCAPE FENCE
- --- SIDEWALK RAMP TYPE 'C'
- 13 --- PARKING SPACE COUNT
- 16 --- STORM DRAIN STRUCTURE
- B.M. --- BUILDING MOUNT SITE LIGHT
- --- LIGHT POLE BASE OR LAMP CLUSTER

Note: See Sediment Control Plan (Sheet 10) for Stock Pile location on Parcel G-3.

Notes: ▼ Denotes building ingress/egress points. The grade at these locations is 340.25. Five (5) feet from these points the outside finished grade is 340.15. ▼ HC Denotes a handicap accessible ingress/egress. See Architectural Plan for paver details at building entrances.

PROPOSED 1 STORY OFFICE BUILDING
F.F. = 340.25

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE August 24, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Land... 11/2/00 Date
Chris... 11/2/00 Date
... 11/10/00 Date



VILLAGE OF OWEN BROWN
SECTION 5 AREA 1
LOT 2
PLAT No. 3822
The Columbia Association, Inc.
Zoned: 'NT'

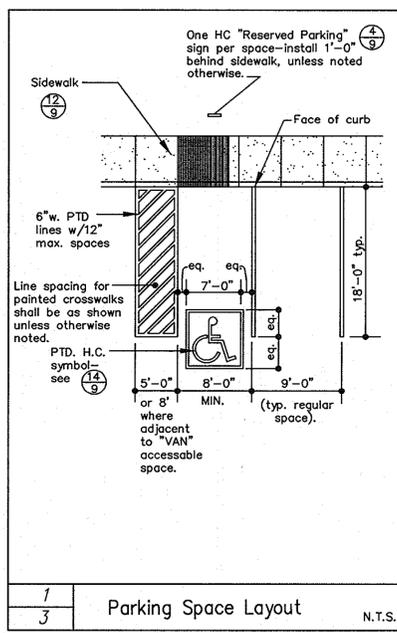
GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
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DATE	REVISION	BY	APP'R.

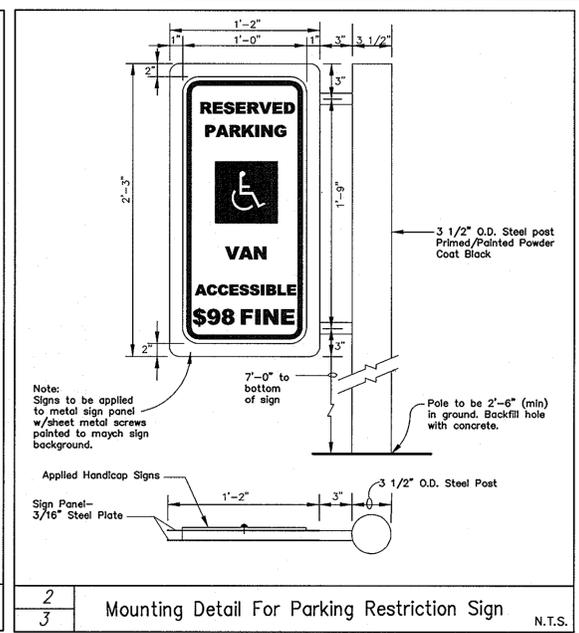
PREPARED FOR:
Hilcraft Associates LLC
c/o Marvick Brothers Aesthetics
The Stone Mill
1340 Smith Avenue, Suite 200
Baltimore, Maryland 21209
Attn: Mr. Richard P. Marvick
410-779-1208

SITE DEVELOPMENT PLAN
VILLAGE OF OWEN BROWN
SECTION 5 AREA 1
PARCEL 'F-2'
PLAT No. 7044

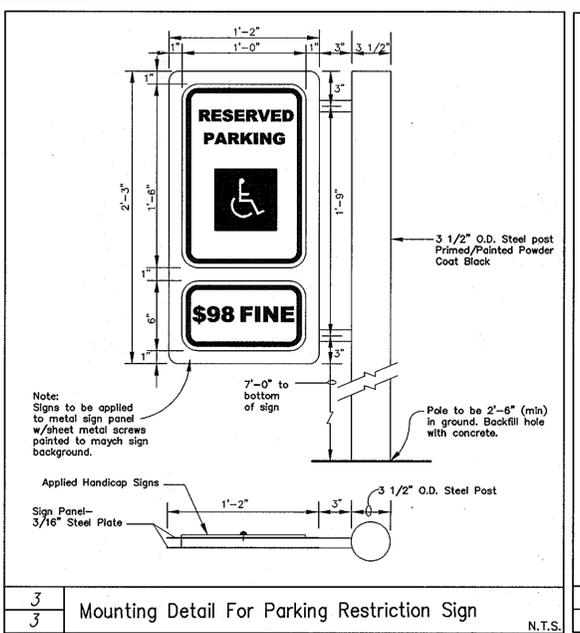
SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	99115
DATE	TAX MAP - GRID	SHEET
NOV. 01, 2000	36 - 14	2 OF 12



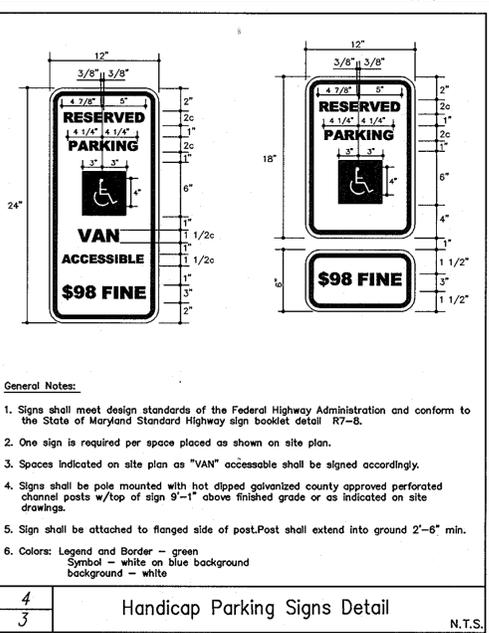
1
3 Parking Space Layout N.T.S.



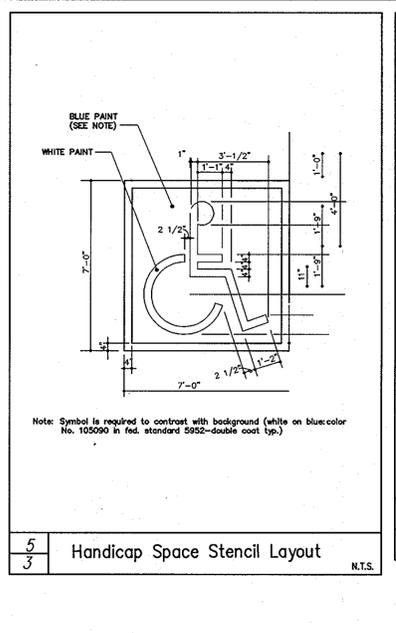
2
3 Mounting Detail For Parking Restriction Sign N.T.S.



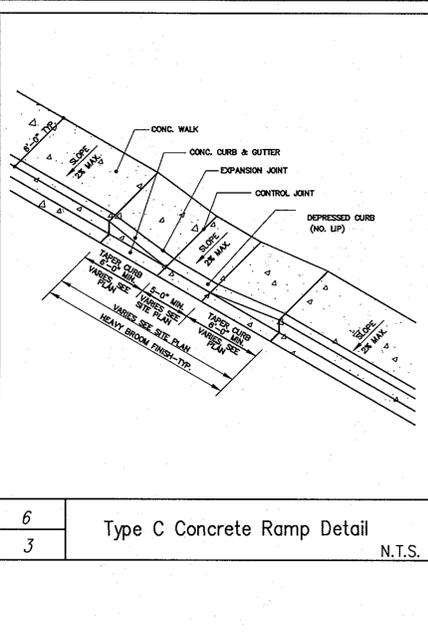
3
3 Mounting Detail For Parking Restriction Sign N.T.S.



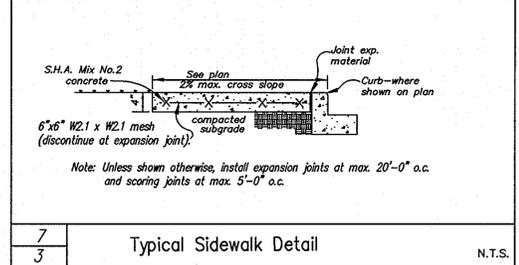
4
3 Handicap Parking Signs Detail N.T.S.



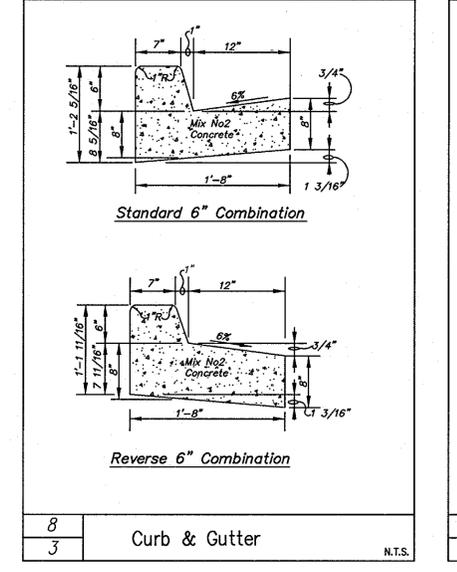
5
3 Handicap Space Stencil Layout N.T.S.



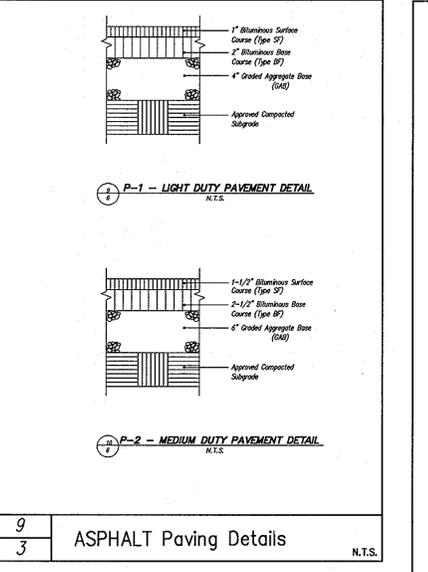
6
3 Type C Concrete Ramp Detail N.T.S.



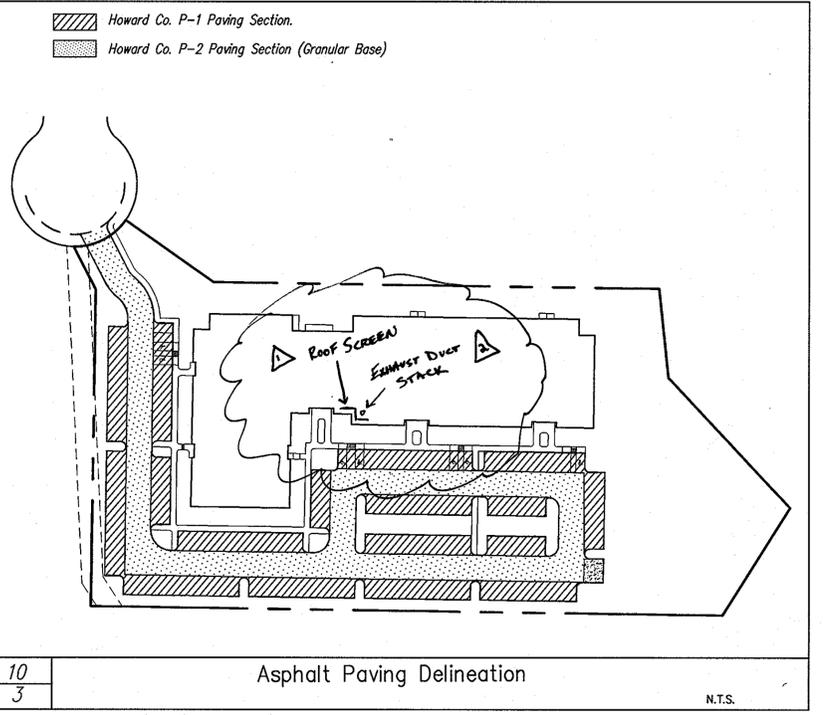
7
3 Typical Sidewalk Detail N.T.S.



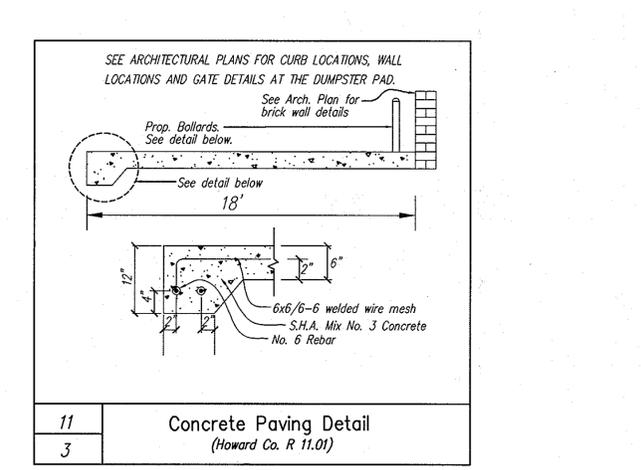
8
3 Curb & Gutter N.T.S.



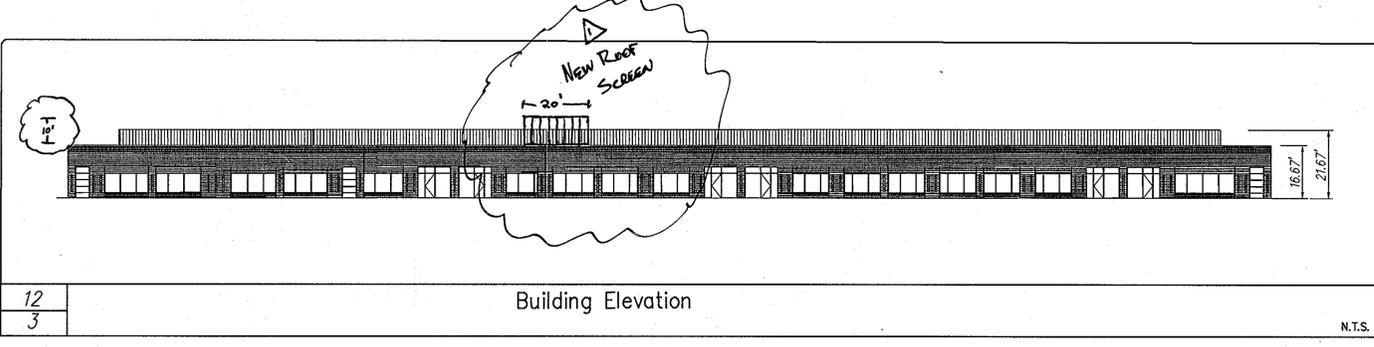
9
3 ASPHALT Paving Details N.T.S.



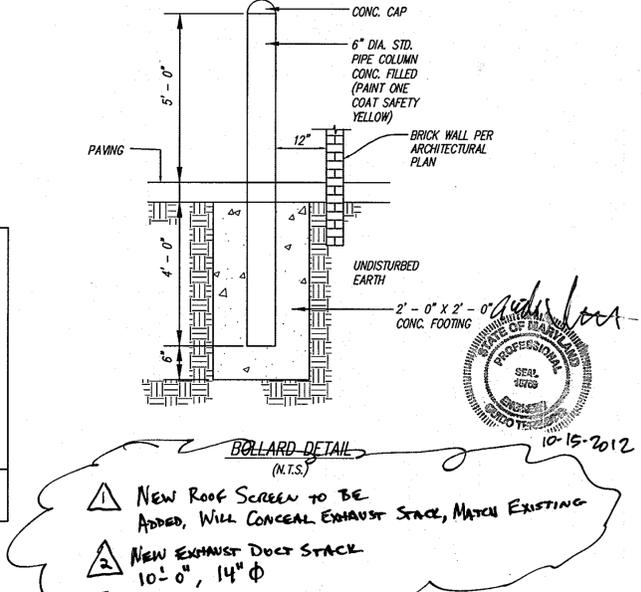
10
3 Asphalt Paving Delineation N.T.S.



11
3 Concrete Paving Detail (Howard Co. R 11.01) N.T.S.



12
3 Building Elevation N.T.S.



13
3 BOLLARD DETAIL (N.T.S.) N.T.S.

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE August 24, 2000



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director: [Signature] Date: 11/2/00
Chief, Division of Land Development: [Signature] Date: 11/2/00
Chief, Development Engineering Division: [Signature] Date: 11/16/00

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
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DATE	REVISION	BY	APP'R.

PREPARED FOR:
OWNER:
Hicroft Associates LLC
c/o Manskin Brothers Absohouse
The Stone Mill
1340 Smith Avenue, Suite 200
Baltimore, Maryland 21209
Attn: Mr. Richard P. Manskin
410-779-1208

SITE DETAILS/PAVING PLAN
VILLAGE OF OWEN BROWN
SECTION 5 AREA 1
PARCEL "F-2"
PLAT No. 7044
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	99115
DATE	TAX MAP - GRID	SHEET
Nov. 01, 2000	36 - 14	3 OF 12

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

- Plant Names
Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

- Plant Standards
All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.

- Plant Measurements
All plants shall conform to the measurements specified in the Plant Schedule as approved by the ARC.

- Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above grade for trees four inches (4") in caliper and over.
- Minimum branching height for all shade trees shall be six feet (6'), maximum eight feet (8').

- Caliper, height, spread and size of ball shall be generally as follows:

CALIPER	HEIGHT	SPREAD	SIZE OF BALL
3" - 3.5"	14' - 16'	6' - 8'	32" diameter
3.5" - 4"	14' - 16'	8' - 10'	36" diameter
4" - 4.5"	16' - 18'	8' - 10'	40" diameter
4.5" - 5"	16' - 17'	10' - 12'	44" diameter
5" - 5.5"	16' - 20'	10' - 12'	48" diameter
5.5" - 6"	18' - 20'	12' - 14'	52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards".

4. Plant Identification

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

5. Plant Inspection

The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

B. Planting Methods

All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:

1. Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

3. Excavation of Plant Pits

The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following schedule:

- Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed by the landscape contractor.
- All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.

- If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

- Diameter and depth of tree pits shall generally be as follows:

PLANT SIZE	ROOT BALL	PIT DIAMETER	PIT DEPTH
3" - 3.5" cal.	32"	64"	28"
3.5" - 4" cal.	36"	72"	32"
4" - 4.5" cal.	40"	80"	36"
4.5" - 5" cal.	44"	88"	40"
5" - 5.5" cal.	48"	96"	44"
5.5" - 6" cal.	52"	104"	48"

A 20 % compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra topsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

- Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.
- Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eye and eye with 4" take-up. For trees over 5" caliper, provide 3/16", 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.
- Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3" in caliper.
- All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail".

5. Plant Pruning, Edging and Mulching

- Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in

diameter shall be painted with an approved antiseptic tree wound dressing.

- All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine pockets.

- After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

7. Plant Guarantee

All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period.

- For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting season.

- Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

Sodding

All sodding shall be in accordance to the "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape Architects.

All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4" long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victa, or Escort.

LANDSCAPING NOTES

- This plan has been prepared in accordance with Section 16.124 of the Howard County Code and Chapter VI (Alternative Compliance) of 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.
- Financial surety for the required landscaping per schedule A and B shall be posted with the developers' agreement in the amount of \$3,150.00.
- Tabulation for landscape shown:
Required planting by HCD for 4.278 acre of office combined at 24 trees/acre = 103 trees
Planting provided:
Shade Trees (plants provided) 54
Ornamental Trees 24 = 12 E.S.T. 1 2:1
Evergreen Trees (existing and proposed) 45 = 22 E.S.T. 1 2:1
Shrubs provided: 222 = 22 E.S.T. 1 10:1
Total E.S.T. = 110
*E.S.T., or Equivalent Shade Tree
- 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.

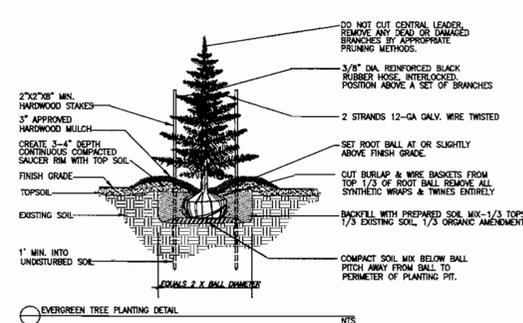
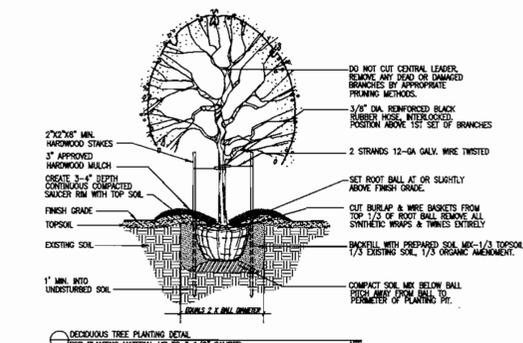
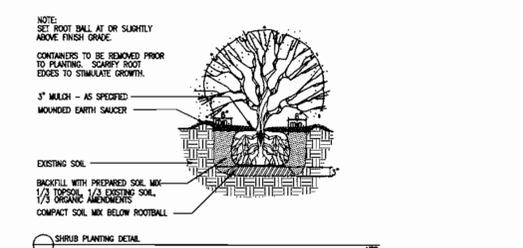
SCHEDULE A PERIMETER LANDSCAPE EDGE Category	Perimeter		On-site S. W. M. Perim.
	Adj. to Roadways	Adj. to Perimeter Property	
Landscape Buffer Type	B	N/A - Internal Perimeter	
Linear Feet of Roadway/ Perimeter Frontage	28'		
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	28'		
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	28'		
Number of Plants Required Shade Trees Evergreen Trees Shrubs	1 1		
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 subst.) Shrubs (10:1 subst.) (describe plant substitution credits below if needed)			Provided through Alternative Compliance. -- Alternative Compliance...exceeds county req. -- -- Alternative Compliance...exceeds county req. --
Bond Requirement - Surety for Schedule A: Schedule 'A' Number of Shade Trees for bonding: 1 x \$300 = \$300.00 Schedule 'A' Number of Evergreen Trees for bonding: 1 x \$150 = \$150.00 Schedule 'A' Number of Shrubs for bonding: 0 x \$30 = \$ Schedule 'A' Number of Street Trees for bonding: 0 x \$300 = \$ TOTAL Estimate for Surety: \$450.00			
COMMENTS:			

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of Parking Spaces = 171 Spaces (Provided)	
Number of Trees Required = 9 Trees @ 1 per 20 spaces	
Number of Trees Provided more than 9 provided with alternative compliance	
Shade Trees Other Trees (2:1 substitution)	
NOTE: Alternative Compliance per HCD's Standards Alternative Compliance exceeds County requirements	
Schedule 'B' Number of required Shade Trees for bonding: 9x \$300 = \$2,700.00	

DEVELOPER'S / BUILDER'S CERTIFICATE

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 Howard County Landscape Manual. I/We further certify that upon completion, a Certification of Landscape Installation, accompanied by an executed one-year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.

Name (Developer's /Builder's) _____ Date _____



APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE August 24, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Joseph R. Kuttler 11/21/00
Date

Cindy Hamilton 10/20/00
Date

Chad D. ... 11/16/00
Date



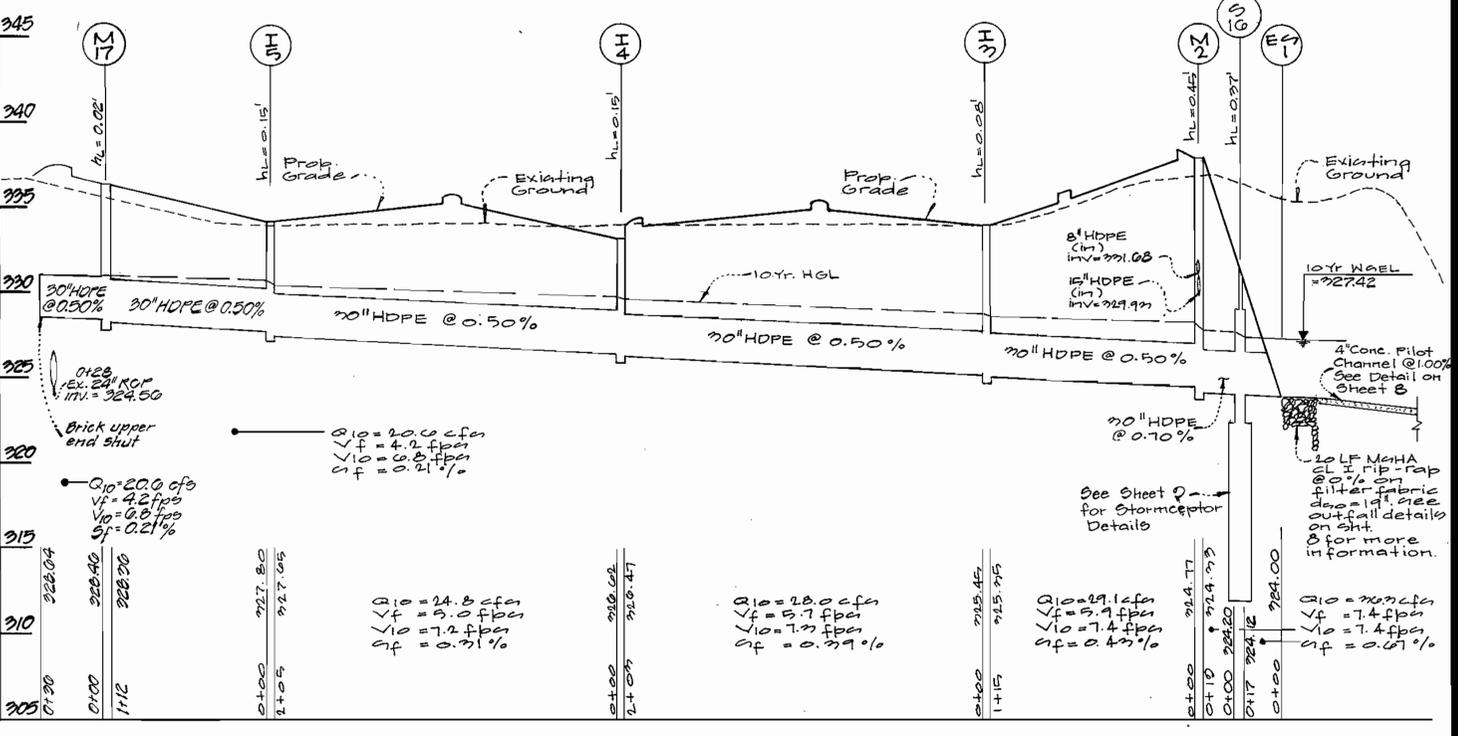
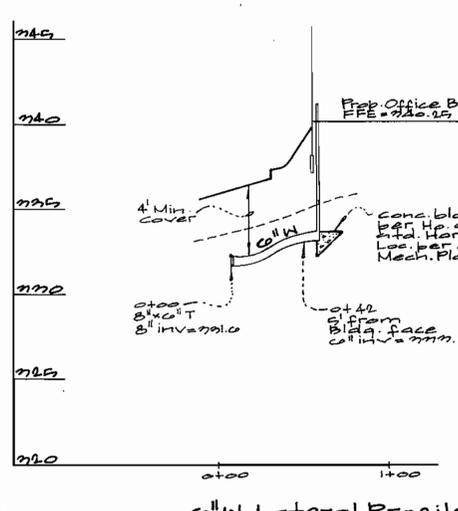
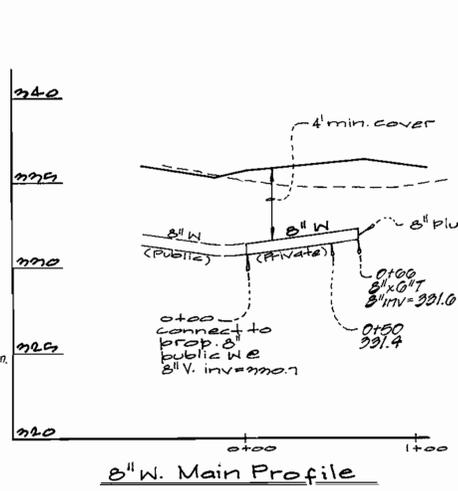
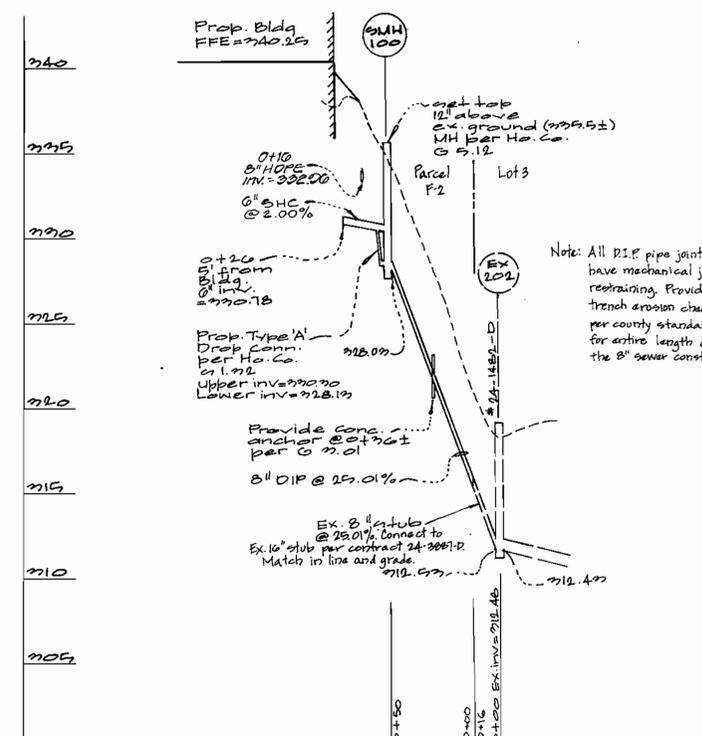
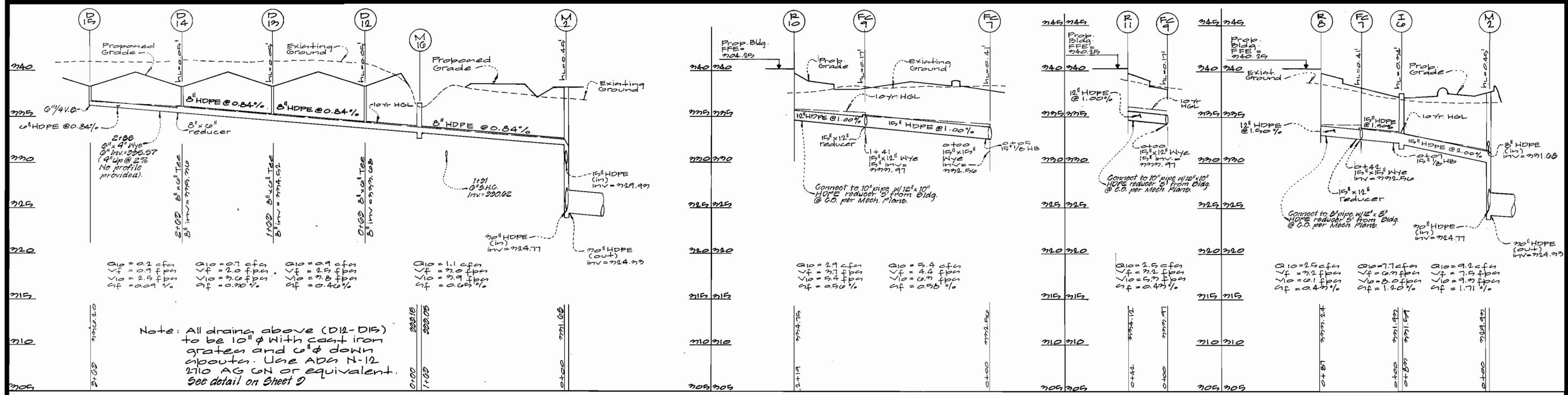
GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3808 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BAL: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:
Hilcraft Associates LLC.
c/o Manekin Brothers Abeshouse
The Stone Mill
1340 Smith Avenue, Suite 200
Baltimore, Maryland 21209
Attn: Mr. Richard P. Manekin
410-779-1208

LANDSCAPE NOTES & DETAILS
VILLAGE OF OWEN BROWN
SECTION 5 AREA 1
PARCEL "F-2"
PLAT No. 7044
GUILFORD ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
NTS PLOT AT 1"=30'	NT	99115
DATE	TAX MAP - GRID	SHEET
Nov. 01, 2000	36 - 14	5 OF 12



Profile Scale:
 Horizontal: 1" = 50'
 Vertical: 1" = 5'

Structure Schedule							
No.	Type	Width (inside)	Top Elevation	Invert Elevation	St'd Detail	Locations	Remarks
E0-1	End section	24"	225.40	224.00	Manufacturer	SWM Pond	See Detail
M-2	Manhole	48"	228.20	227.20	224.20	South East	See Detail
I-3	WR Inlet	24"	224.07	224.07	225.25	South West	
I-4	WR Inlet	24"	224.25	224.25	225.47	Central West	
I-5	WR Inlet	24"	224.25	224.25	227.80	North West	
I-6	A-S Inlet	24"	227.54	227.54	221.40	South Central	
S-10	Stormceptor	—	222.00	222.00	216-7200	SWM Pond	See Sheet 9
M-10	Shallow Manhole	48"	226.50	223.05	225.2	Behind Building	
M-17	Shallow Manhole	5'-0"	226.40	223.26	225.2	North Central	

Pipe Schedule			
Size	Type	Quantity (l.f.)	Remarks
6"	HDPE	110*	See Detail
8"	HDPE	420	"
12"	HDPE	105	"
15"	HDPE	200	"
24"	HDPE	707	"
4"	HDPE	20	"(No Profile)

* Including vertical drains (10 ±)

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE August 24, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signatures and Dates]



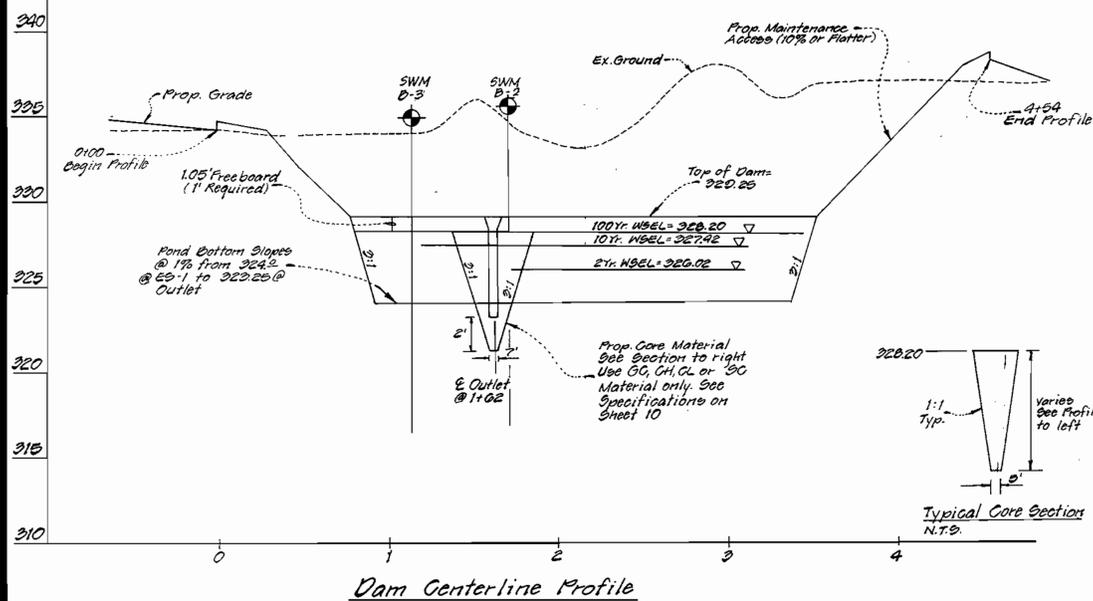
GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3609 NATIONAL DRIVE - SUITE 200 - BURTONTVILLE OFFICE PARK
 BURTONTVILLE, MARYLAND 20886
 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-589-2524 FAX: 301-421-4188

DATE	REVISION	BY	APPR.

PREPARED FOR:
 Manekin Brothers Abeshouse
 The Stone Mill
 1840 Smith Avenue, Suite 200
 Baltimore, Maryland 21208
 Attn: Mr. Richard M. Manekin
 410-770-1208

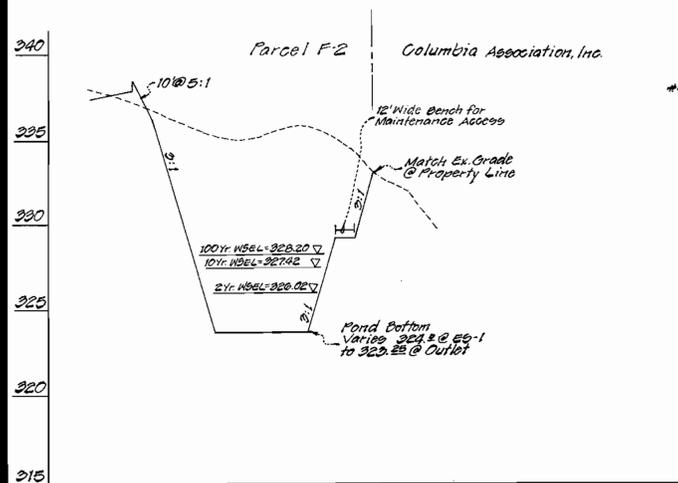
UTILITY PROFILES
VILLAGE OF OWEN BROWN
 SECTION 5 AREA 1
 PARCEL "F-2"
 PLAT No. 7044
 GULFORD ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	99115
DATE	TAX MAP - GRID	SHEET
Nov. 04, 2000	36 - 14	7 OF 12

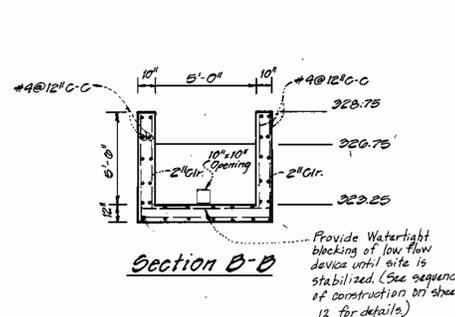


Dam Centerline Profile

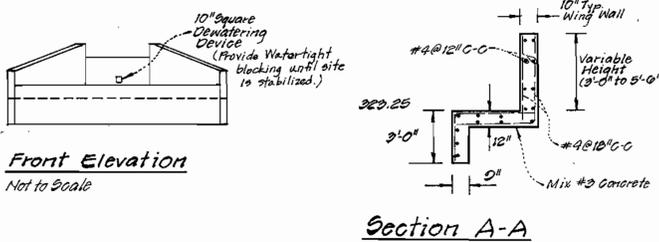
PROFILE SCALES
HORIZ. 1"=50' VERT. 1"=5'



Pond Typical Section



Section B-B



Front Elevation
Not to Scale

Section A-A

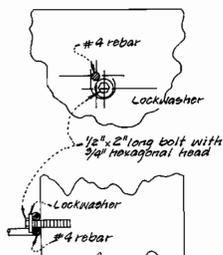
S.W.M. OUTLET STRUCTURE DETAILS
APPROX. SCALE: 1"=5'

Outlet Structure - General Notes

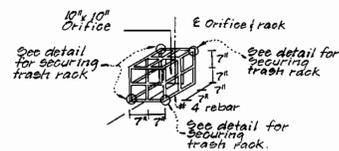
- A. Reference Standards
 1. Doca National Building Code.
 2. Building Code Requirements for Reinforced Concrete, ACI-318.
- B. Materials
 1. Concrete to be Normalweight (150 PCF) with a Compressive Strength of 3,500 PSI Minimum at 28 days. All concrete to be air entrained (MSHA Mix No. 3)
 2. Deformed Reinforcing Bars to conform to ASTM G15, Grade 60.
- C. Construction
 1. All foundations to be placed on undisturbed soil or compacted structural fill.
 2. Assumed minimum bearing capacity = 2,000 PSF. Actual Capacity to be verified prior to placing concrete.
 3. Place backfill against walls in maximum lifts of eight (8) inches.
 4. Provide 3/4" x 3/4" Chamfer along all exposed edges.

Notes for Trash Rack

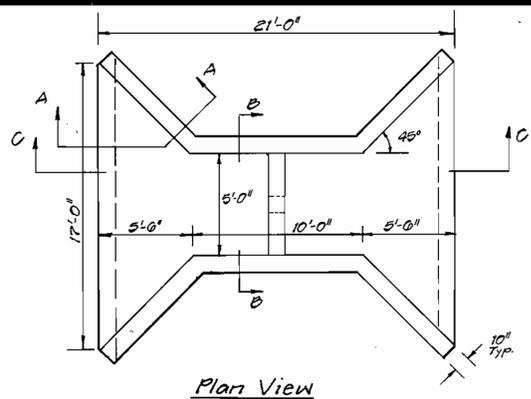
1. Bars will not be required against the floor or Weir wall of the riser structure.
2. Bolts to be placed into a concrete anchor.
3. All exposed metal surfaces are to be galvanized after fabrication and painted with two (2) coats of battleship grey paint.



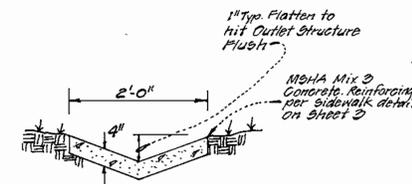
Detail For Securing Trash Rack
N.T.S.



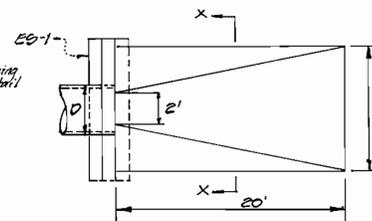
Trash Rack Detail



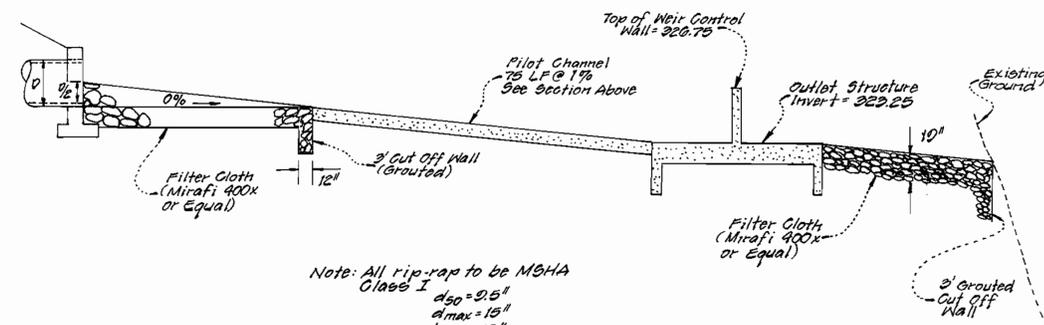
Plan View



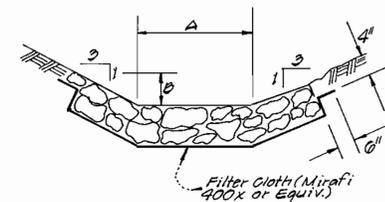
Pilot Channel Section
N.T.S.



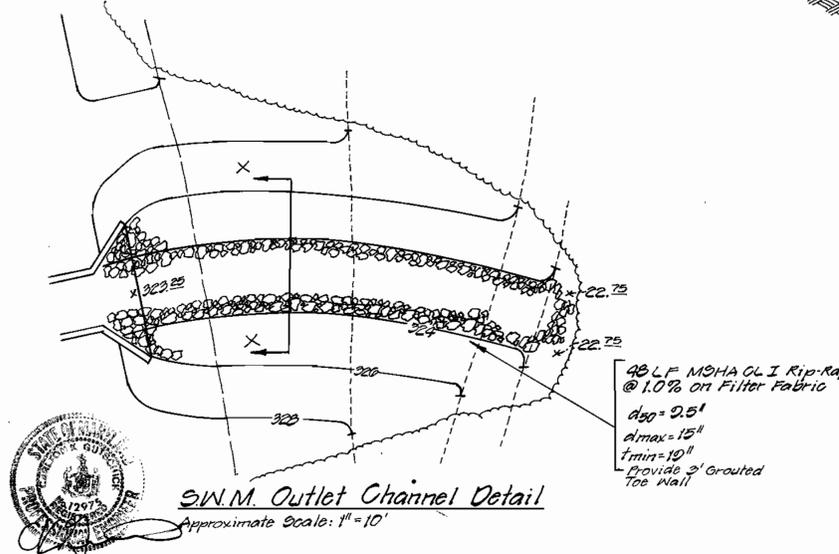
Outlet Protection - Plan View
N.T.S.



Pond Inlet/Outlet Detail



Section X-X
Not to Scale



S.W.M. Outlet Channel Detail

Approximate Scale: 1"=10'

APPROVED
PLANNING BOARD
of HOWARD COUNTY
DATE August 24, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Date 11/21/00
Date 11/21/00
Date 11/16/00

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

DES. DRN. E.B. CHK.

DATE

REVISION

BY

APP'R

Prepared For:
Manekin Brothers Abeshouse
The Stone Mill
1940 Smith Avenue, Suite 200
Baltimore, Maryland 21202
Attn: Mr. Richard P. Manekin
410-772-1203

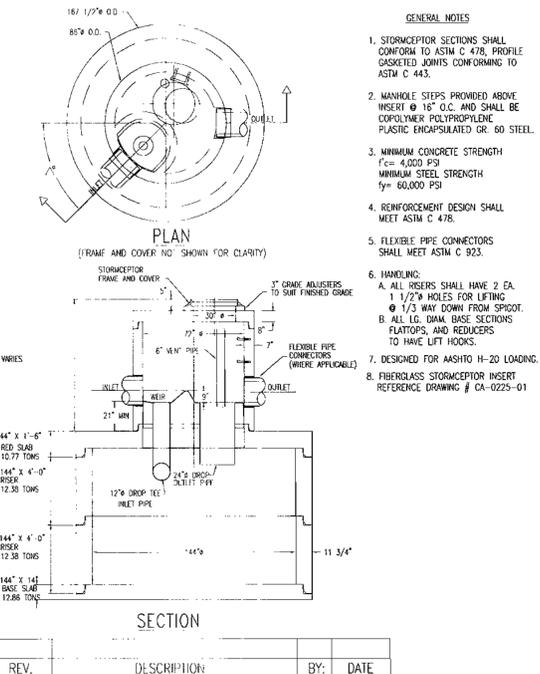
STORMWATER MANAGEMENT DETAIL SHEET

VILLAGE OF OWEN BROWN

SECTION 5 AREA 1
PARCEL "F-2"
PLAT No. 7044

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	99115
DATE	TAX MAP - GRID	SHEET
Nov 01, 2000	36 - 14	3 OF 12

HOWARD COUNTY, MARYLAND



Precast Concrete Stormceptor® Order Request Form
* TO BE INCLUDED ON SWM PLAN BY DESIGNER

CONTRACTOR INFORMATION

Name: _____
 Address: _____
 City: _____
 State: _____
 Zip Code: _____
 Contact: _____
 Phone: _____
 Fax: _____

OWNER INFORMATION

Name: Hillcroft Associates L.L.C.
 Phone: 410-779-1208
 Fax: 410-779-9810

PERVIOUS DRAINAGE AREA FOR THIS UNIT

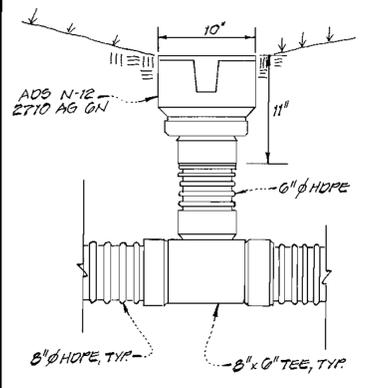
Stormceptor® Model	Insert Size	Manhole Number	S-16
STC		Top Elevation (ft)	332.00
900 <input type="checkbox"/>	DISC <input checked="" type="checkbox"/>	Inlet Pipe Invert (ft)	324.20
1200 <input type="checkbox"/>	22" <input type="checkbox"/>	Outlet Pipe Invert (ft)	324.12
1800 <input type="checkbox"/>	32" <input type="checkbox"/>	Pipe Type	H.D.P.E.
2400 <input type="checkbox"/>	44" <input type="checkbox"/>	Inlet Pipe Inside Diameter (ID)	30"
	CUSTOM <input checked="" type="checkbox"/>	Inlet Pipe Outside Diameter (OD)	36.1"
		Outlet Pipe Inside Diameter (ID)	30"
		Outlet Pipe Outside Diameter (OD)	36.1"

PLEASE DRAW ORIENTATION OF INLET AND OUTLET PIPES ON DIAGRAM ALONG WITH THE PIPE INSIDE DIAMETER (ID) AND INVERT ELEVATION (ft). CLEARLY MARK INLET PIPES WITH AN "I" AND OUTLET PIPES WITH AN "O". PLEASE PROVIDE THE INLET/OUTLET PIPE ANGLE IN DEGREES.

Project Name: Village of Owen Brown, Section 5, Area 1, Parcel F-2
 Approximate time frame of delivery (weeks): _____
 Delivery Address: Street _____
 City: _____ State: _____ Zip Code: _____
 Designer Company: _____
 Designer Contact: _____ Phone: _____ Fax: _____

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR** Hydro Conduit
 ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)971-1900
 FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG,
 PHONE (703)971-1900

- Operation and Maintenance Schedule for Stormceptors*
- The Stormceptor water quality device shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum using the Stormceptor Inspection/Monitoring Form. Inspections shall be done using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When the sediment depths exceed the level specified in table 6 of the Stormceptor Technical Manual the unit must be cleaned.
 - The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.
 - The owner will maintain the Stormceptor unit using a vacuum truck that will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. The owner must properly clean and dispose of the removed materials and liquids.
 - The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found, the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.
 - The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available to Howard County officials upon their request.



AREA DRAIN DETAIL (012-015)
 NOT TO SCALE

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE: August 29, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Joseph R. Ratter 11/21/00
 Director Date

Cindy Kemmle 11/21/00
 Chief, Division of Land Development and Research Date

Chris Damann 11/16/00
 Chief, Development Engineering Division Date



GLW GUTSCHICK LITTLE & WEBER, P.A.
 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

NO.	DATE	REVISION	BY	APP'R

PREPARED FOR:
 Hillcroft Associates L.L.C.
 c/o Manekin Brothers Abeshouse
 The Stone Mill
 1340 Smith Avenue, Suite 200
 Baltimore, Maryland 21209
 Attn: Mr. Richard P. Manekin
 410-779-1208

STORM WATER MANAGEMENT & STORM DRAIN DETAIL SHEET

VILLAGE OF OWEN BROWN
 SECTION 5 AREA 1
 PARCEL "F-2"
 PLAT No. 7044

QUILFORD ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NTS	NT	99115
DATE	TAX MAP - CRD	SHEET
Nov. 01, 2000	36 - 14	9 OF 12

POND SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 50 foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification GC, SC, CH or CL. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

Placement - Area on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated in to the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water can be squeezed out.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within ±2 % of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Pipe Conduits

All pipes shall be circular in cross section.

Corrugated Metal Pipe - All of the following criteria shall apply for corrugated metal pipe:

1. **Materials** - (Steel Pipe) - This pipe and its appurtenances shall be galvanized and fully bituminous coated and shall conform to the requirements of AASHTO Specification M-190 Type A with watertight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound. Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings or an approved equal may be used: Nexon, Plasti-Cote, Blac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-245 and M-246.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Any aluminum coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Material - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211 with watertight coupling bands or flanges.

Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

2. **Coupling bands, anti-seep collars, and sections, etc.**, must be composed of the same material as the pipe. Metals must be insulated from dissimilar materials with use of rubber or plastic insulating materials at least 24 mils in thickness.

3. **Connections** - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe & riser are metal. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight. Dimple bands are not considered to be watertight.

All connections shall use a rubber or neoprene gasket when joining pipe sections. The end of each pipe shall be reinforced with an adequate number of corrugations to accommodate the band width. The following pipe connections are acceptable for pipes less than 24" in diameter: flanges on both ends of the pipe, a 12" wide standard lap type band with 12" wide 3/8" thick closed cell circular neoprene gasket; and a 12" wide hugger type band with 0-ring gaskets having a minimum diameter of 1/2" greater than the corrugation depth. Pipes 24" in diameter and larger shall be connected by a 24" long annular corrugated band using rods and lugs. A 12" wide by 3/8" thick closed cell circular neoprene gasket will be installed on the end of each pipe for a total of 24".

Helically corrugated pipe shall have either continuously welded seams or have lock seams.

4. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
5. **Backfilling** shall conform to "Structure Backfill".
6. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. **Materials** - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361.
2. **Bedding** - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.
3. **Laying pipe** - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.
4. **Backfilling** shall conform to "Structure Backfill".
5. **Other details** (anti-seep collars, valves, etc.) shall be shown on the drawings.

Polyvinyl Chloride (PVC) Pipe - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:

1. **Materials** - PVC pipe shall be PVC - 1120 or PVC - 1220 conforming to ASTM D-1785 or ASTM D-2241.
2. **Joints and connections** to anti-seep collars shall be completely watertight.
3. **Bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. **Backfilling** shall conform to "Structure Backfill".
5. **Other details** (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standards Specifications for Construction and Materials, Section 608, Mix No. 3.

Rock Riprap

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

The rip rap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.12.

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DETENTION POND

Routine Maintenance:

1. Facility shall be inspected annually and after major storms. Inspections shall be performed during wet weather to determine if the pond is functioning properly.
2. Top and side slopes of the embankment shall be mowed a minimum of two (2) times per year, once in June and once in September. Other side slopes and maintenance access shall be mowed as needed.
3. Debris and litter shall be removed during regular mowing operations and as needed.
4. Visible signs of erosion in the pond as well as the rip-rap or gabion outlet area shall be repaired as soon as it is noticed.

Non-Routine Maintenance:

1. Structural components of the pond such as the dam, the riser, and the pipes shall be repaired upon the detection of any damage. The components shall be inspected during routine maintenance operations.
2. Upon approval from the Department of Public Works, sediment shall be removed from the pond and forebay no later than when the capacity of the pond or forebay is half-full of sediment, or when deemed necessary for aesthetic reasons.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION

Project Name: Hillcroft Executive Park
Location: Howard County, Maryland
Job Number: 241998
Boring Number: SWM-2
Page 1 of 1

ELEV.	SOIL DESCRIPTION Color, Moisture, Density, Size Proportion	STR. DEPTH	DEPTH SCALE	CON.	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
330.0	SURFACE	0.0						
329.5	Topsoil = 12" Brownish, moist, loose, silt with sand trace mica (ML) (Loam)	2.5	2.5	1	1, 2, 3	1	12"	Strata A Fill soils
329.0	Reddish brown, moist, medium dense silt with rock fragments trace mica (SM) (Sandy Loam)	6.0	6.0	1	13, 12, 11	2	10"	Strata B Residual soils
		7.5	7.5	1	5, 6, 11	3	12"	
		10.0	10.0	1	10, 10, 11	4	13"	
		12.5	12.5	1	5, 5, 9	5	11"	
328.5	Orange brown, moist, medium dense silt with rock fragments trace mica (SM) (Sandy Loam)	13.0	13.0	1	8, 8, 6	6	13"	
		17.5	17.5	1	13, 14, 28	7	17"	
318.0	Orange brown, moist, dense silt SAND mica (SM) (Sandy Loam)	20.0	20.0	1	13, 14, 28	7	17"	318.0 Terminated @ 20 feet

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

SAMPLER TYPE: OPEN END SPT SPOON UNLESS OTHERWISE NOTED
SAMPLING METHOD: HAND
CORRECTION: NONE
CORRECTION FACTOR: NONE
CORRECTION TYPE: NONE
CORRECTION VALUE: NONE
CORRECTION UNIT: NONE
CORRECTION SIGN: NONE
CORRECTION SYMBOL: NONE
CORRECTION DESCRIPTION: NONE

Groundwater Readings

Time	Date	Depth	Cave-In
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Groundwater Readings

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Groundwater Readings

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CORRECTION DESCRIPTION: NONE

Groundwater Readings

Time	Date	Depth	Cave-In
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CORRECTION TYPE: NONE
CORRECTION VALUE: NONE
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CORRECTION SIGN: NONE
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Groundwater Readings

Time	Date	Depth	Cave-In
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STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

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CORRECTION TYPE: NONE
CORRECTION VALUE: NONE
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CORRECTION SIGN: NONE
CORRECTION SYMBOL: NONE
CORRECTION DESCRIPTION: NONE

Groundwater Readings

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Groundwater Readings

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HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION

Project Name: Hillcroft Executive Park
Location: Howard County, Maryland
Job Number: 241998
Boring Number: SWM-1
Page 1 of 1

ELEV.	SOIL DESCRIPTION Color, Moisture, Density, Size Proportion	STR. DEPTH	DEPTH SCALE	CON.	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
330.0	SURFACE	0.0						
329.5	Topsoil = 6" Brownish, moist, medium dense sandy silt with trace rock fragments and mica (ML) (Loam)	1.8	1.8	1	2, 4, 1	1	16"	Strata A Fill soils
329.0	Brownish, moist, medium dense sandy silt with mica (ML) (Loam)	4.0	4.0	1	7, 6, 14	2	13"	Strata B Residual soils
		6.5	6.5	1	11, 10, 11	3	14"	
		7.5	7.5	1	8, 12, 15	4	14"	
328.0	DISINTEGRATED ROCK	10.0	10.0	1	51, 38, 30	5	13"	Strata C Disintegrated Rock
		12.5	12.5	1	501*	6	3"	
321.0	Refused on Rock @ 14 feet	15.0	15.0	1				
		17.5	17.5	1				
		20.0	20.0	1				

STANDARD PENETRATION TEST DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS

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Groundwater Readings

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CORRECTION SIGN: NONE
CORRECTION SYMBOL: NONE
CORRECTION DESCRIPTION: NONE

Groundwater Readings

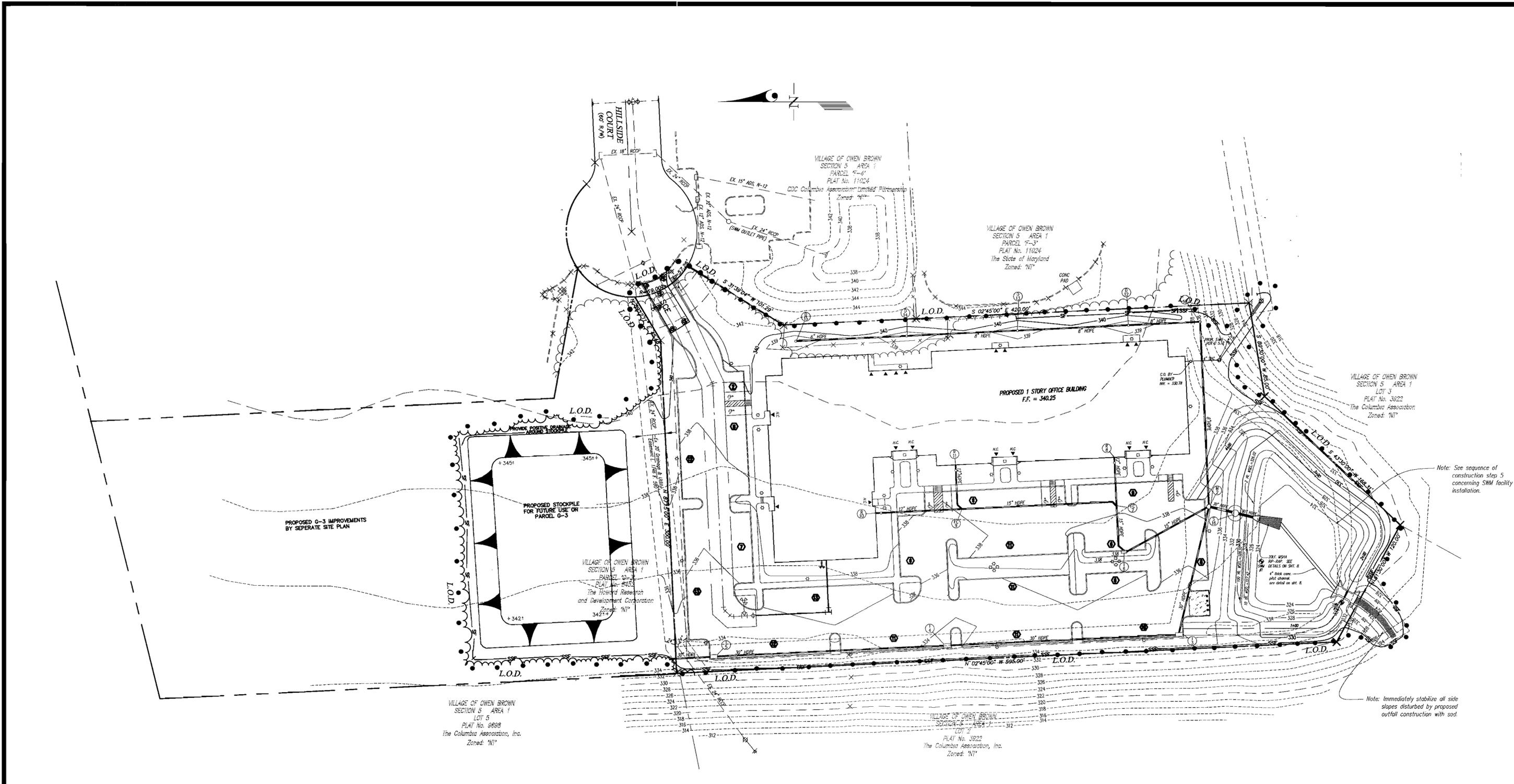
Time	Date	Depth	Cave-In
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CORRECTION SYMBOL: NONE
CORRECTION DESCRIPTION: NONE

Groundwater Readings

Time	Date	Depth	Cave-In
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Note: See sequence of construction step 5 concerning SWM facility installation.

Note: Immediately stabilize all side slopes disturbed by proposed outfall construction with sod.

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE August 24, 2000



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Director: [Signature] Date: 11/21/00
 Chief, Division of Land Development and Research: [Signature] Date: 11/20/00
 Chief, Development Engineering Division: [Signature] Date: 11/16/00

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. I also authorize periodic on-site inspection by the HSCD."

[Signature] 10/6/00
 Signature of Developer/Builder Date

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

[Signature] 10-5-00
 Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.
[Signature] 11/12/00
 Natural Resources Conservation Service Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.
[Signature] 11/12/00
 Howard S.C.D. Date

LEGEND

LIMIT OF DISTURBANCE	● ● ● ● ●
SILT FENCE	SF—SF—SF
STABILIZED CONSTRUCTION ENTRANCE	[Pattern]
SUPER SILT FENCE	SSF—SSF—SSF

THIS PLAN FOR SEDIMENT CONTROL PURPOSES ONLY

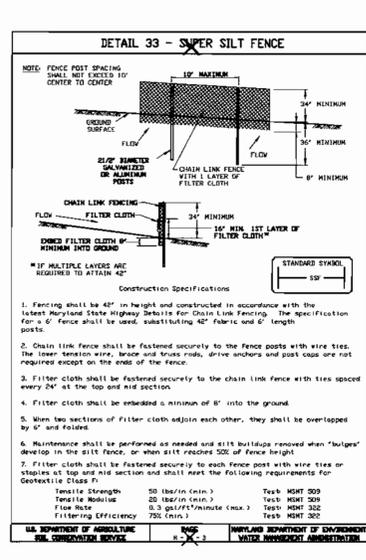
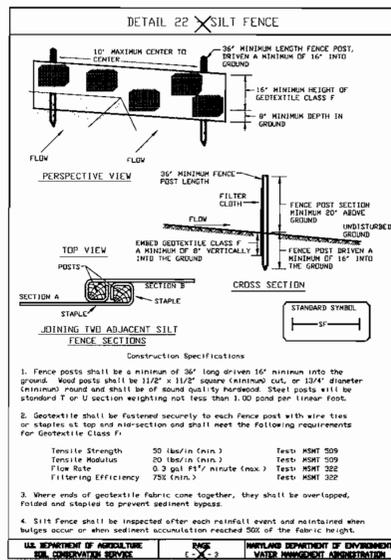
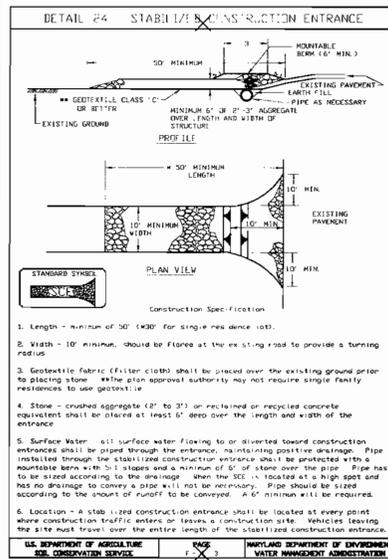
GLW GUTSCHICK LITTLE & WEBER, P.A.
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
 BURTONSVILLE, MARYLAND 20866
 TEL: 301-421-4024 BALT: 410-680-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.

PREPARED FOR:
 Hilarith Associates L.L.C.
 c/o Manekin Brothers Abeshouse
 The Stone Mill
 1340 Smith Avenue, Suite 200
 Baltimore, Maryland 21209
 Attn: Mr. Richard P. Manekin
 410-778-1208

SEDIMENT AND EROSION CONTROL PLAN
 VILLAGE OF OWEN BROWN
 SECTION 5 AREA 1
 PARCEL "F-2"
 PLAT No. 7044
 GUILFORD ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
1"=40'	NT	99115
DATE	TAX MAP - GRID	SHEET
Nov. 01, 2000	36 - 14	11 OF 12



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. 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

- I. This practice is limited to areas having 2:1 or flatter slopes where:
 - a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supply of moisture and plant nutrients.
 - c. The original soil to be vegetated contains material toxic to plant growth.
 - d. The soil is so acidic that treatment with limestone is not feasible.
- II. 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

- I. 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 respective soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimental Station.
 - i. 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 agronomist or 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 1/2" in diameter.
 - ii. Topsoil must be free of plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
 - iii. 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.
- II. For sites having disturbed areas under 5 acres:
 - i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- III. For sites having disturbed areas over 5 acres:
 - i. On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - a. pH for topsoil shall be between 6.0 and 7.5. If

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) 131-1880
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.
3. Following initial soil disturbance or redistribution, 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51), sod (Sec. 54), temporary seedings (Sec. 50) and mulching (Sec. 52). Temporary stabilization, with mulch alone, can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:

Total Area of Site	: 4.38	Acres
Area Disturbed	: 5.3	Acres
Area to be roofed or paved	: 2.65	Acres
Area to be vegetatively stabilized	: 2.65	Acres
Total Cut	: 8200	Cu. Yds.
Total Fill	: 8200	Cu. Yds.
Off-site waste/borrow area location:	N/A	
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within one working day whichever is shorter.

PERMANENT SEEDING NOTES

- Apply to graded or cleared area 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 (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. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
 - 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square feet) and 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 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 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 of well anchored straw mulch and seed as soon as possible in the spring. Option (2) 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 grain 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 seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless 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 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 sod.
- Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain 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.

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit. (1 day)
2. Arrange for an on-site pre-construction meeting with the sediment control inspector. (1 day)
3. Install stabilized construction entrance. (1 day)
4. Wrap site with silt fence & super silt fence as shown on sediment control plan. (2 days)
5. Construct storm water management facility. Block low flow opening until all upstream area is stabilized. As an alternate, contractor may forgo installing the SWM facility until step 10. (1 week) Regardless of timing, install super silt fence around the perimeter of the pond as shown on sht. 11
6. Rough grade site, construct storm drains, construct water & sewer from existing stubs to within 5' of building. (3 weeks)
7. Construct building. (2 months)
8. Install curb & gutter, sidewalks, & base paving. (2 weeks)
9. Fine grade landscape areas and stabilize remaining areas with grass, seed & mulch; install landscaping. (2 weeks)
10. Flush storm drain pipes as needed. Properly dewater SWM facility, unblock low flow opening, muck out, fine grade and stabilize the facility bottom, and unblock the low flow device; or, install the SWM facility (See step 5).
11. Install surface paving. (1 week)
12. With permission of the sediment control inspector, remove silt fence & super silt fence, & stabilize as necessary. (2 days)

Dust Control

Definition
Controlling dust blowing and movement on construction sites and roads.

Purpose
To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies
This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications

Temporary Methods

1. Mulches - See standards for vegetative stabilization with mulches only. Mulch should be crimped or locked to prevent blowing.
2. Vegetative Cover - See standards for temporary vegetative cover.
3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12' apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.
4. Irrigation - This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed. At no time should the site be irrigated to the point that runoff begins to flow.
5. Barriers - Solid board fences, silt fences, snow fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angle to prevailing currents at intervals of about ten times their height are effective in controlling soil blowing.
6. Calcium Chloride - Apply at rates that will keep surface moist. May need treatment.

Permanent Methods

1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.
2. Topsoiling - Covering with less erosive soil material. See standards for top soil.
3. Stone - Cover surface with crushed stone or gravel.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.
2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA, ARS.

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. I also authorize periodic on-site inspection by the HSCD."

Richard M. Manolis 10/6/00
Signature of Developer/Builder Date

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."

John C. Winkler 11/13/00
Natural Resources Conservation Service Date

John C. Winkler 10-5-00
Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

John C. Winkler 11/21/00
Director Date

Andy Homan 11/21/00
Chief, Division of Land Development and Research Date

John C. Winkler 11/16/00
Chief, Development Engineering Division Date

John C. Winkler 11/13/00
Howard S.C.D. Date

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE August 29, 2000

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

3909 NATIONAL DRIVE - SUITE 250 - BURTNSVILLE OFFICE PARK
BURTNSVILLE, MARYLAND 20868

TEL: 301-421-4024 FAX: 301-421-4198

DES.	DRN.	CHK.	DATE	REVISION	BY	APP'R.

PREPARED FOR:

Hilcraft Associates LLC
c/o Manokh Brothers Absehouse
The Stone Mill
1340 Smith Avenue, Suite 200
Baltimore, Maryland 21209
Attn: Mr. Richard P. Manokh
410-779-1208

SEDIMENT CONTROL NOTES AND DETAILS

VILLAGE OF OWEN BROWN

SECTION 5 AREA 1

PARCEL "F-2"

PLAT NO. 7044

SCALE: NO SCALE
ZONING: NT
DATE: Nov 01, 2000
TAX MAP - GRID: 36 - 14

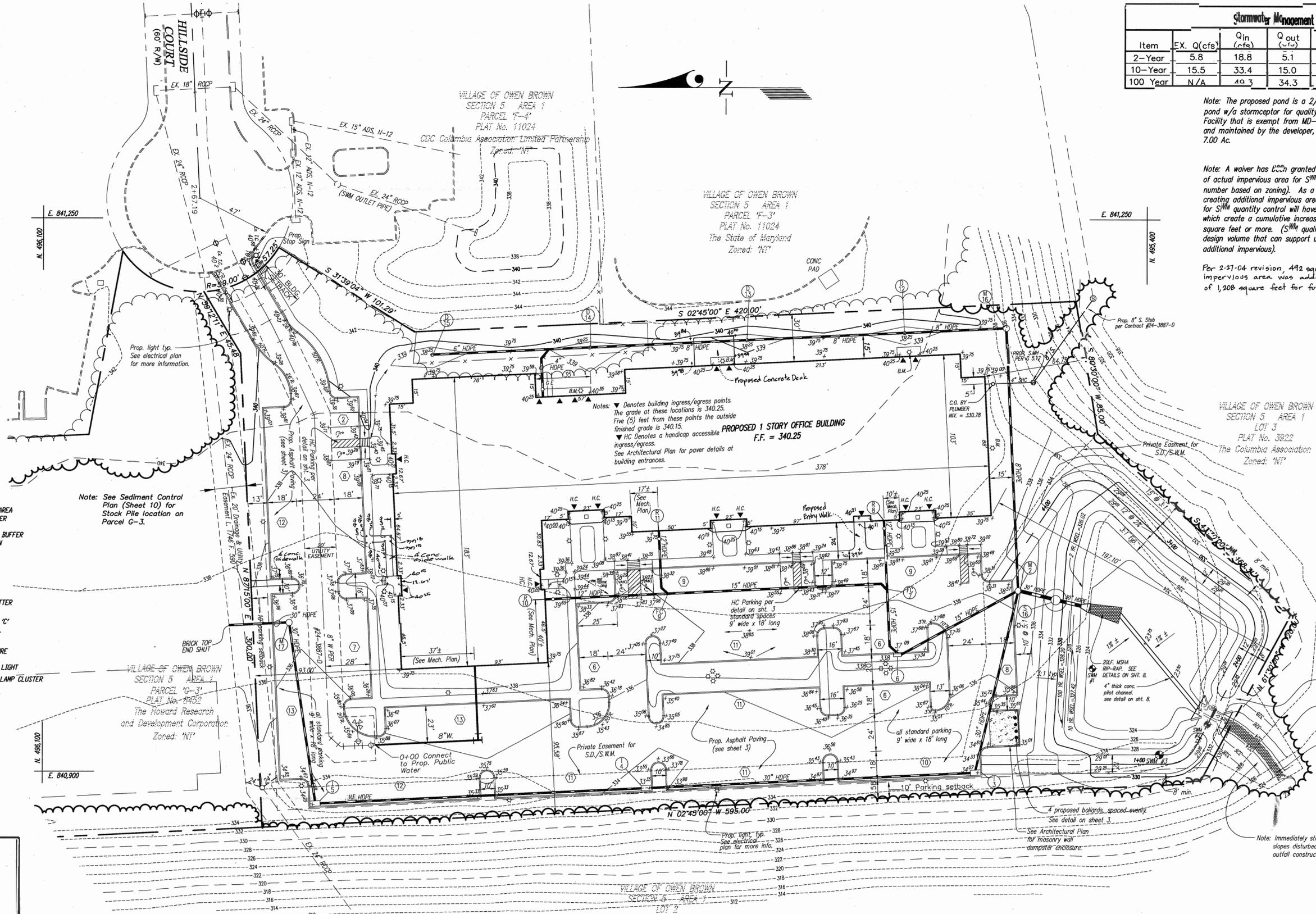
SCALE	ZONING	G. L. W. FILE No.
NO SCALE	NT	99115
DATE	TAX MAP - GRID	SHEET
Nov 01, 2000	36 - 14	12 OF 12

Stormwater Management Pond Summary						
Item	EX. Q(cfs)	Q _{in} (cfs)	Q _{out} (cfs)	WCEL	Stor. Req. (Ac.-Ft.)	Stor. Prov. (Ac.-Ft.)
2-Year	5.8	18.8	5.1	326.02	0.48	0.43
10-Year	15.5	33.4	15.0	327.42	0.68	0.76
100 Year	N/A	40.3	34.3	328.20	N/A	0.06

Note: The proposed pond is a 2/10 year management detention pond w/a stormceptor for quality control. It is a Class "a" Facility that is exempt from MD-378. It shall be privately owned and maintained by the developer, and the total drainage area is 7.00 Ac.

Note: A waiver has been granted for this project to allow the use of actual impervious area for S₁₀ computations (in lieu of a number based on zoning). As a result, there is limited flexibility in creating additional impervious area in the future. A re-analysis for S₁₀ quantity control will have to be submitted for any changes which create a cumulative increase in impervious area of 1,700 square feet or more. (S₁₀ quality control has an excess of design volume that can support up to 26,500 square feet of additional impervious).

For 2-27-04 revision, 492 square feet of additional impervious area was added, leaving a balance of 1,208 square feet for future additions.



LEGEND

--- 366 ---	EX. CONTOUR
--- 300 ---	PROP. CONTOUR
--- 300 ---	EX. TREE LINE
--- 300 ---	PROP. TREE LINE
--- 300 ---	EX. STORM DRAIN
--- 300 ---	PROP. STORM DRAIN
--- 300 ---	PROP. LIMIT OF DISTURBED AREA
--- 300 ---	STREAM VALLEY BUFFER
--- 300 ---	100 YR FLOODPLAIN
--- 300 ---	100 YEAR FLOODPLAIN BUFFER
--- 300 ---	FOREST CONSERVATION
--- 300 ---	WETLANDS
--- 300 ---	WETLANDS BUFFER
--- 300 ---	EX. STREAM
--- 300 ---	RIP-RAP
--- 300 ---	SANITARY SEWER
--- 300 ---	WATERLINE
--- 300 ---	CONCRETE CURB & GUTTER
--- 300 ---	LANDSCAPE FENCE
--- 300 ---	SIDEWALK RAMP TYPE 'C'
--- 300 ---	PARKING SPACE COUNT
--- 300 ---	STORM DRAIN STRUCTURE
--- 300 ---	BUILDING MOUNT SITE LIGHT
--- 300 ---	LIGHT POLE BASE OR LAMP CLUSTER

Note: See Sediment Control Plan (Sheet 10) for Stock Pile location on Parcel G-3.

Notes:
 ▼ Denotes building ingress/egress points. The grade at these locations is 340.25. Five (5) feet from these points the outside finished grade is 340.15.
 ▼ HC Denotes a handicap accessible ingress/egress. See Architectural Plan for paver details at building entrances.

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE August 24, 2000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Date: 11/21/00
 Date: 11/21/00
 Date: 11/10/00



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 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4188

DATE	REVISION	BY	APPR
2-27-04	Cons. deck & entry walk additions	JAU	
7-12-04	Rev. NW entry for HC access; added a' s.w. to Parcel G-3	JAU	

PREPARED FOR:
 Hillcroft Associates LLC
 c/o Manick Brothers Abolmash
 The Stone Mill
 1340 Smith Avenue, Suite 200
 Baltimore, Maryland 21208
 Attn: Mr. Richard P. Manick
 410-779-1208

SITE DEVELOPMENT PLAN
VILLAGE OF OWEN BROWN
 SECTION 5 AREA 1
 PARCEL "F-2"
 PLAT No. 7044

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	99115
DATE	TAX MAP - GRID	SHEET
NOV. 01, 2000	36 - 14	2 OF 12