

**GENERAL NOTES**

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. 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.
3. THE CONTRACTOR SHALL NOTIFY THE UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. 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.
5. PROPOSED USE: PARCEL A: SENIOR HOUSING\*\*\*  
LOT 39: VACANT LAND  
LOT 41: MALL ENTRANCE ROAD
6. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
7. EXISTING TOPOGRAPHY IS SHOWN PER FIELD SURVEY INFORMATION BY GUTSCHICK LITTLE & WEBER, P.A. & AIR FLOW TOPOGRAPHY PROVIDED BY DAFT MCLENE & WALKER, INC. & FROM DESIGN PLANS FOR CONSTRUCTION.
8. COORDINATES AND BEARINGS ARE BASED UPON THE MD STATE PLANE SYSTEM (NAD 27).
9. PARCEL A WATER AND SEWER SERVICE IS PUBLIC. ALL ON-SITE SEWER AND STORM DRAINS ARE PRIVATE.
10. PARCEL A WATER QUALITY + QUANTITY IS PROVIDED ON SITE.
11. ALL EXISTING WATER AND SEWER IS PER CONTRACT 20-2615 + CONTRACT 167-W.
12. ALL EXISTING STORM DRAIN IS PER SDP 97-107 + F 68-57.
13. SEE TRENCH BEDDING CLASS 'C' FOR STORM DRAINS.
14. RECORDING REFERENCE: PLAT No. 162270, 162271, 162272 (F-03-155).
15. EXISTING UTILITIES ARE BASED ON APPROVED DESIGN PLANS FOR CONSTRUCTION AND FIELD LOCATION BY GUTSCHICK, LITTLE & WEBER, P.A.
16. THERE IS NO FLOODPLAIN ON SITE.
17. THERE ARE NO WETLANDS ON SITE.
18. BUILDING SETBACKS AND BUILDING RESTRICTIONS ARE PER FDP PHASE 217-A-1.
19. THIS SITE IS EXEMPT FROM THE FOREST CONSERVATION REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE BY SECTION 16.1202(EXC1)(IV) (PUD with a PDP approved prior to 12/31/92).
20. NOTE: IN CASE OF DISCREPANCIES BETWEEN THE PLAT AND THE PLANS, THE PLAT SHALL GOVERN.
21. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN ANY WETLAND, WETLANDS BUFFER, 50' STREAM BUFFER OR FLOODPLAIN.
22. ALL OUTDOOR LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134. THE SITE LIGHTING INDICATED ON THIS SITE WILL BE BRONZE, FULL CUTOFF, 200 WATT METAL HALIDE FIXTURE MOUNTED ON A 25-FOOT TALL ROUND, TAPERED, DARK BRONZE POLE.
23. THE LANDSCAPE PLAN WAS PREPARED ACCORDING TO THE ALTERNATIVE COMPLIANCE SECTION OF THE LANDSCAPE MANUAL.
24. THIS PROJECT INVOLVES AN EXTENSION OF THE PUBLIC WATER SYSTEM (CONTRACT # 44-44133-D) TO BE CONSTRUCTED UNDER A DEVELOPERS AGREEMENT ASSOCIATED WITH THIS PLAN. FOR PUBLIC WATER EXTENSION ON SITE SEE CONTRACT #44-4133-D.
25. ALL PROPOSED RAMPS SHALL BE IN ACCORDANCE WITH THE CURRENT A.D.A. STANDARDS. MAXIMUM SIDEWALK CROSS SLOPE SHALL BE (2%) TWO PERCENT. PROVIDE A MINIMUM OF (5X5) FIVE BY FIVE FOOT LEVEL LANDING (2% MAX) AT TOP AND BOTTOM OF ALL RAMPS.
26. ALL CURB FILLETS ARE 5' RADIUS UNLESS NOTED OTHERWISE. SPOT ELEVATIONS ALONG CURB LINE ARE FOR THE FLOW LINE, UNLESS NOTED OTHERWISE.
27. THERE ARE NO KNOWN GRAVE SITES OR CEMETERIES ON THIS SITE.
28. TRASH REMOVAL FOR PARCEL A WILL BE PROVIDED BY PRIVATE CONTRACTOR. TRASH RECEPTACLES WILL BE KEPT BELOW GRADE IN THE LOWER LEVEL.
29. COORDINATES AND BEARINGS SHOWN HEREON ARE BASED ON THE NAD27 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL, STARTING IN THIS AREA WHICH WERE UTILIZED BY WHITMAN REQUARDT ASSOCIATES, INC.  
TRI01 N 503692.8580 E 839102.2760  
TRI02 N 503690.7010 E 838314.2860
30. SUBSURFACE EXPLORATION AND GEOTECHNICAL EVALUATION BY ECS LTD APRIL 4, 2002.
31. THE SUBJECT PROPERTY IS ZONED "NEW TOWN" PER THE 10-18-93 COMPREHENSIVE ZONING PLAN.
32. APTO TRAFFIC AND NOISE STUDIES WERE PREPARED AND APPROVED UNDER F-99-176. DUE TO THE CONSISTENCY OF THE TRAFFIC, ROAD GEOMETRY AND ADJACENT TOPO, NOISE DELINEATION ON PARCEL "B" WAS EXTENDED TO PARCEL "A".
33. TRAFFIC STUDY UPDATE PREPARED BY WELLS AND ASSOCIATES, LLC, NOVEMBER, 2002.
34. ALL UTILITIES SHALL TERMINATE WITHIN 5' OF THE BUILDING UNLESS NOTED OTHERWISE.
35. THIS SITE HAS BEEN MASS GRADED UNDER GP-03-28 AND GP-03-29.
36. INGRESS/EGRESS FOR THIS SITE IS PROVIDED BY THE EXISTING PRIVATE MALL ACCESS ROAD LOCATED ON LOTS 41 AND 42. RECORDED AS LIBER 552, FOLD 425.
37. SEE LAYOUT PLAN BY ARCHITECT FOR ENTRY PLAZA AND REAR COURTYARD AREAS.
38. SEE ARCHITECTURAL DRAWINGS FOR PATIO AND WALKWAY SCORING PATTERNS.
39. STORM DRAIN CONNECTIONS FROM THE STORM DRAIN MAIN LINE TO DOWNSPOUTS TO BE INSTALLED BY THE LANDSCAPE CONTRACTOR. THE ALIGNMENT AND INDICATED FITTINGS ARE SCHEMATIC AND MAY BE MODIFIED IN THE FIELD. DOWNSPOUTS SHALL NOT BE CORNERED PRIOR TO ENTERING THE STORM DRAIN MAIN LINE UNLESS NOTES OTHERWISE. ROOF DOWNSPOUTS ARE INDICATED THUS (\*).
40. EXISTING LIGHTS ALONG MALL RING ROAD NEED TO BE ADJUSTED TO MEET THE PROPOSED SIDEWALK ELEVATIONS. CONTRACTOR TO COORDINATE THESE ADJUSTMENTS.
41. CONTRACTOR SHALL TEST FIT THE UTILITIES IN THE VICINITY OF THE PROPOSED PROJECT ENTRANCES AND ADJUST UTILITY DEPTHS AS NECESSARY TO PROVIDE MINIMUM COVER PER UTILITY OWNERS REQUIREMENTS.

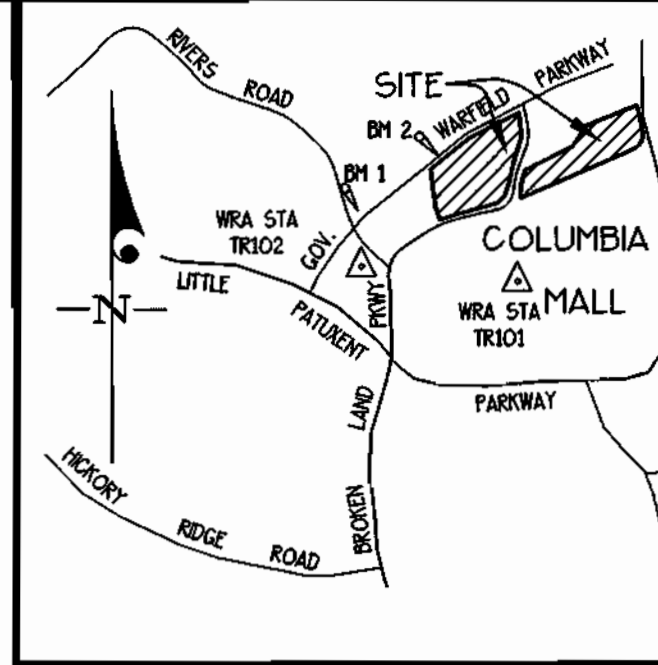
# SITE DEVELOPMENT PLAN

## THE EVERGREENS AT COLUMBIA TOWN CENTER SECTION 2 AREA 8, PARCEL A SECTION 2 AREA 1, LOTS 39 & 41

**BENCH MARKS**

BM #1 (GLW TRAV. 9001) TOP OF REBAR + CAP IN MEDIAN OF GOV. WARFIELD PARKWAY, 250'+/- OF INTX. OF TWIN RIVERS ROAD. ELEV.= 431.22

BM #2 (GLW TRAV. 9002) TOP OF REBAR + CAP EAST SIDE OF GOV. WARFIELD PARKWAY BEHIND ASPHALT PATH, 1000'+/- EAST OF INTX. OF TWIN RIVERS ROAD. ELEV.= 404.76

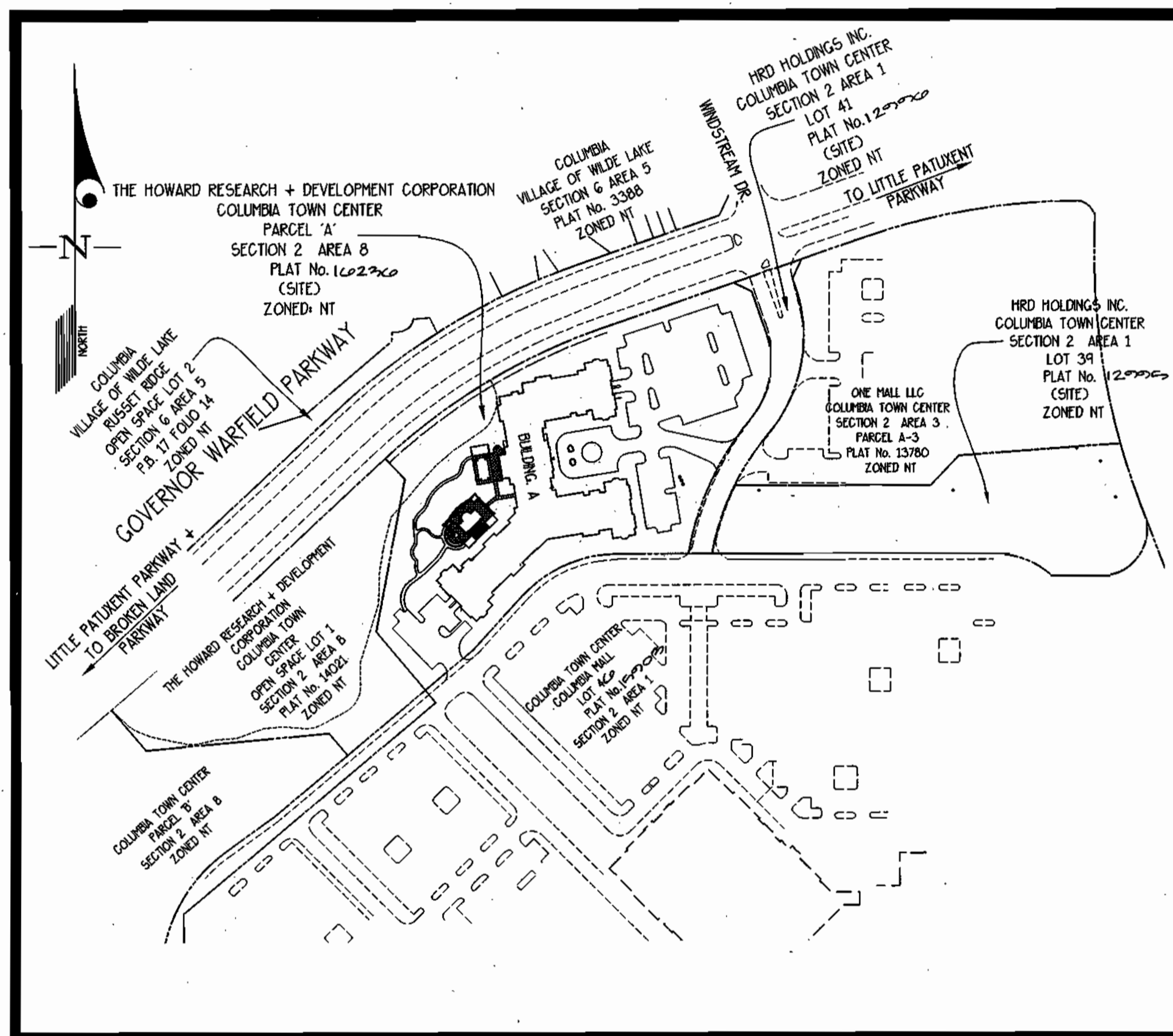


\* On April 12, 1999, WP-99-91, waiver of Sections 16.144(F) and 16.146, requirement for a preliminary plan, was approved subject to various conditions as defined in the approval letter.

\*\*On August 20, 2002, WP 02-125, waiver of Sections 16.123(a)(2) + 16.155 (a)(1)(i), to permit development (mass grading) and the issuance of a grading permit without an approved site development plan or final subdivision plan was approved subject to three conditions in the approval letter.

**Site Analysis Data Chart**

1. Gross Area: Parcel A: 254,809 SF or 5.85 Ac.  
LOT 39: 128,502 SF or 2.94 Ac.  
LOT 41: 27,007 SF or 0.62 Ac.
2. Limit of Disturbed Area = 233,910 SF or 5.37 Ac.
3. Zoning = NT-EMPLOYMENT CENTER COMMERCIAL FDP 217-A-1.
4. Proposed Use: Parcel A: Building A: Senior Housing  
Building B: Greenhouse  
Buildings C and D: Pool Equipment and Storage  
Building E: Potting Shed and Storage  
Lot 41: Mall Entrance Road  
Lot 39: Vacant Land
5. Number of units permitted: N/A
6. Number of units proposed: 156
7. No. of standard parking spaces required by FDP Phase 217-A-1-9c-2h (1 space per 3 living units): 52 Spaces.
8. Total parking spaces provided on Parcel A: 235 spaces (see chart below).
9. No. of handicap spaces required: 7 spaces (incl. 1 van spaces).
10. No. of handicap spaces provided: 7 spaces (incl. 3 van spaces).
11. Building area including canopy: Building A: 52,078 S.F.  
Building B: 436 S.F.  
Building C: 229 S.F.  
Building D: 229 S.F.  
Building E: 79 S.F.  
Pool: 964 S.F.  
Total: 54,015 S.F.
12. Building percent coverage: 54,015/254,809=21%
13. Project background: See Dept. of Planning + Zoning File Numbers: S 90-31, F 91-01, F 98-47, S 98-17, FDP 217-A-1, F 03-155, W 99-91\*, F 99-176, WP 02-125\*\*, F 03-155.



**KEY MAP**

SCALE: 1" = 200'

**SHEET INDEX**

- |                                |   |
|--------------------------------|---|
| 1. COVER SHEET                 | 11. STORM DRAIN OUTFALL SEDIMENT CONTROL PLAN |
| 2. SITE DEVELOPMENT PLAN       | 12. SEDIMENT CONTROL NOTES + DETAILS          |
| 3. STORM DRAIN OUTFALL PLAN    | 13. ROOF + POOL DRAIN PLAN                    |
| 4. SITE DETAIL SHEET           | 14. UTILITY PROFILES                          |
| 5. HANDICAP ACCESSIBILITY PLAN | 15. STORMWATER MANAGEMENT DETAILS             |
| 6. LANDSCAPE + LIGHTING PLAN   | 16. RETAINING WALL DETAILS                    |
| 7. LANDSCAPE DETAIL SHEET      | 17. RETAINING WALL DETAILS                    |
| 8. LANDSCAPE DETAIL SHEET      | 18. RETAINING WALL DETAILS                    |
| 9. LANDSCAPE DETAIL SHEET      | 19. STORM DRAIN DRAINAGE AREA MAP             |
| 10. SEDIMENT CONTROL PLAN      | 20. STORM DRAIN DRAINAGE AREA MAP             |

\*\*\* Pursuant to a Declaration of Covenants, Conditions and Restrictions recorded among the Land Record of Howard County, Maryland in Liber 7373, Folio 275, each occupied unit in the Property shall comply with the applicable Zoning Regulations of Howard County, Maryland, for Age Restricted Adult Housing, as they may be amended from time to time. At this time, the Zoning Regulations require that each unit shall have at least one person who is 55 years of age or older. The units shall also be subject to all applicable Fair Housing Laws.

NOTE: ALL INFORMATION INDICATED ON THESE PLANS ARE FOR CONSTRUCTION BY THE RMJ DEVELOPMENT GROUP EXCEPT AS LABELED HRD GROUP I WORK WHICH IS TO BE CONSTRUCTED BY HRD OR HRD GROUP I WORK WHICH IS TO BE CONSTRUCTED BY THE RMJ DEVELOPMENT GROUP FOR THE BENEFIT AND REIMBURSEMENT OF HRD OR HRD GROUP II WORK WHICH IS TO BE CONSTRUCTED BY THE RMJ DEVELOPMENT GROUP FOR ITS BENEFIT AND REIMBURSED BY HRD.

OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
410-992-6284



**LEGEND**

- 366 --- EX. CONTOUR
- 78 --- PROP CONTOUR
- EX. TREES
- EX. STORM DRAIN
- PROP. STORM DRAIN
- LOS --- LIMIT OF SUBMISSION
- EX. 8" S --- EX. 8" S
- EX. 8" W --- EX. WATERLINE
- PROP. 8" S --- PROP. SANITARY SEWER
- --- PROPOSED WATERLINE
- --- EX. CURB + GUTTER
- --- CONCRETE CURB + GUTTER
- --- CURB TRANSITION
- --- PROPOSED REVERSE CURB + GUTTER
- --- PROPOSED CONCRETE SIDEWALK
- --- EX. EASEMENTS
- --- EX. ASPHALT PAVING
- --- EX. SIDEWALKS
- --- 50' STREAM BUFFER
- --- 25' WETLAND BUFFER
- --- WETLANDS
- --- STEEP SLOPES
- --- TOP OF PAVING SPOT SHOT
- --- NUMBER OF PARKING SPACES
- --- PROP. LIGHT FIXTURE + POLE
- --- EX. LIGHT FIXTURE + POLE
- --- HANDICAP RAMP (SEE DETAIL SHEET 4)
- --- RETAINING WALL/SCREEN WALL
- --- MAIN ENTRANCE
- --- SECONDARY ENTRANCE
- SB --- SB --- LIMITS OF 50' STREAM BUFFER
- WB --- WB --- LIMITS OF 25' WETLAND BUFFER
- --- FLUSH CURB
- --- HANDICAP

PARKING SPACES PROVIDED			
	STANDARD	HC/REG. / VAND	TOTAL
SURFACE	139	0/4	143
LOWER LEVEL BLDG.	87	2/2	91
			TOTAL 234

CL. STREAM COORDINATES		
15	504688.16	838594.97
16	504720.94	838624.26
17	504751.71	838659.84
18	504787.91	838712.48
19	504798.57	838717.09

ADDRESS CHART	
BUILDING IDENTIFICATION	STREET ADDRESS
Building A	10101 GOVERNOR WARFIELD PARKWAY
Building B	10111 GOVERNOR WARFIELD PARKWAY
Building C	N/A GOVERNOR WARFIELD PARKWAY
Building D	N/A GOVERNOR WARFIELD PARKWAY
Building E	N/A GOVERNOR WARFIELD PARKWAY

WATER CODE	SEWER CODE	SUBDIVISION NAME	SECTION/AREA	PARCEL
E 32	5G06G00	COLUMBIA TOWN CENTER	2 / 1	Lots 39 and 41
PLAT No.	ZONE	TAX MAP	BLOCK	ELEC. DIST.
162270, 162271, 162272	NT-EMP. CNTR. COMM.	30	19+20	5
				CENSUS TRACT
				6067.03

APPROVED  
HANDSIGNED AND  
SEAL OF HOWARD COUNTY BY  
DATE: 05/01/03

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
*Penny Borestein, MD* 10/7/03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*Mark A. Wagle* 1/15/03  
Director Date

*Andy Hamilton* 1/15/03  
Chief, Division of Land Development Date

*Chad Damman* 10/6/03  
Chief, Development Engineering Division MK Date

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

PREPARED FOR:  
& OWNER PARCEL A:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o RMJ DEVELOPMENT GROUP, INC  
1650 TYSONS BOULEVARD, SUITE 650  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT GILSTEAD  
TEL: (703) 905-9557

COVER SHEET  
**COLUMBIA TOWN CENTER**  
SECTION 2 AREA 8, PARCEL A  
SECTION 2 AREA 1, LOTS 39 & 41  
PLAT Nos. 162270, 162271, 162272

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT/EMPLOYMENT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	30-19420	1 OF 20

Drawings	DESIGN	SP1.dwg	DES.	DRN.kip	CHK.	DATE	REVISION	BY	APPR.

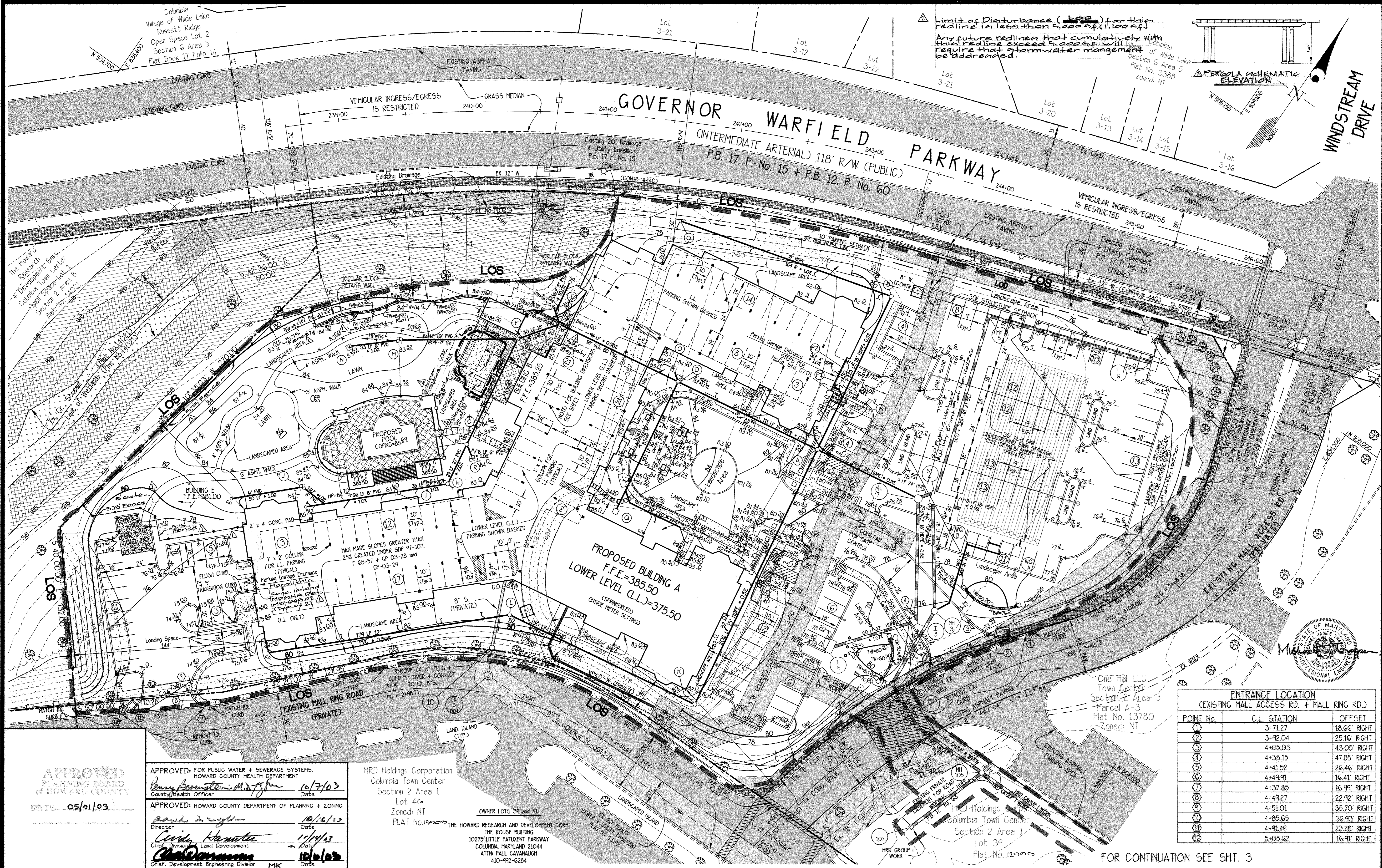
ELECTION DISTRICT No. 5

HOWARD COUNTY, MARYLAND

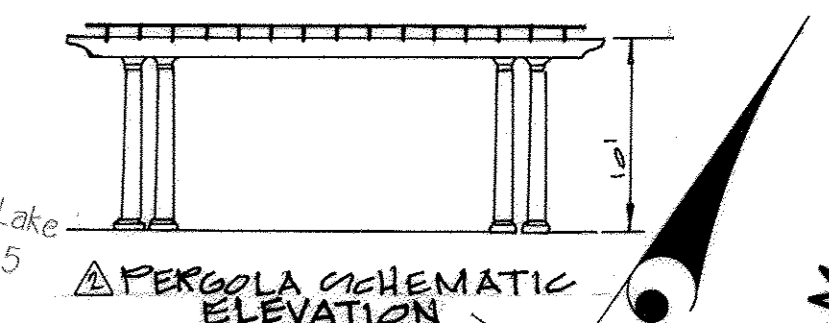
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SDP 03-080





Limit of Disturbance (LOD) for this redline is less than 5,000 sq. ft. (1,100 sq. ft.)  
 Any future redlines that cumulatively with this redline exceed 5,000 sq. ft. of Columbia Town Center Section 2 Area 1, Lots 39 & 41, will require that stormwater management be addressed.



ENTRANCE LOCATION  
 (EXISTING MALL ACCESS RD. + MALL RING RD.)

POINT No.	C.I. STATION	OFFSET
1	3+71.27	18.66' RIGHT
2	3+92.04	25.16' RIGHT
3	4+05.03	43.05' RIGHT
4	4+38.15	47.85' RIGHT
5	4+41.52	26.46' RIGHT
6	4+49.91	16.41' RIGHT
7	4+37.85	16.99' RIGHT
8	4+49.27	22.92' RIGHT
9	4+51.01	35.70' RIGHT
10	4+85.65	36.93' RIGHT
11	4+91.49	22.78' RIGHT
12	5+05.62	16.91' RIGHT

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer  
 Date: 10/7/03

APPROVED FOR HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
 Director  
 Date: 10/16/03

Chief, Planning Division  
 Date: 10/16/03

Chief, Development Engineering Division  
 Date: 10/16/03

HRD Holdings Corporation  
 Columbia Town Center  
 Section 2 Area 1  
 Lot 40  
 Zoned: NT  
 PLAT No. 15700

OWNER LOTS 39 AND 41:  
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE ROUSE BUILDING  
 10275 LITTLE PATUNENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 ATTN: PAUL CAVANAUGH  
 410-992-6284

APPROVED  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE: 05/01/03

**GLWGUTSCHICK 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: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.
8-5-16	Add outdoor fireplace, grilling area, pergola		
8-1-03	Add fence & safety rail		

PREPARED FOR:  
 + OWNER PARCEL A:  
 EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
 675 RMA DEVELOPMENT GROUP, INC.  
 1650 TYSONS BOULEVARD, SUITE 620  
 McLEAN, VIRGINIA 22102  
 ATTN: SCOTT OLUMSTEAD  
 TEL: (410) 992-6284

**SITE DEVELOPMENT PLAN**  
**COLUMBIA TOWN CENTER**  
**SECTION 2 / AREA 1, PARCEL A**  
**SECTION 2 / AREA 1, LOTS 39 & 41**  
 PLAT No. 16226, 12500, 12501, 12502

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	30-19&20	2 OF 20

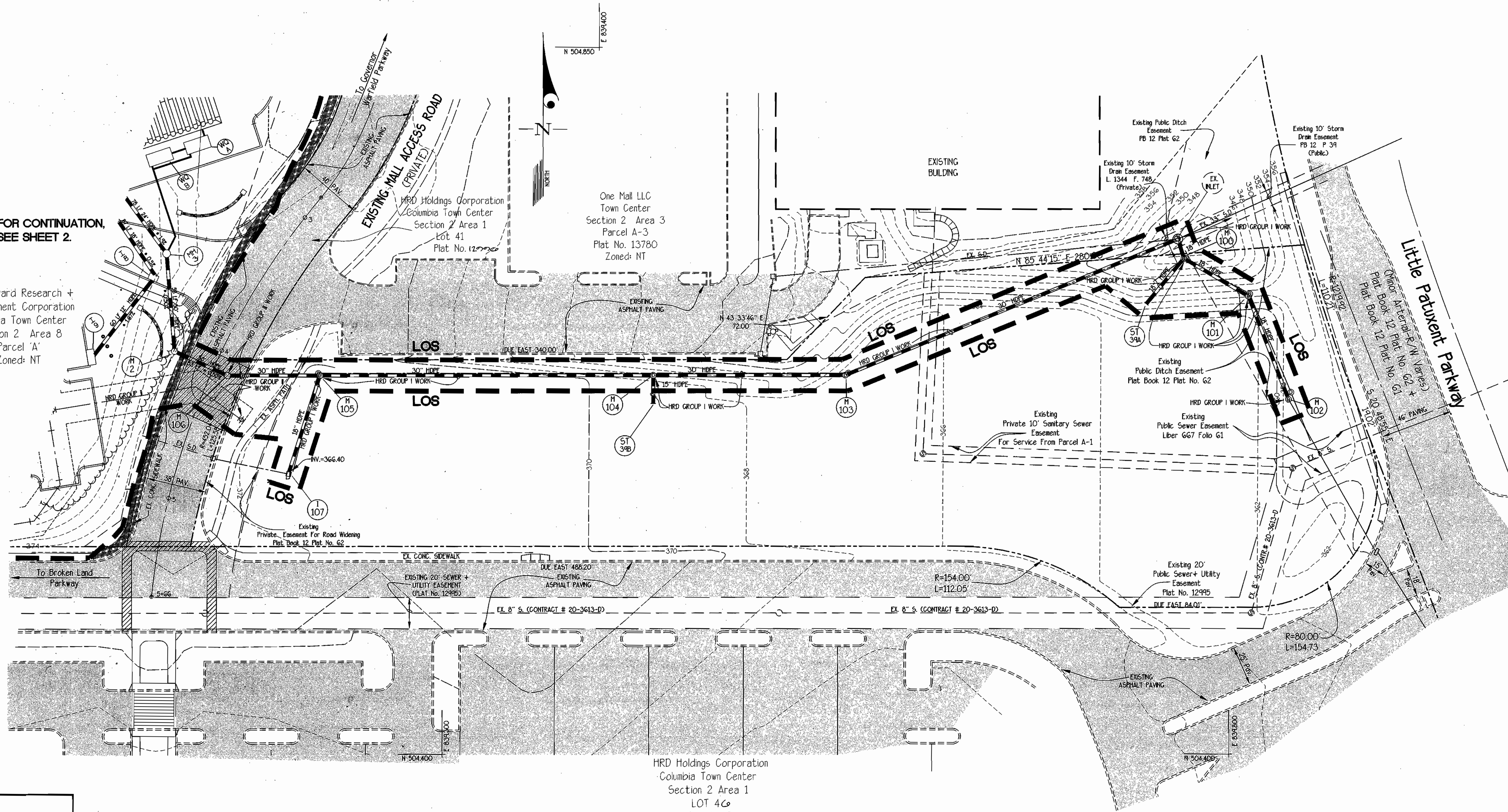
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SDP 03-080



FOR CONTINUATION,  
SEE SHEET 2.

The Howard Research +  
Development Corporation  
Columbia Town Center  
Section 2 Area 8  
Parcel 'A'  
Zoned: NT



HRD Holdings Corporation  
Columbia Town Center  
Section 2 Area 1  
LOT 46  
Zoned: NT  
Plat No. 159709  
(SDP 97-107)

OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
410-992-6284



APPROVED  
PLANNING BOARD  
OF HOWARD COUNTY  
DATE 05/01/03

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Penny Borenstein* 10/7/03  
County Health Officer Date

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*Mark M. Ely* 10/16/03  
Director Date

*David Hamilton* 10/17/03  
Chief, Division Land Development Date

*Chad Damann* 10/16/03  
Chief, Development Engineering Division Date

GLWGUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
TEL: 301-421-0024 FAX: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-0186

PREPARED FOR:  
& OWNER PARCEL A:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
C/O RMI DEVELOPMENT GROUP, INC.  
1850 TYSONS BOULEVARD, SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT OLMSHEAD  
TEL: (703) 905-9557

STORM DRAIN OUTFALL PLAN  
COLUMBIA TOWN CENTER  
SECTION 2 AREA 8, PARCEL A  
SECTION 2 AREA 1, LOTS 39 & 41  
PLAT No. 10233, 12995, 12996, 12997, 12998, 12999

SCALE 1" = 30'	ZONING NT	G. L. W. FILE No. 02033
DATE Sept., 2003	TAX MAP - GRD 36&30-1&19	SHEET 3 OF 20

Drawings\02033\DESIGN\02033SP12.dwg	DES.	DRN. WSD	CHK.	DATE	REVISION	BY	APP'R.
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ELECTION DISTRICT No. 5

HOWARD COUNTY, MARYLAND



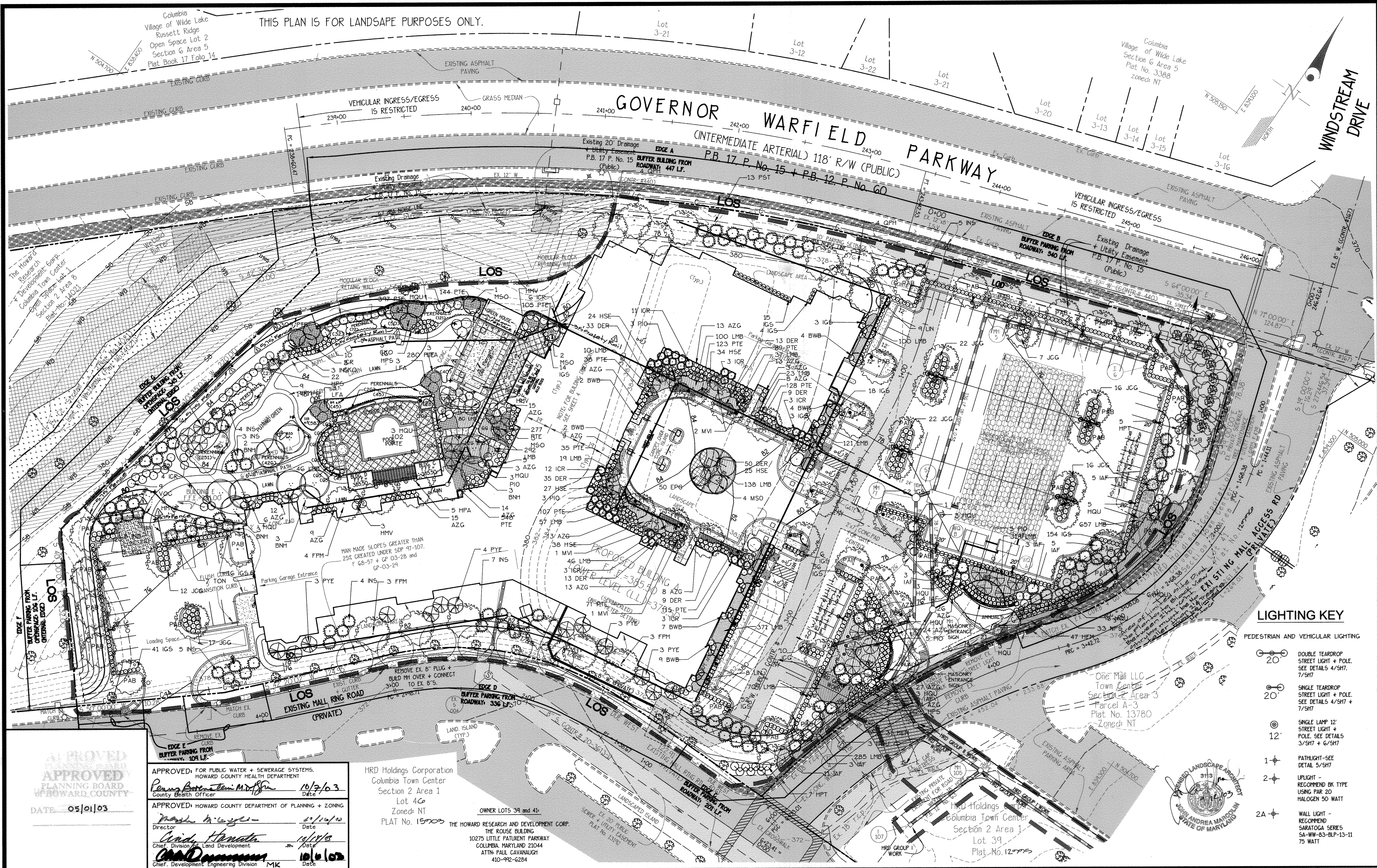








THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.



APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT  
 Penny Borenstein, M.D., P.E. 10/2/03  
 County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
 [Signature] 10/16/03  
 Director Date

[Signature] 10/16/03  
 Chief, Division of Land Development Date

[Signature] 10/16/03  
 Chief, Development Engineering Date MK

HRD Holdings Corporation  
 Columbia Town Center  
 Section 2 Area 1  
 Lot 40  
 Zone: NT

OWNER LOTS 39 and 41  
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE ROUSE BUILDING  
 10275 LITTLE PATIENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 ATTN: PAUL CAVANAUGH  
 410-992-6284

APPROVED  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE 05/01/03

**LIGHTING KEY**

- PEDESTRIAN AND VEHICULAR LIGHTING
- 20' DOUBLE TEARDROP STREET LIGHT + POLE. SEE DETAILS 4/SHT. 7/SHT
  - 20' SINGLE TEARDROP STREET LIGHT + POLE. SEE DETAILS 4/SHT. 7/SHT
  - 12' SINGLE LAMP 12" STREET LIGHT + POLE. SEE DETAILS 3/SHT + 6/SHT
  - 1' PATHLIGHT-SEE DETAIL 5/SHT
  - 2' UPLIGHT - RECOMMEND BK TYPE USING PAR 20 HALOGEN 50 WATT
  - 2A' WALL LIGHT - RECOMMEND SARATOGA SERIES 5A-WW-83-BLP-13-11 75 WATT

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
 CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
 3909 NATIONAL DRIVE - SUITE 230 - BARTONVILLE OFFICE PARK  
 BURTNSVILLE, MARYLAND 20886  
 TEL: 301-421-4024 BAL: 410-880-1820 DC/WA: 301-989-2524 FAX: 301-421-4186

DATE	REVISION	BY	APPR.
05-01-03	Add outdoor fireplace, grilling area + Pergola	g.t.	MJT
05-01-03	Add Fence + Safety Rail	W.S.	W.S.

PREPARED FOR: + OWNER PARCEL A:  
 EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
 c/o BWA DEVELOPMENT GROUP, INC.  
 1650 TYSONS BOULEVARD, SUITE 620  
 MCLEAN, VIRGINIA 22102  
 ATTN: PAUL CAVANAUGH  
 TELE: (410) 992-6284

**LANDSCAPE AND LIGHTING PLAN**  
**COLUMBIA TOWN CENTER**  
**SECTION 2 / AREA 8, PARCEL A**  
**SECTION 2 / AREA 1, LOTS 39 & 41**  
 PLAT No. 102033, 102034, 102035, 102036, 102037, 102038, 102039, 102040, 102041, 102042, 102043, 102044, 102045, 102046, 102047, 102048, 102049, 102050, 102051, 102052, 102053, 102054, 102055, 102056, 102057, 102058, 102059, 102060, 102061, 102062, 102063, 102064, 102065, 102066, 102067, 102068, 102069, 102070, 102071, 102072, 102073, 102074, 102075, 102076, 102077, 102078, 102079, 102080, 102081, 102082, 102083, 102084, 102085, 102086, 102087, 102088, 102089, 102090, 102091, 102092, 102093, 102094, 102095, 102096, 102097, 102098, 102099, 102100, 102101, 102102, 102103, 102104, 102105, 102106, 102107, 102108, 102109, 102110, 102111, 102112, 102113, 102114, 102115, 102116, 102117, 102118, 102119, 102120, 102121, 102122, 102123, 102124, 102125, 102126, 102127, 102128, 102129, 102130, 102131, 102132, 102133, 102134, 102135, 102136, 102137, 102138, 102139, 102140, 102141, 102142, 102143, 102144, 102145, 102146, 102147, 102148, 102149, 102150, 102151, 102152, 102153, 102154, 102155, 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A. Plant Materials

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

1. Plant Names

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

2. 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.

3. Plant Measurements

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

a. 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.

b. Minimum branching height for all shade trees shall be six feet (6'), maximum eight feet (8').

c. 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.

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:

The planting of evergreen material shall be from March 1st to June 15th and from September 15th to December 15th. The field done when the ground is moist. No topsoil shall be used at any time.

b. 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.

c. 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.

d. 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"

% 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:

a. 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.

b. 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.

c. 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.

d. 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

a. 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.

b. 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.

c. 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.

a. 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.

b. 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 with 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, Victoria, or Escort.

LANDSCAPING NOTES

- This plan has been prepared in accordance with the New Town Alternative Compliance provisions of 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 relocation's 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 \$24,450.00.
- Tabulation for landscape shown: The area of the facility is 5.85 acres, less 0.32 acres remaining in tree cover. The remaining area has been calculated for Required planting by HRD for 5.53 acres of facility combined at 24 trees/acre = 133 trees  
Planting provided:  
Shade Trees 77  
Ornamental Trees 81 = 40 E.S.T. @ 2:1  
Evergreen Trees 91 = 45 E.S.T. @ 2:1  
Shrubs provided: 1154 = 115 E.S.T. @ 10:1  
Total E.S.T. = E.S.T., or Equivalent Shade Tree = 278
- 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	EDGE A EDGE BEDGE C EDGE D EDGE E EDGE F EDGE G						
	Buffer Bldg from Roadway	Buffer P'king from Roadway	buffer P'king from Roadway	Buffer Bldg from Roadway	Buffer P'king from Roadway	Interior Edge	Interior Edge
Landscape Buffer Type	B	E	E	B	E	N/A	N/A
Linear Feet of Roadway/Perimeter Frontage	447'	540'	201'	336'	109'	106'	345'
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	225' LF ex. woods	NO	NO	NO	NO	NO	345' LF ex. woods
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	No	No	190' LF	336' L.F.	No	No	No
Number of Plants Required	9 11 0	14 0 135	5 0 50	7 8 0	2 3 0	N/A	N/A
Number of Plants Provided	8 15 0 0	10 16 6 181	2 18 6 80	6 12 13 5	2 5 7	4 0 0 28	0 0 0 0
Bond Requirement - Surety for Schedule A: Schedule 'A' Number of Shade Trees for bonding: 37 x \$300 = \$11,100.00 Schedule 'A' Number of Evergreen Trees for bonding: 22 x \$150 = \$3,300.00 Schedule 'A' Number of Shrubs for bonding: 185 x \$30 = \$5,550.00 Schedule 'B' Number of required Shade Trees for bonding: 15 x \$300 = \$4,500.00 TOTAL Estimate for Surety: \$24,450.00							

SCHEDULE B PARKING LOT INTERNAL LANDSCAPING	
Number of Parking Spaces = 145 Spaces (Provided)	
Number of Shade Trees Required = 15 Trees @ 1 per 10 spaces	
Number of Shade Trees Provided = 27 (Other Trees (2:1 substitution))	
NUMBER OF LANDSCAPED ISLANDS REQUIRED: 15 @ 1 PER 10 SPACES NUMBER OF LANDSCAPED ISLANDS PROVIDED: 17 @ 1 PER 10 SPACES	
Schedule 'B' Number of required Shade Trees for bonding: 15 x \$300 = \$4,500.00	

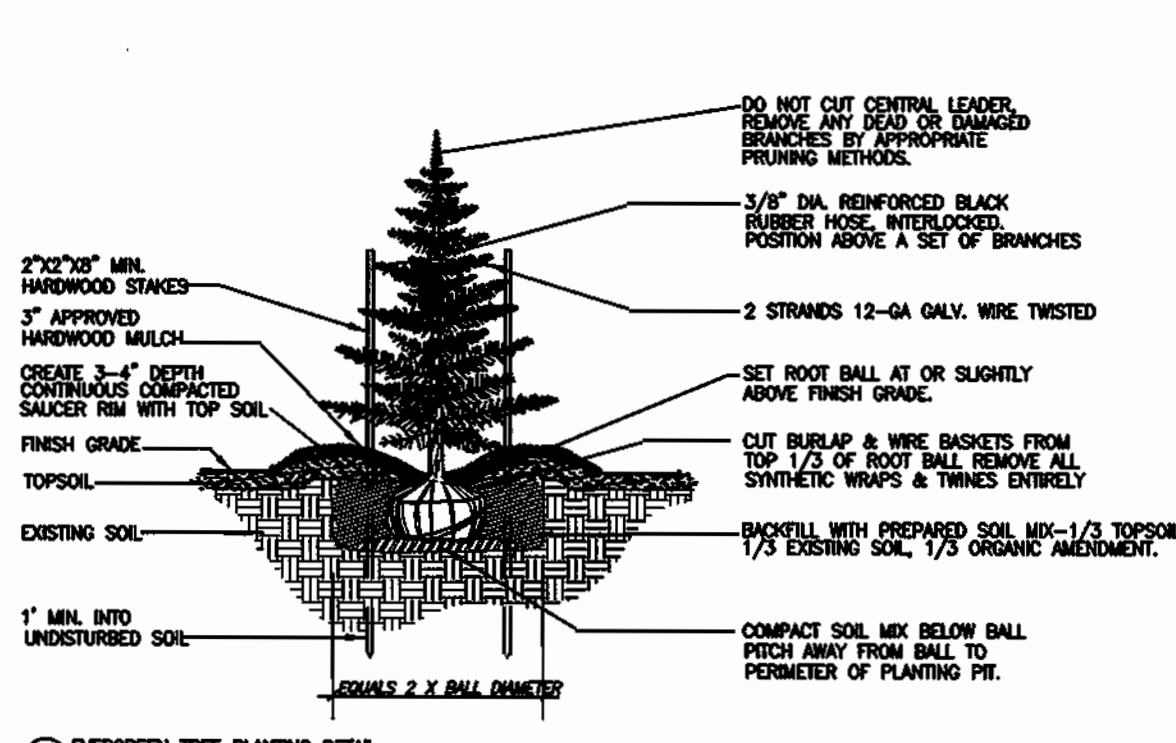
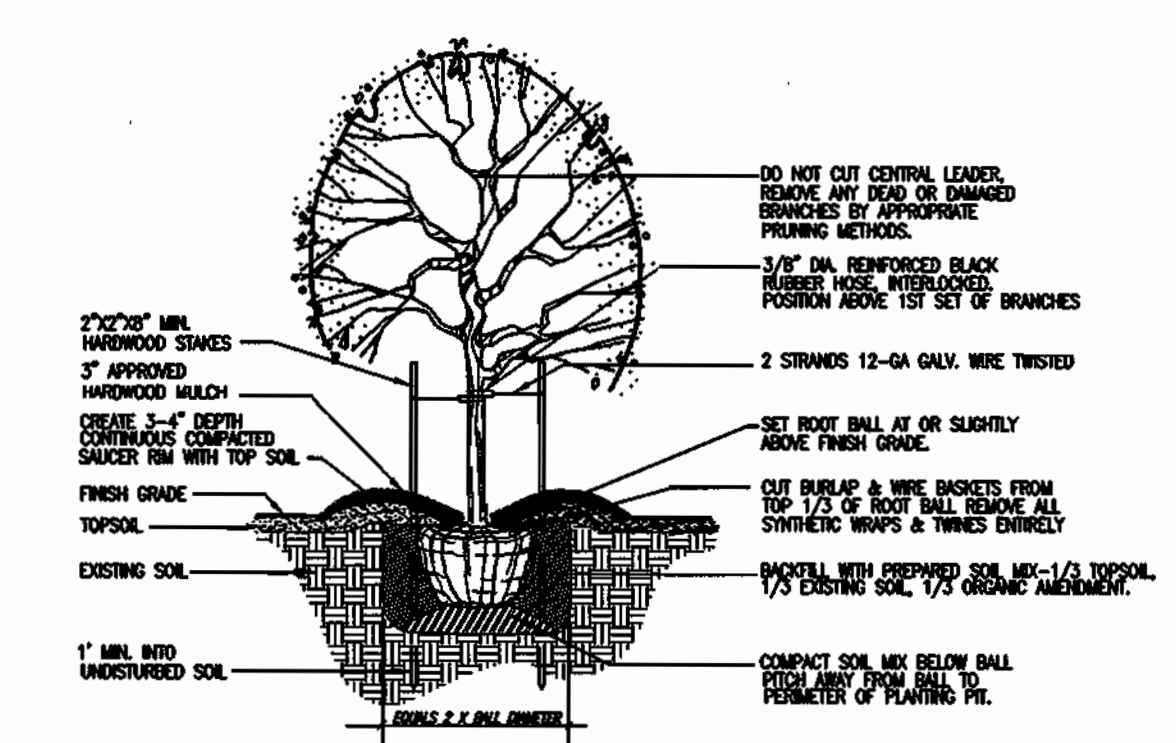
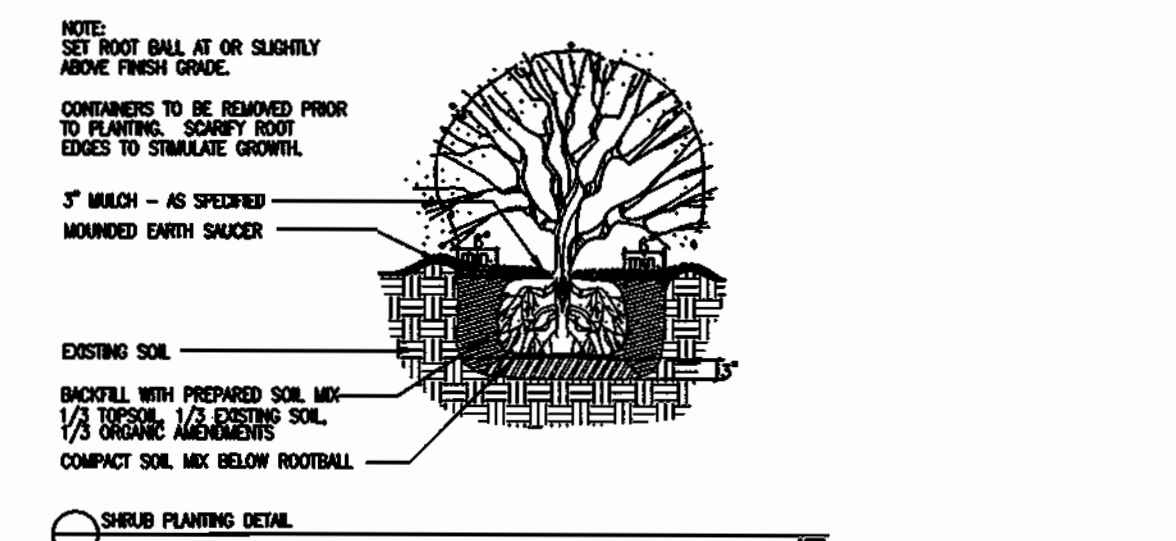
DEVELOPER'S / BUILDER'S CERTIFICATE  
I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion, a Certification of Landscape Installation, accompanies by an executive one-year guarantee of plant materials, will be submitted to the Department of Planning and Zoning.  
9/12/03  
Name (Developer's /Builder's) \_\_\_\_\_ Date \_\_\_\_\_

Financial surety for the required landscaping has been posted as part of the DPW Developer's Agreement in the amount of \$24,450.00.

QTY.	SYM.	BOTANICAL/COMMON NAME	SIZE	CONT.	REMARKS
11	BNH	Betula nigra 'Heritage'	2 1/2" - 3" cal.	B&B	full
		Heritage River Birch	12-14" ht.		
16	FPM	Fraxinus pennsylvanica 'Marshall's Seedless'	2 1/2" - 3" cal.	B&B	
		Marshall's Seedless Ash	12-14" ht.		
44	PAB	Platanus x acerifolia 'Bloodgood'	2 1/2" - 3" cal.	B&B	
		Bloodgood London Planetree	12-14" ht.		
8	QPH	Quercus phellos	2 1/2" - 3" cal.		
		Willow Oak	12-14" ht.		

QTY.	SYM.	BOTANICAL/COMMON NAME	SIZE	CONT.	REMARKS
45	IAF	Ilex x attenuata 'Foster'	8-10" ht.	B&B	heavy
		Foster Holly			
39	INS	Ilex x 'Nellie Stevens'	8-10" ht.	B&B or cont.	
		Nellie Stevens Holly			
13	PST	Pinus strobus	12" ht.		full
		White Pine			

QTY.	SYM.	BOTANICAL/COMMON NAME	SIZE	CONT.	REMARKS
51	HCU	Hydrangea quercifolia	36" ht.	B&B or cont.	full, heavy
		Oakleaf Hydrangea			
15	HPT	Hydrangea paniculata 'Tardiva'	36" ht.	B&B or cont.	full, heavy
		Tardiva Hydrangea			
11	HMV	Hydrangea macrophylla 'Varegata'	30" - 36" ht.	B&B or cont.	heavy
		Varegated Hydrangea			



NOTE: LANDSCAPE CONTRACTOR TO ENSURE ALL PLANTINGS IN VICINITY OF ALL EXISTING SURFACE UTILITIES MEET THE MINIMUM SET BACK REQUIREMENTS.

PLANTING SCHEDULE

QTY.	SYM.	BOTANICAL/COMMON NAME	SIZE	CONT.	REMARKS
9	Kko	Cornus kousa	2' - 2 1/2" cal.		
		Japanese Dogwood			
9	Lfa	Lagerstroemia x 'Aurea' 'Acoma'	5-6" ht.	B&B	multi-stem, heavy
		Acoma Crape Myrtle			
17	Lln	Lagerstroemia indica 'Watches'	8-10" ht.	B&B	multi-stem, heavy
		Watches Crape Myrtle			
10	Mso	Magnolia x soulangiana	10" ht.	B&B	multi-stem, heavy
		Sauzeo Magnolia (Multi-stem)			
4	Mvi	Magnolia virginiana	7" ht.	B&B	multi-stem, heavy
		Sweetbay Magnolia (Multi-stem)			
21	Pio	Prunus incam 'Okama'	2 1/2" - 3" cal.		
		Okama Cherry			
13	Pye	Prunus x yedoensis	2 1/2" - 3" cal.		
		Yoshino Cherry			

QTY.	SYM.	BOTANICAL/COMMON NAME	SIZE	CONT.	REMARKS
300	azq	Azalea Glacior	24" - 30" ht.	B&B or cont.	classy Lvs, wh. Fls.
		Glacier Azalea			
444	igs	Ilex glabra 'Shamrock'	30" ht.	B&B or cont.	full
		Shamrock Inkberry Holly			
28	wbb	Buxus microphylla 'Winter Beauty'	24" - 30" ht.	B&B or cont.	
		Winter Beauty Korean Boxwood			
58	lcr	Ilex cornuta x rugosa 'China Girl'	36" ht.	B&B or cont.	
		China Girl Holly			
130	jqg	Juniperus chinensis var. 'Sargentii'	24" - 30" ht.	B&B or cont.	
		Green Sargent's Juniper			
7	lon	Thuja occidentalis 'Nigra'	8" ht.	B&B or cont.	full
		Nigra American Arborvitae			

APPROVED PLANNING BOARD OF HOWARD COUNTY  
DATE 05/01/03

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT  
Lenny Borenstein, M.D., Health Officer  
10/2/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
Mark A. Weyler, Director  
10/14/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
Wanda Hamilton, Chief, Division of Land Development  
10/16/03  
Chris Damann, Chief, Development Engineering Division  
10/16/03



OWNER Lots 39 and 41:  
THE HOWARD REGIONAL DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
TELE: (410) 992-6284

GLW GUTSCHICK LITTLE & WEBER, P.A.  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONVILLE OFFICE PARK  
BURTONVILLE, MARYLAND 20866  
TEL: 301-421-4024 FAX: 301-421-4186

hcm  
Hord Coplan Macht  
ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING INTERIOR DESIGN  
111 MARKET PLACE SUITE 710 BALTIMORE MARYLAND 21202  
410 537-7511 FAX: 410 537-8000

PREPARED FOR:  
AND OWNER PARCEL A:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o PAUL DEVELOPMENT GROUP, LLC  
1650 TYSONS BOULEVARD  
SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT OLIMSTEAD  
TELE: (703) 905-9557

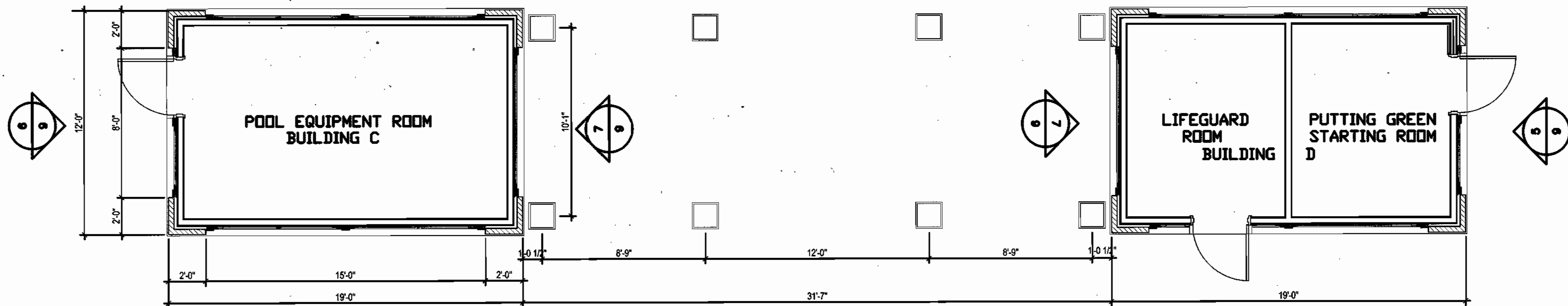
LANDSCAPE NOTES & DETAILS  
THE EVERGREENS AT COLUMBIA TOWN CENTER  
SECTION 2 AREA 8, PARCEL A  
SECTION 2 AREA 8, LOTS 39 & 41  
PLAT No. 10220, 10221, 10222  
ELECTION DISTRICT No. 5  
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
NTS	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	30&36-1 & 19	7 OF 20

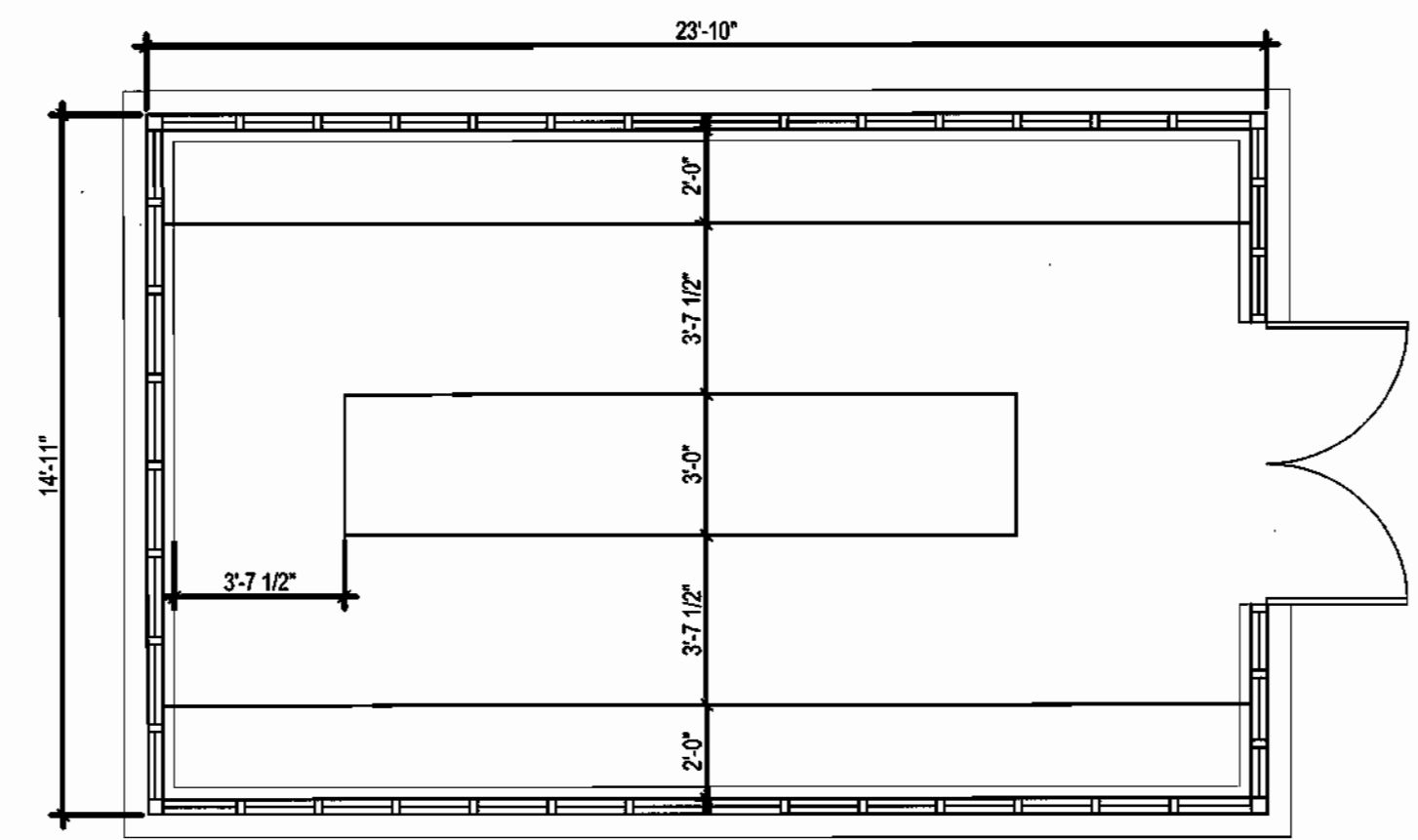




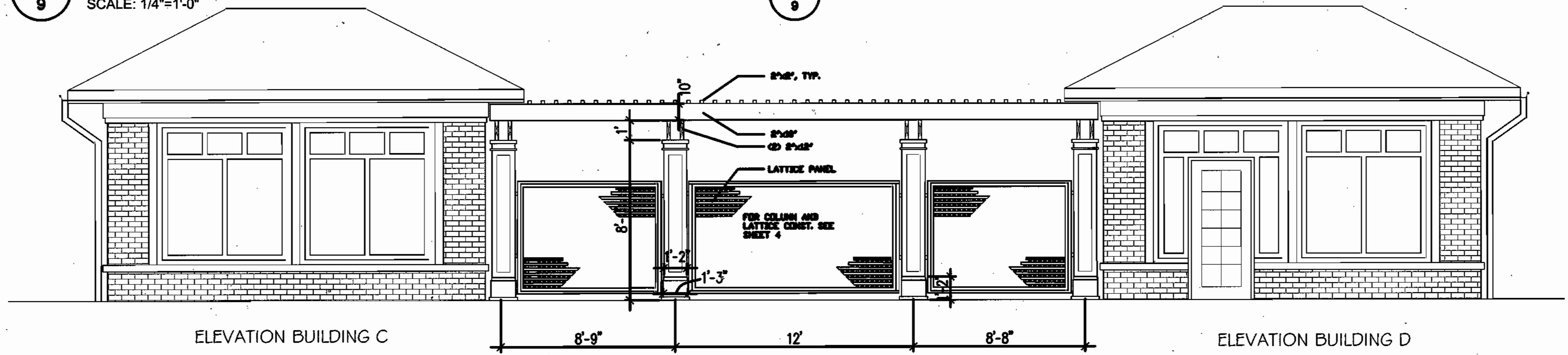




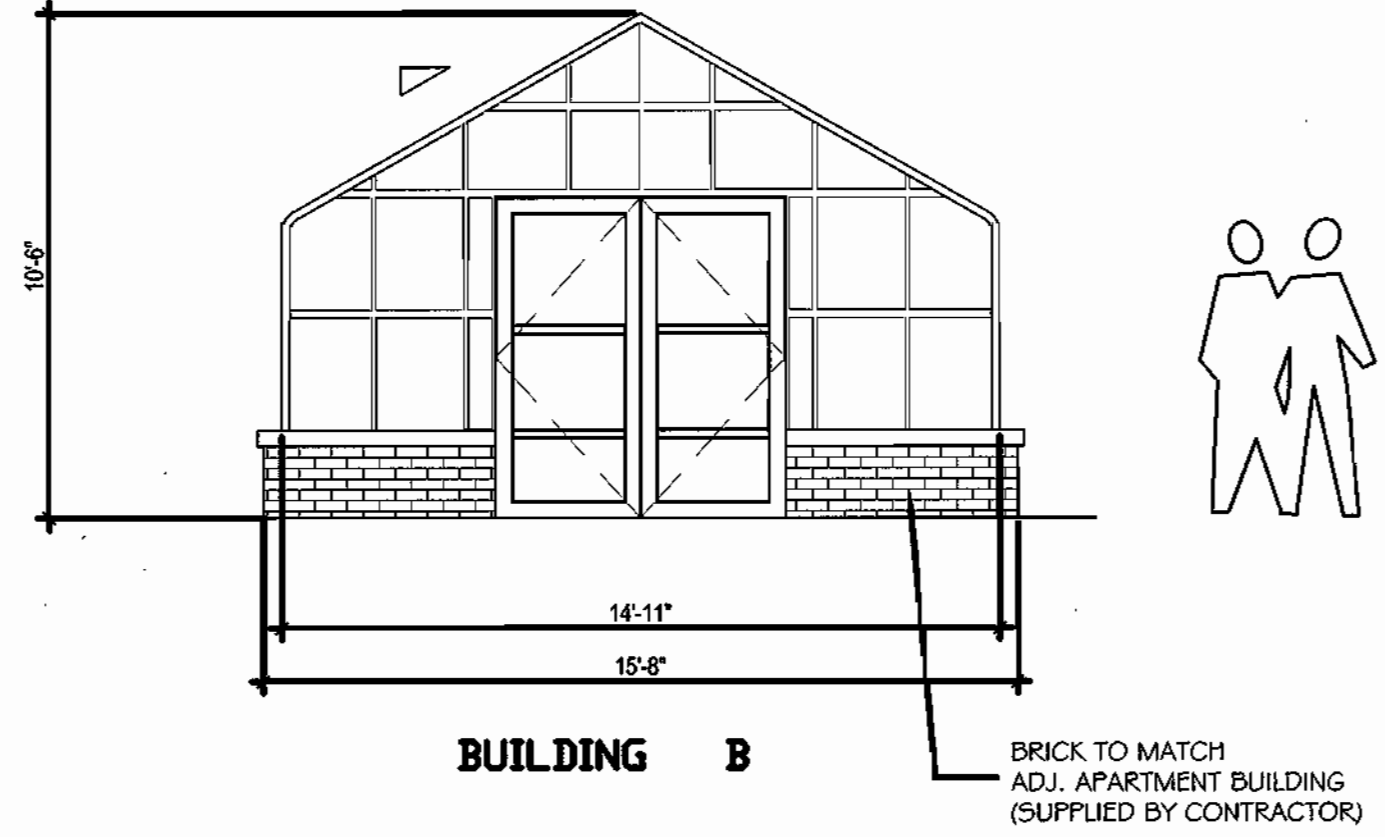
1 PLAN OF PERGOLA AND POOL HOUSE  
9 SCALE: 1/4"=1'-0"



3 PLAN OF GREEN HOUSE  
9 SCALE: 1/4"=1'-0"



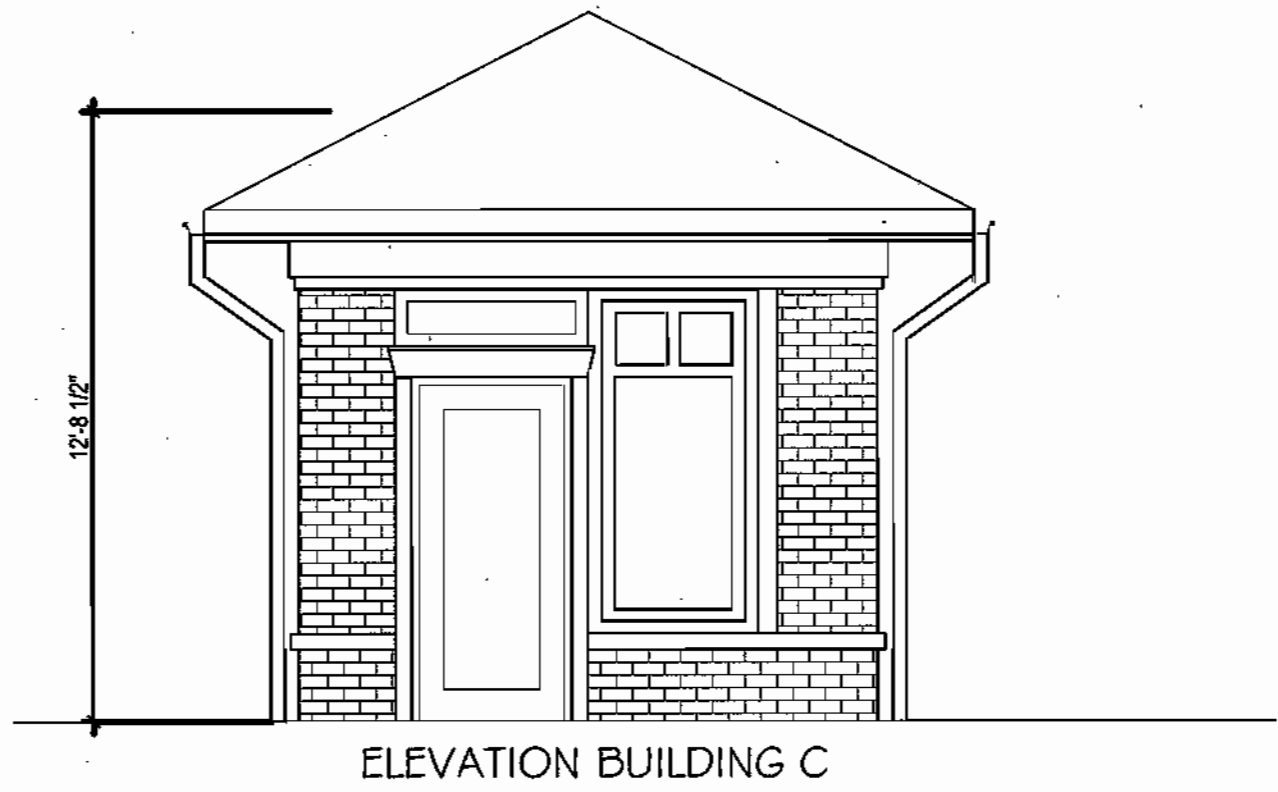
2 ELEVATION OF POOL HOUSES & PERGOLA  
9 SCALE: 1/4"=1'-0"



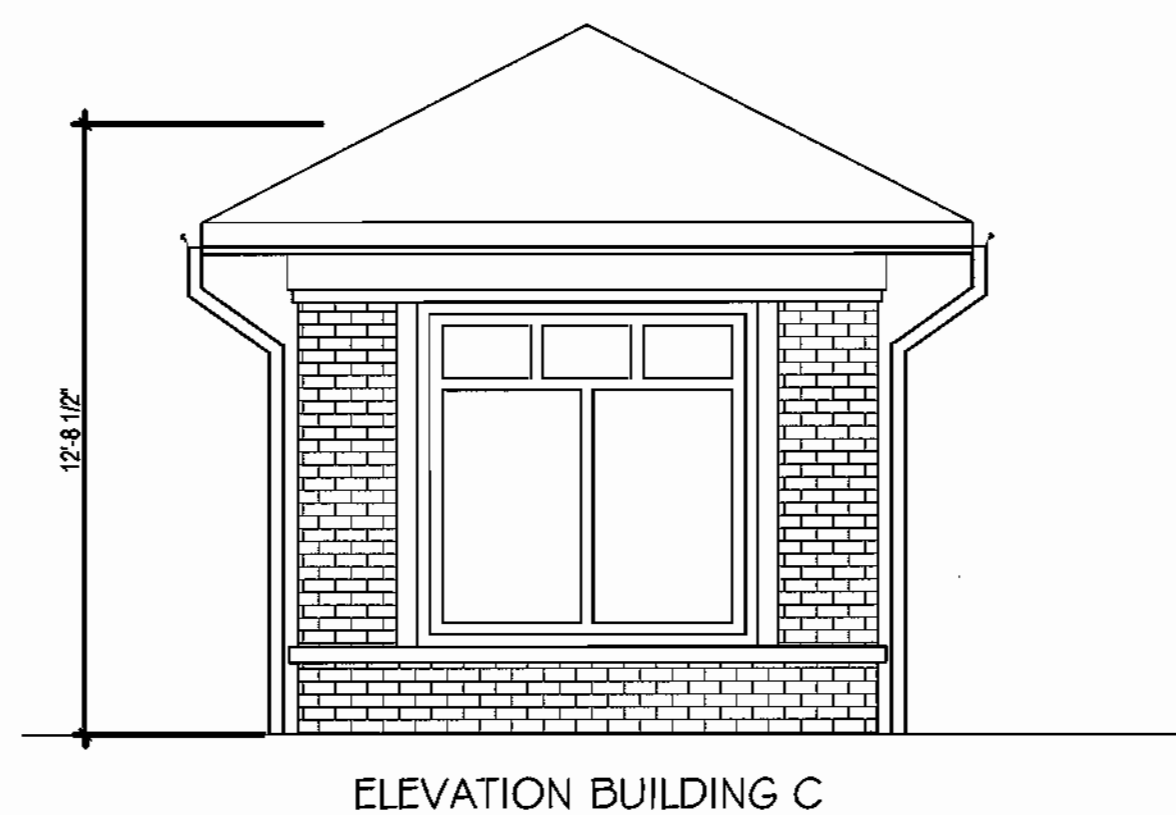
4 ELEVATION OF GREEN HOUSE  
9 SCALE: 1/4"=1'-0"



5 SIDE ELEV. OF POOL HOUSE AT STARTER SHED  
9 SCALE: 1/4"=1'-0"



6 SIDE ELEV. OF POOL HOUSE AT EQUIP. ROOM  
9 SCALE: 1/4"=1'-0"



7 SIDE ELEV. OF POOL HOUSE AT PERGOLA  
9 SCALE: 1/4"=1'-0"

APPROVED  
PLANNING BOARD  
of HOWARD COUNTY  
DATE 05/01/03

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
*Penny Braxton* 10/7/03  
County Health Officer Date  
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
*Mark A. Weger* 10/10/03  
Director Date  
*Cindy Hamilton* 10/10/03  
Chief, Division of Land Development Date  
*Chris Damman* 10/10/03  
Chief, Development Engineering Division MK Date

OWNER:  
RMJ DEVELOPMENT GROUP, LLC  
1650 TYSONS BOULEVARD  
SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: JOHN D. RHOAD, JR.  
TELE: (703) 905-9557



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

*hcm* Hord Coplan Meach  
ARCHITECTURE LANDSCAPE ARCHITECTURE PLANNING INTERIOR DESIGN  
111 MARKET PLACE SUITE 710 BALTIMORE MARYLAND 21202  
410 637 7311 FAX: 410 637 6500

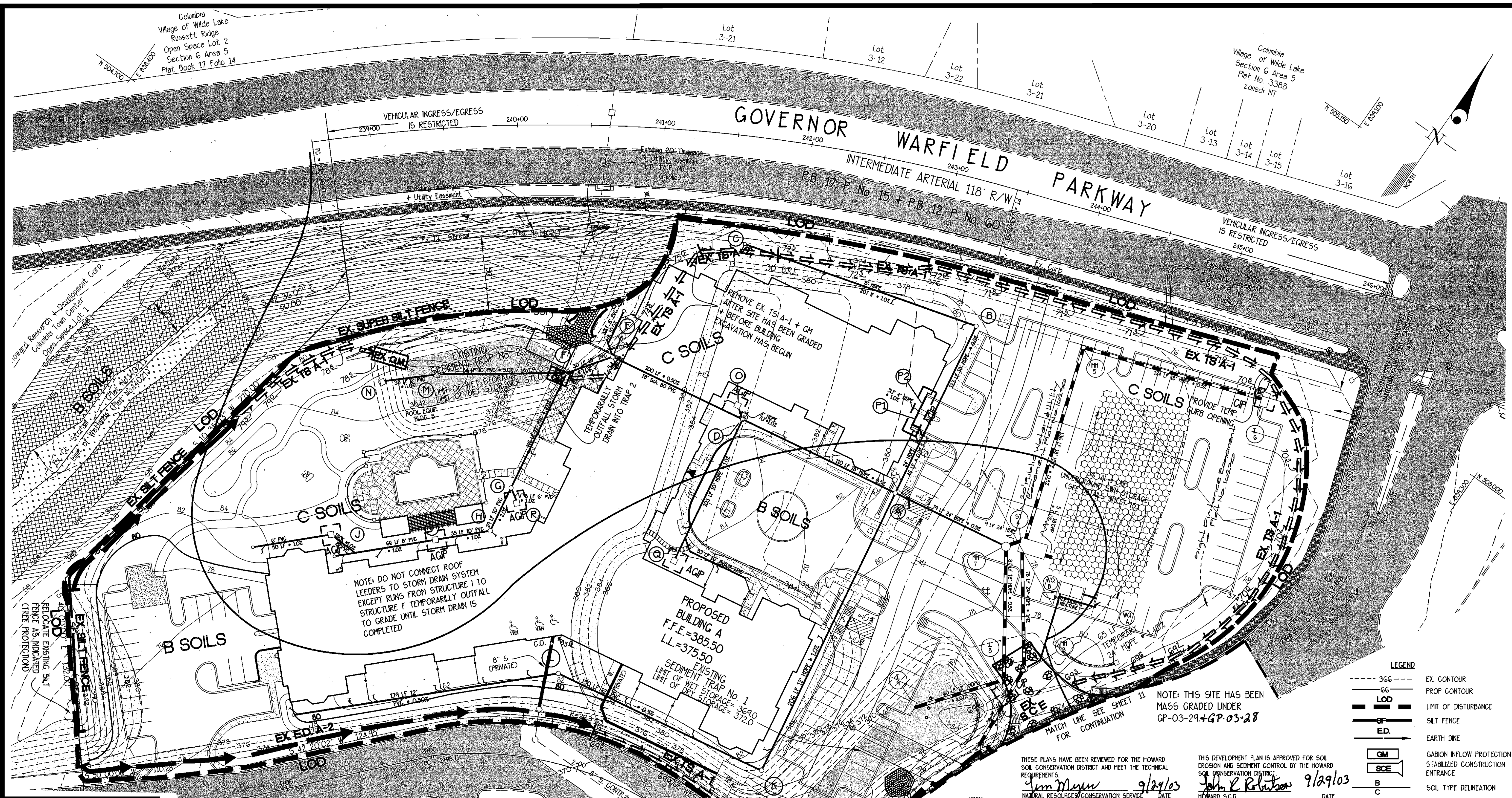
DATE	REVISION	BY	APP'R.

PREPARED FOR:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o RMJ DEVELOPMENT GROUP, INC  
1650 TYSONS BOULEVARD  
SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT OLUSTEAD  
TELE: (703) 905-9557

POOL HOUSE/ PUMP HOUSE & GREEN HOUSE DETAILS  
**THE EVERGREENS AT COLUMBIA TOWN CENTER**  
SECTION 2 AREA 8, PARCEL A  
SECTION 2 AREA 1, LOTS 39 & 41  
PLAT No. 1022001277412774  
ELECTION DISTRICT No. 5 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2001	30&36-1 & 19	9 OF 20





**APPROVED**  
PLANNING BOARD  
OF HOWARD COUNTY  
DATE 05/01/03

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Romy Boneston M.D.* 10/17/03  
County Health Officer Date

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*David A. Weger* 11/14/03  
Director Date

*Andy Kharuta* 11/14/03  
Chief, Division of Land Development Date

*Chris Rasmussen* 10/16/03  
Chief, Development Engineering Division MK Date

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 PERSON ON-SITE INSPECTION BY THE HSCD.

OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL GAVANAUGH  
410-912-6284

*[Signature]* 9/12/03  
SIGNATURE OF DEVELOPER/BUILDER DATE

PREPARED FOR:  
OWNER PARCEL A1  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o RMJ DEVELOPMENT GROUP, INC.  
1650 TYSONS BOULEVARD, SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT CLUMSTEAD  
TEL: (703) 905-9557

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.

*Michael J. Tropp* 9/12/03  
DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

*Jan Meyer* 9/29/03  
NATURAL RESOURCE CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John R. Robinson* 9/29/03  
HOWARD S.C.D. DATE

Sediment Trap Number 1

TYPE OF SEDIMENT TRAP: STONE OUTLET  
PRE-DEVELOPMENT DRAINAGE AREA: 3.50 AC.  
POST DEVELOPMENT DRAINAGE AREA: 3.90 AC.  
STORAGE REQUIRED- WET VOLUME: 3.90 AC. X 1800 CF./AC = 7020 C.F.  
STORAGE REQUIRED- DRY VOLUME: 3.90 AC. X 1800 C.F./AC = 7020 C.F.  
BOTTOM ELEVATION: 367.00  
OUTLET ELEVATION: 368.00  
LIMIT OF STORAGE ELEVATION: 370.86  
SIDE SLOPES: 2:1  
TOP OF EMBANKMENT ELEVATION: 373.00  
OUTLET LENGTH: 16.0 FT.

Sediment Trap Number 2

TYPE OF SEDIMENT TRAP: STONE OUTLET  
PRE-DEVELOPMENT DRAINAGE AREA: 2.04 AC.  
POST DEVELOPMENT DRAINAGE AREA: 1.64 AC.  
STORAGE REQUIRED- WET VOLUME: 2.04 AC. X 1800 C.F./AC = 3672 C.F.  
STORAGE REQUIRED- DRY VOLUME: 2.04 AC. X 1800 C.F./AC = 3672 C.F.  
BOTTOM ELEVATION: 366.00  
OUTLET ELEVATION: 368.00  
LIMIT OF STORAGE ELEVATION: 369.24  
SIDE SLOPES: 2:1  
TOP OF EMBANKMENT ELEVATION: 372.00  
OUTLET LENGTH: 9 FT.

- LEGEND
- 366 --- EX. CONTOUR
  - 66 --- PROP CONTOUR
  - LOD --- LIMIT OF DISTURBANCE
  - SF --- SILT FENCE
  - ED --- EARTH DKE
  - GM --- GABION INFLOW PROTECTION
  - SCE --- STABILIZED CONSTRUCTION ENTRANCE
  - B --- SOIL TYPE DELINEATION
  - C ---

NOTE: THIS SITE HAS BEEN MASS GRADED UNDER GP-03-29+GP-03-28

MATCH LINE SEE SHEET 11 FOR CONTINUATION

MATCH LINE SEE SHEET 11 FOR CONTINUATION

**GLWGUTSCHICK 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: 301-421-4188

DATE	REVISION	BY	APPR.

ELECTION DISTRICT No. 5

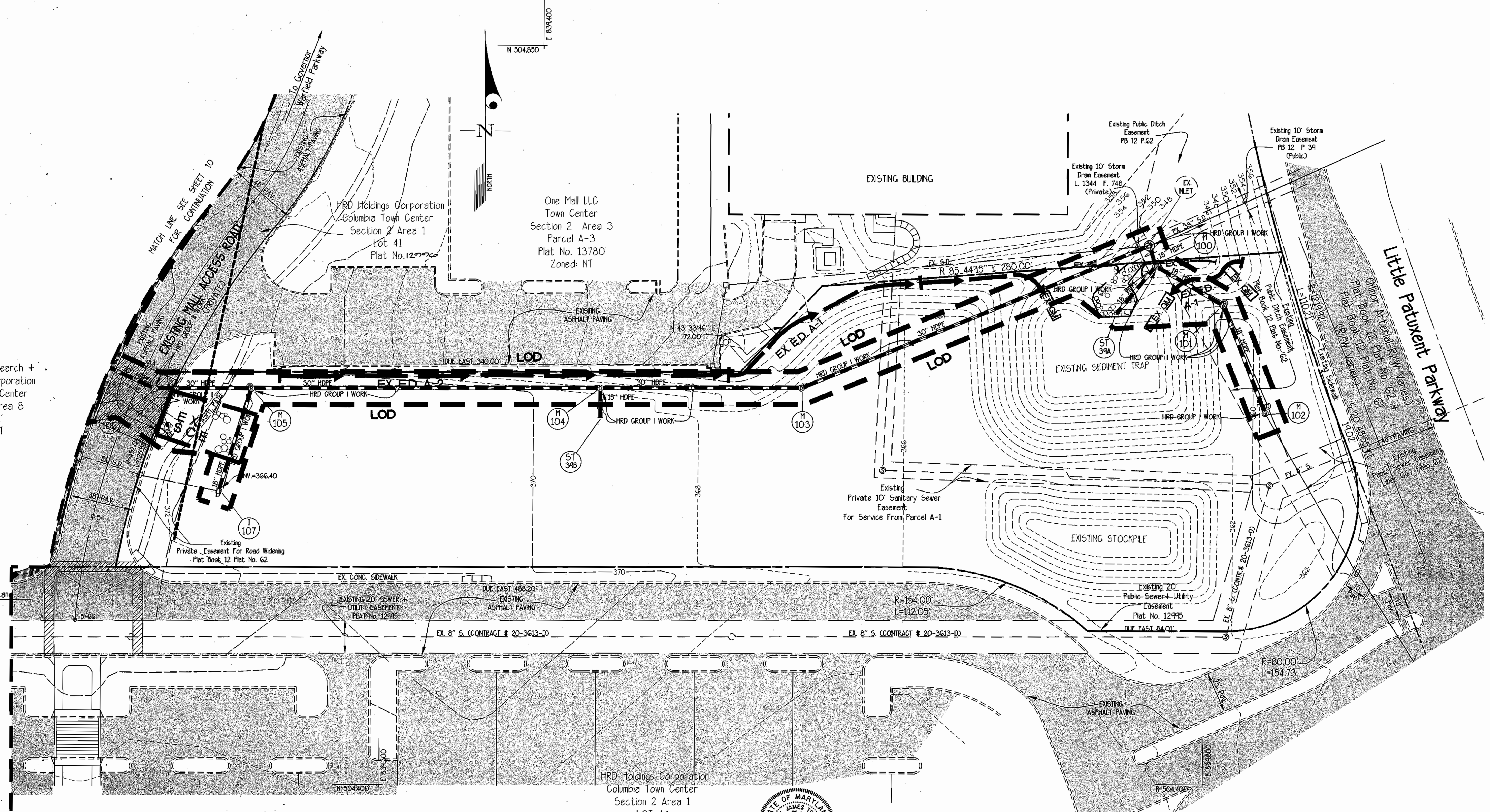
**SEDIMENT CONTROL PLAN**  
**COLUMBIA TOWN CENTER**  
**SECTION 2 AREA 8, PARCEL A**  
**SECTION 2 AREA 1, LOTS 39 & 41**  
PLAT No. 11222-2-2003-01

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	36&30-1&19	10 OF 20



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The Howard Research + Development Corporation  
Columbia Town Center  
Section 2 Area 8  
Parcel 'A'  
Zoned: NT



HRD Holdings Corporation  
Columbia Town Center  
Section 2 Area 1  
LOT 4c  
Plat No. 169005  
Zoned: NT  
(SDP 97-107)

*Michael J. Tropp*  
Professional Engineer  
State of Maryland  
No. 14978  
Exp. 12/31/04

**APPROVED**  
PLANNING BOARD  
of HOWARD COUNTY  
DATE: 05/01/03

APPROVED: FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Ronny Bonester, M.D.* 10/7/03  
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*David A. Weyler* 11/14/02  
Director Date

*Chris Hamilton* 10/14/02  
Chief, Division of Land Development Date

*Chad Cunningham* 10/16/02  
Chief, Development Engineering Division Date

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]* 9/12/03  
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.

*Michael J. Tropp* 9/12/03  
Date

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

*Jim Myers* 9/29/03  
Natural Resources Conservation Service Date

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation District.

*John R. Pollock* 9/29/03  
Howard S.C.D. Date

OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
410-992-6284

**NOTE: THIS PLAN IS FOR SEDIMENT CONTROL ONLY!!**

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

DATE	REVISION	BY	APPR.

PREPARED FOR:  
& OWNER PARCEL A:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o R&D DEVELOPMENT GROUP, INC.  
1650 TYSONS BOULEVARD, SUITE 820  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT OLMSTEAD  
TEL: (703) 905-9557

**SEDIMENT CONTROL PLAN**  
**COLUMBIA TOWN CENTER**  
**SECTION 2 AREA 8, PARCEL A**  
**SECTION 2 AREA 1, LOTS 39 & 41**  
PLAT No. 169005

ELECTION DISTRICT No. 5

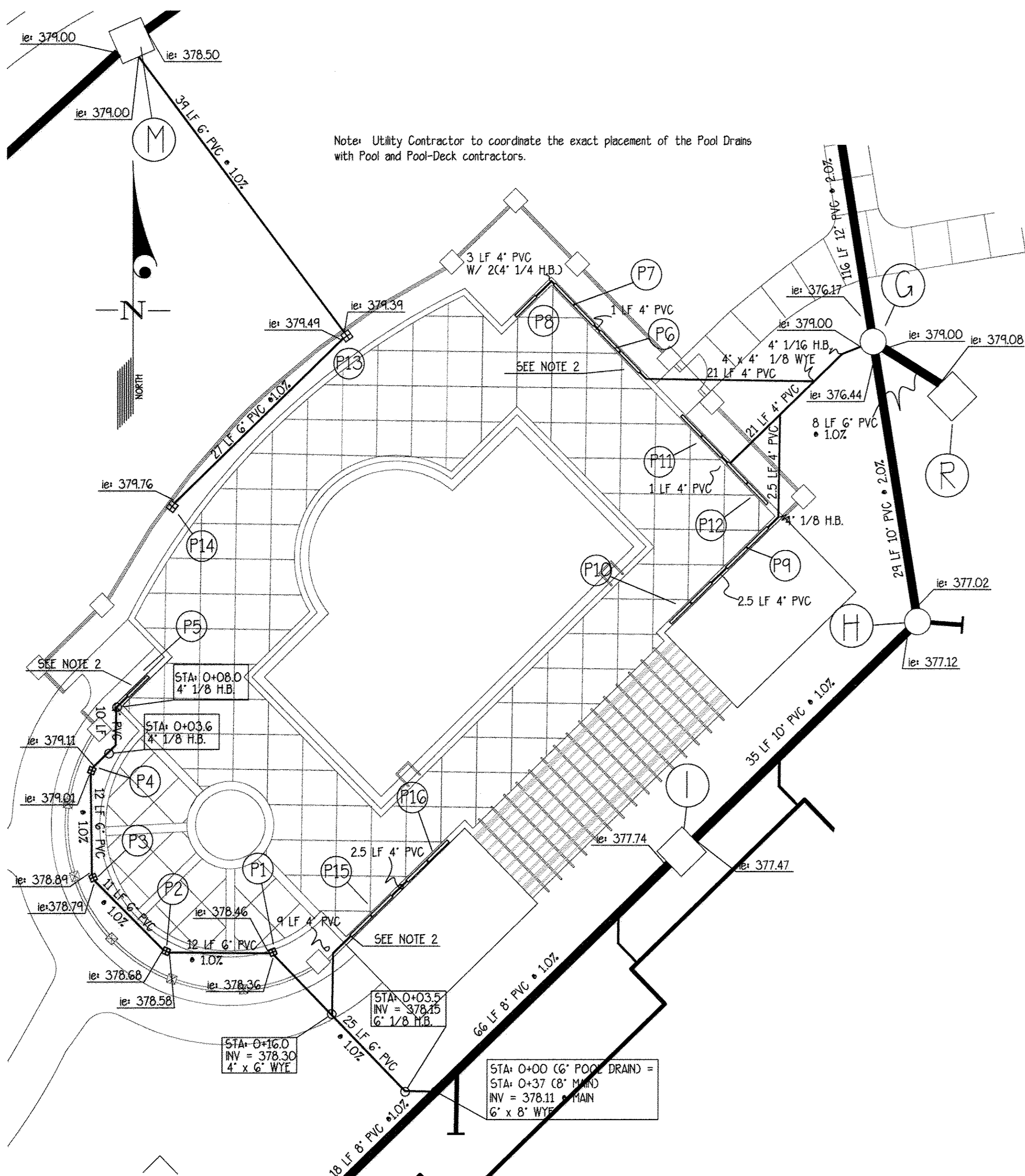
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept, 2003	36&30-1&19	11 OF 20









ROOF DRAIN-POOL AREA CONNECTION SCHEMATIC PLAN

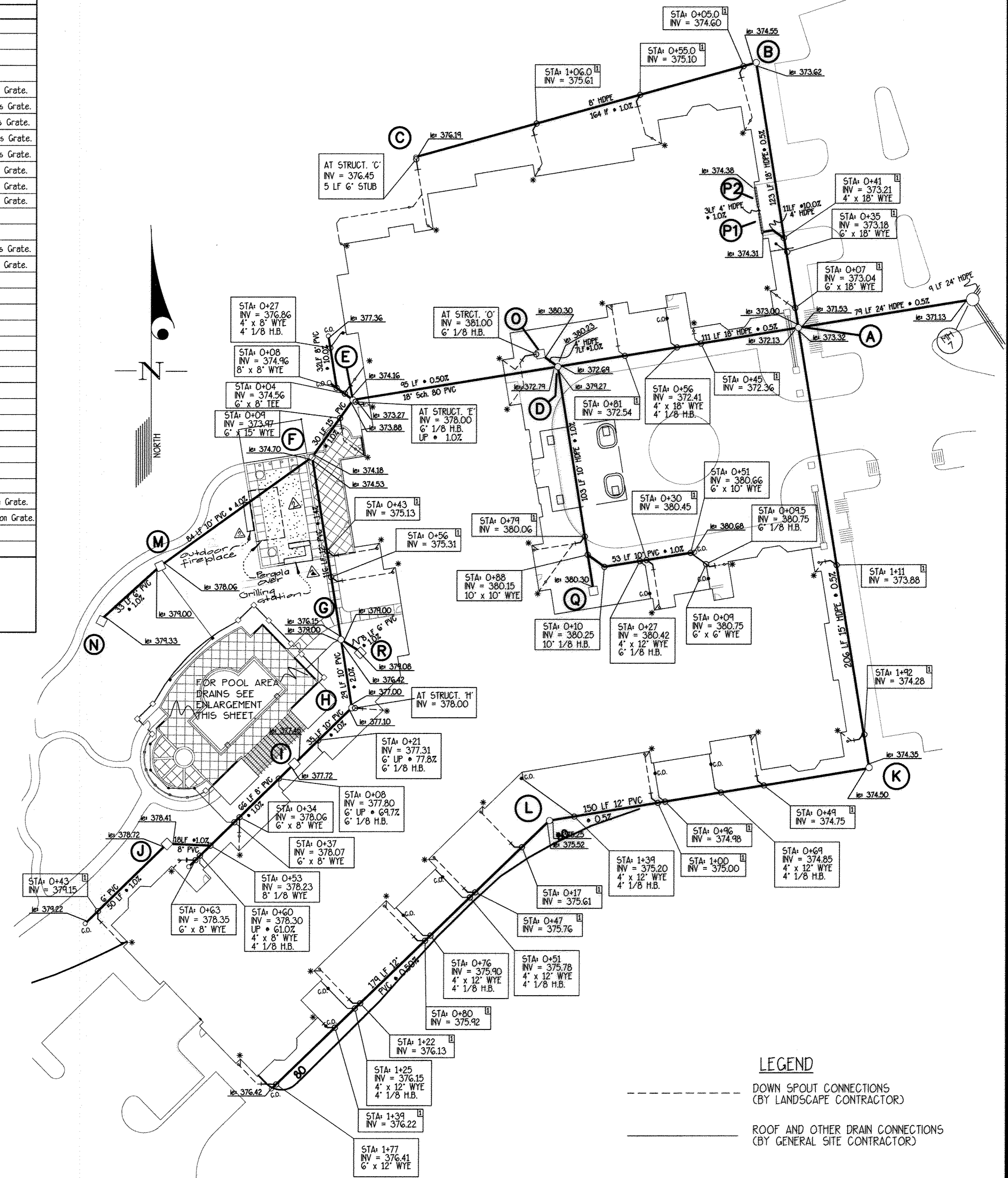
(SCALE: 1" = 10')

Structure Schedule	
No.	Description
P1	8' Nyloplast Drain Basin w/ 8' Bronze Standard Light Duty Inlet Grate.
P2	8' Nyloplast Drain Basin w/ 8' Bronze Standard Light Duty Inlet Grate.
P3	8' Nyloplast Drain Basin w/ 8' Bronze Standard Light Duty Inlet Grate.
P4	8' Nyloplast Drain Basin w/ 8' Bronze Standard Light Duty Inlet Grate.
P5	3.25 ft.-4' ACO K100 Trench Drain - Part 1001(6' deep) w/ No. 485 Brass Grate.
P6	6.56 ft.-4' ACO K100 Trench Drain - Part 1003(9.8' deep) w/ No.485 Brass Grate.
P7	6.56 ft.-4' ACO K100 Trench Drain - Part 1002(7.9' deep) w/ No.485 Brass Grate.
P8	3.25 ft.-4' ACO K100 Trench Drain - Part 1001(6' deep) w/ No. 485 Brass Grate.
P9	6.56 ft.-4' ACO K100 Trench Drain - Part 1003(9.8' deep) w/ No.485 Brass Grate.
P10	6.56 ft.-4' ACO K100 Trench Drain - Part 1001(6' deep) w/ No. 485 Brass Grate.
P11	6.56 ft.-4' ACO K100 Trench Drain - Part 1001(6' deep) w/ No. 485 Brass Grate.
P12	6.56 ft.-4' ACO K100 Trench Drain - Part 1001(6' deep) w/ No. 485 Brass Grate.
P13	12" Nyloplast Drain Basin w/ 12" Bpedestrian Light-Duty Bronze Inlet Grate.
P14	12" Nyloplast Drain Basin w/ 12" Bpedestrian Light-Duty Bronze Inlet Grate.
P15	6.56 ft.-4' ACO K100 Trench Drain - Part 1003(9.8' deep) w/ No.485 Brass Grate.
P16	6.56 ft.-4' ACO K100 Trench Drain - Part 1001(6' deep) w/ No. 485 Brass Grate.
AB	SEE STRUCTURE SCHEDULE ON SHEET 14
C	24" Nyloplast Drain Basin w/ 24" Solid H-25 Cover.
D	24" Nyloplast Drain Basin w/ 24" Solid H-25 Cover.
E	24" Nyloplast Drain Basin w/ 24" Solid H-25 Cover.
F	24" Nyloplast Drain Basin w/ 24" Solid H-25 Cover.
G	24" Nyloplast Drain Basin w/ 24" Solid H-10 Cover.
H	24" Nyloplast Drain Basin w/ 24" Solid H-10 Cover.
I	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.
J	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.
K	12" Nyloplast Drain Basin w/ 12" Solid H-10 Cover.
L	12" Nyloplast Drain Basin w/ 12" Solid H-10 Cover.
M	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.
N	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.
O	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.
P1	9.5 ft.-4' ACO K100 TrenchDrain-Part 1001(6' deep) w/ No. 478 Ductile Iron Grate.
P2	9.5 ft.-4' ACO K100 TrenchDrain-Part 1002(7.9' deep) w/ No. 478 Ductile Iron Grate.
Q	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.
R	12" Nyloplast Drain Basin w/ 12" Pedestrian H-10 Hinged Design.

PRODUCT MANUFACTURERS  
 ACO Polymer Products, Inc.  
 P.O. Box 245  
 12080 Ravenna Road  
 Chardon, OH 44024  
 (800) 543-4764  
 NYLOPLAST  
 3130 Verona Avenue  
 Buford, GA 30518  
 (770) 932-2443

ROOF DRAIN PIPE SCHEDULE			
SIZE	TYPE	QUANTITY (L.F.)	REMARKS
6"	PVC	91	
8"	PVC	280	
10"	PVC	304	
12"	PVC	445	
15"	PVC	30	
15"	HDPE	206	ADS or Equivalent
18"	HDPE	234	ADS or Equivalent
18"	Sch. 80 PVC	95	
24"	HDPE	79	ADS or Equivalent

- Notes:
- Unless otherwise noted, all connections to main are to be constructed of a 6" WYE to main line, followed by a 6" 1/8 H.B. and terminated at a minimum distance of 5 ft. from centerline of main.
  - The landscaper installed' downspout connections shown are schematic in nature.
  - All stubs to the main to be terminated with a temporary endcap and clearly marked at the surface.
  - Pipe lengths in table do not include extensions from main line to the building.
  - All contractor installed inverts to be 383.00 at 5 feet outside the building.
  - General contractor to coordinate the installation of downspout connections in the vicinity of hardscape features such as patios and walks.



ROOF DRAIN-BUILDING CONNECTION SCHEMATIC PLAN

(SCALE: 1" = 30')

LEGEND  
 --- DOWN SPOUT CONNECTIONS (BY LANDSCAPE CONTRACTOR)  
 --- ROOF AND OTHER DRAIN CONNECTIONS (BY GENERAL SITE CONTRACTOR)

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer  
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
 Director  
 Chief, Division of Land Development  
 Chief, Development Engineering Division

OWNER LOTS 39 and 41:  
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
 THE ROUSE BUILDING  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 ATTN: PAUL CAVANAUGH  
 410-992-6284

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

PREPARED FOR:  
 & OWNER PARCEL A:  
 EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
 c/o RMJ DEVELOPMENT GROUP, INC.  
 1650 TYSONS BOULEVARD, SUITE 620  
 McLEAN, VIRGINIA 22102  
 ATTN: SCOTT OLNSTEAD  
 TELE: (703) 905-9557

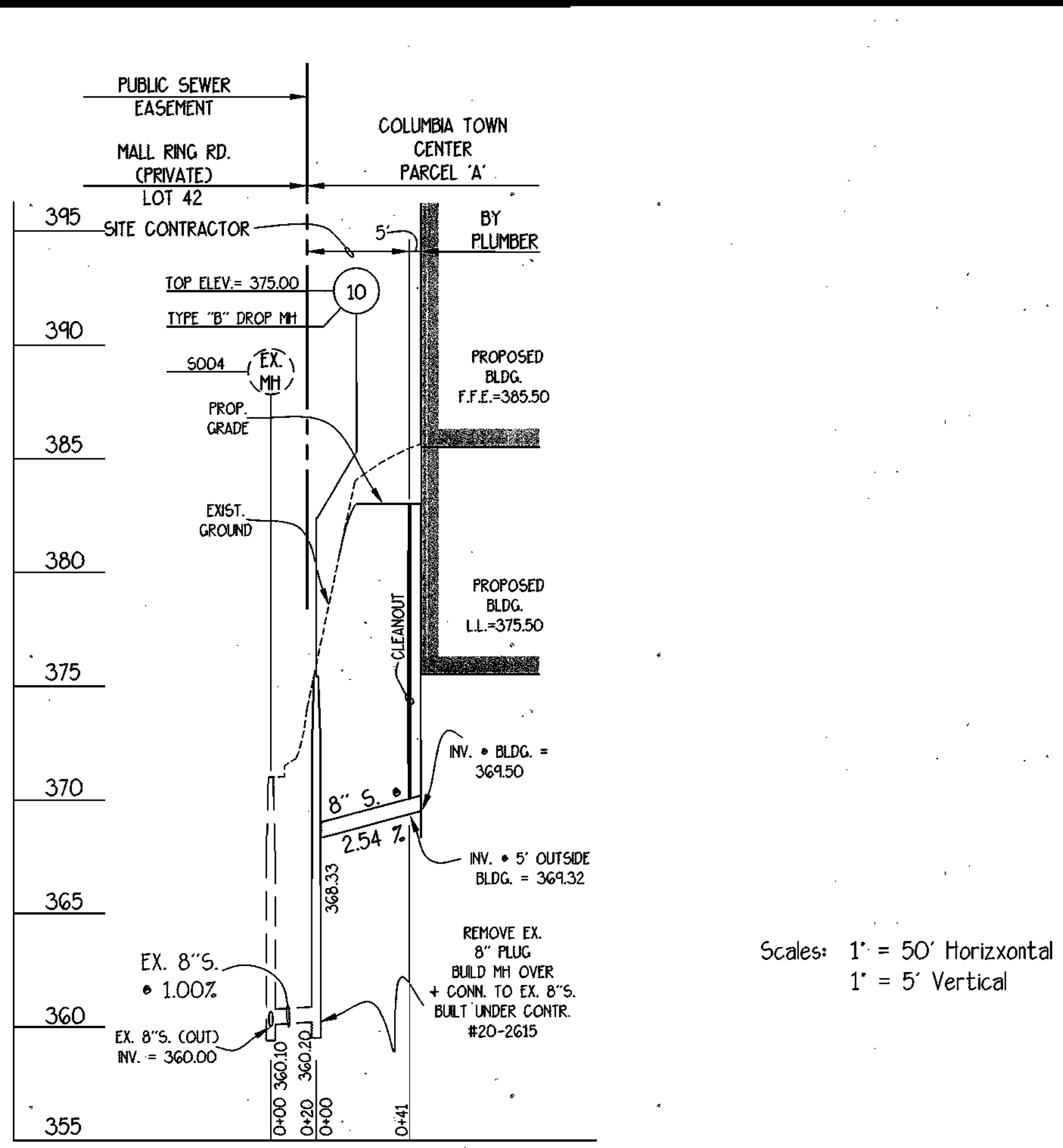
ROOF AND POOL DRAIN MANIFOLD PLAN  
**COLUMBIA TOWN CENTER**  
 SECTION 2 AREA 8, PARCEL A  
 SECTION 2 AREA 1, LOTS 39 & 41  
 PLAT No. 10-27-20-120-000-02-000  
 ELECTION DISTRICT No. 5  
 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	30-19&20	13 OF 20

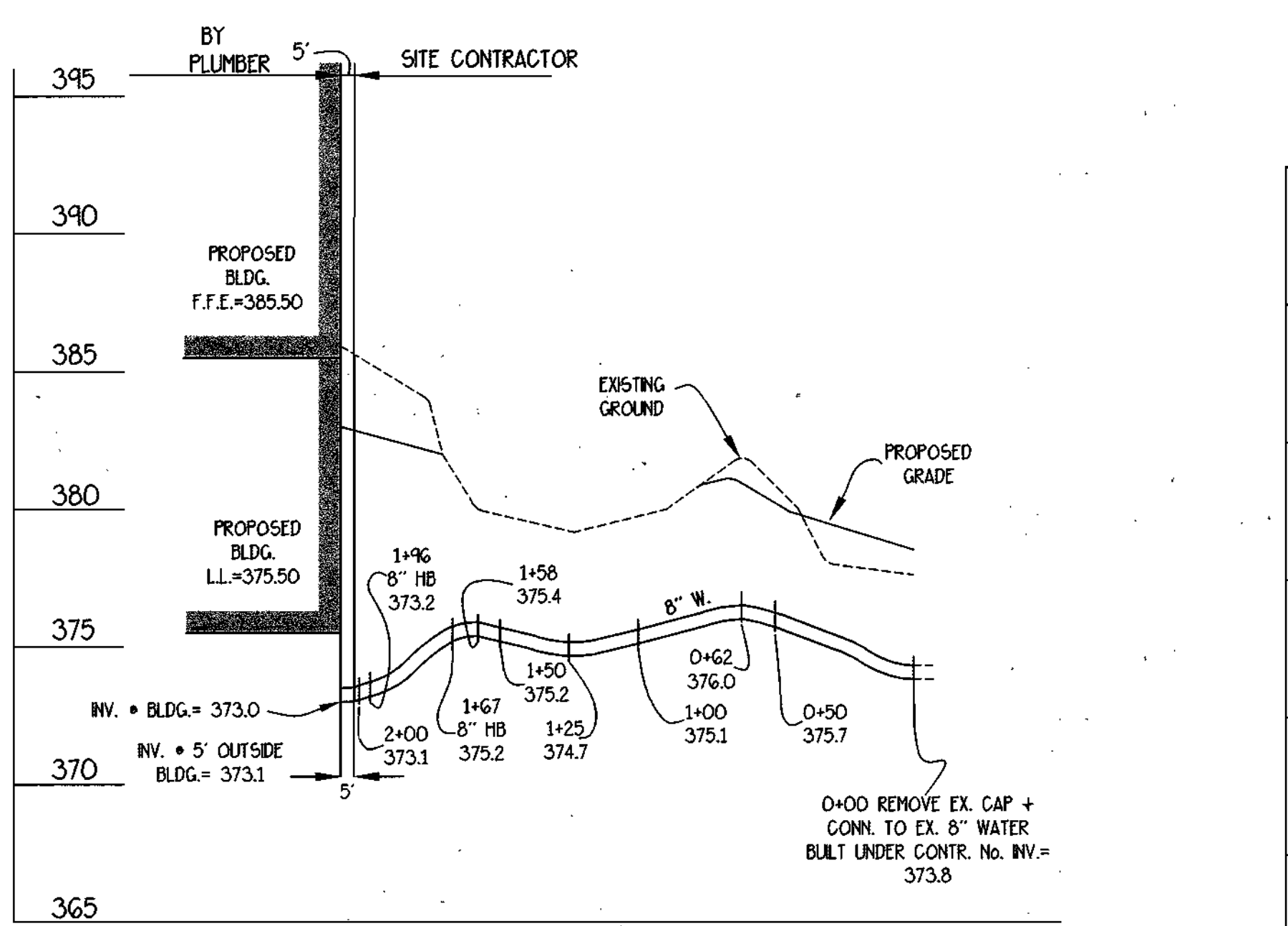
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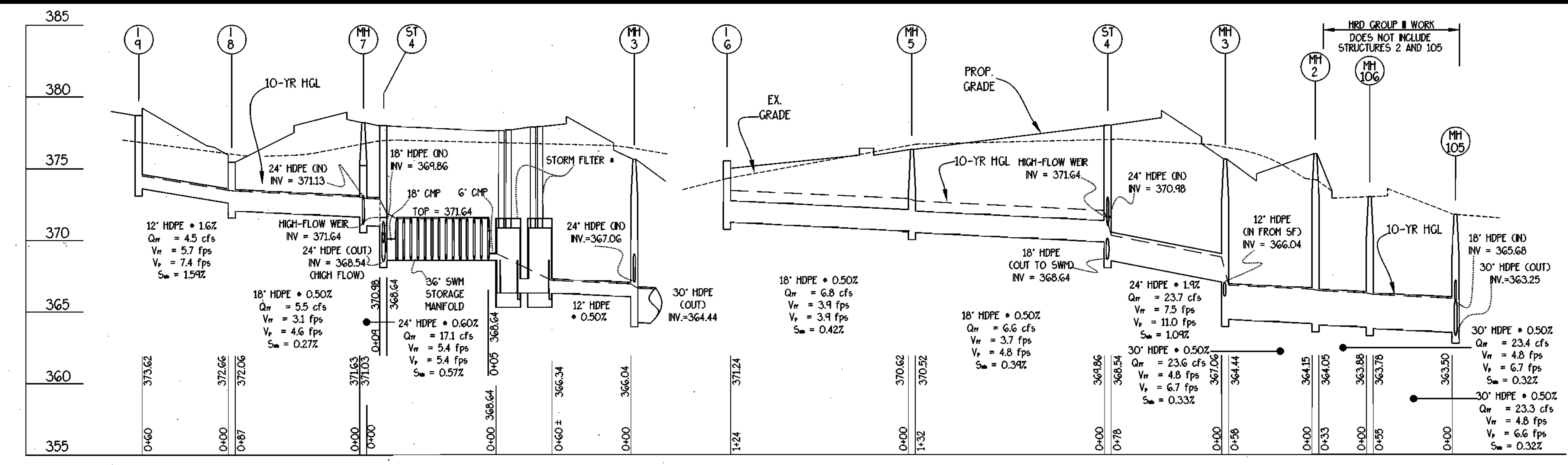
Scales: 1" = 50' Horizontal  
1" = 5' Vertical



**APPROVED PLANNING BOARD OF HOWARD COUNTY**  
DATE: 05/01/03

**APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.**  
HOWARD COUNTY HEALTH DEPARTMENT  
County Health Officer: Penny Bernstein, M.D., Date: 10/7/03

**APPROVED FOR HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING**  
Director: David A. Weger, Date: 10/10/03  
Chief, Division of Land Development: Cindy Hamstra, Date: 10/11/03  
Chief, Development Engineering Division: [Signature], Date: 10/16/03



**STRUCTURE SCHEDULE**

No.	TYPE	WIDTH	TOP ELEVATION	INVERT ELEVATION	STANDARD DETAIL	NOTES	
A	4" MH	4'-0"	380.10	373.32	372.23	Ho.Co. SD-5.12	
I-1	A-5 INLET	5'-0"	378.70	379.21	terminal	373.62	Ho.Co. SD-4.01
I-8	TYPE-S COMBO	3'-5"	375.46	375.17	372.66	372.06	Ho.Co. SD-4.32
MH-7	5" MH	5'-0"	---	---	---	---	MDSHA - 384.03
ST-4	STORMGATE	---	---	---	---	---	SEE SHEET 15 FOR DETAILS
MH-3	5" MH	5'-0"	---	---	---	---	MDSHA - 384.03
I-6	A-10 INLET	10'-0"	375.70	375.50	terminal	371.24	Ho.Co. SD-4.02
MH-5	5" MH	5'-0"	---	---	---	---	MDSHA - 384.03
MH-2	5" MH	5'-0"	---	---	---	---	MDSHA - 384.03
MH-106	5" MH	5'-0"	---	---	---	---	MDSHA - 384.03

**STRUCTURE SCHEDULE**

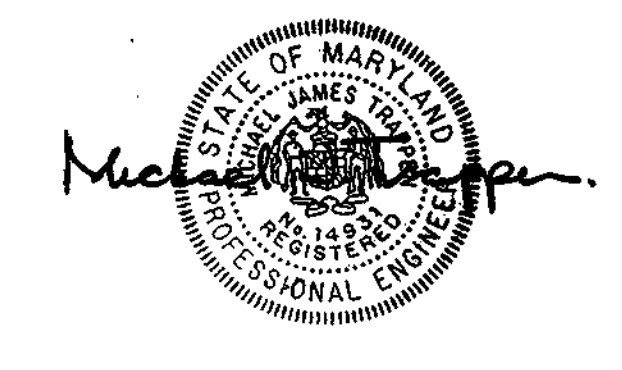
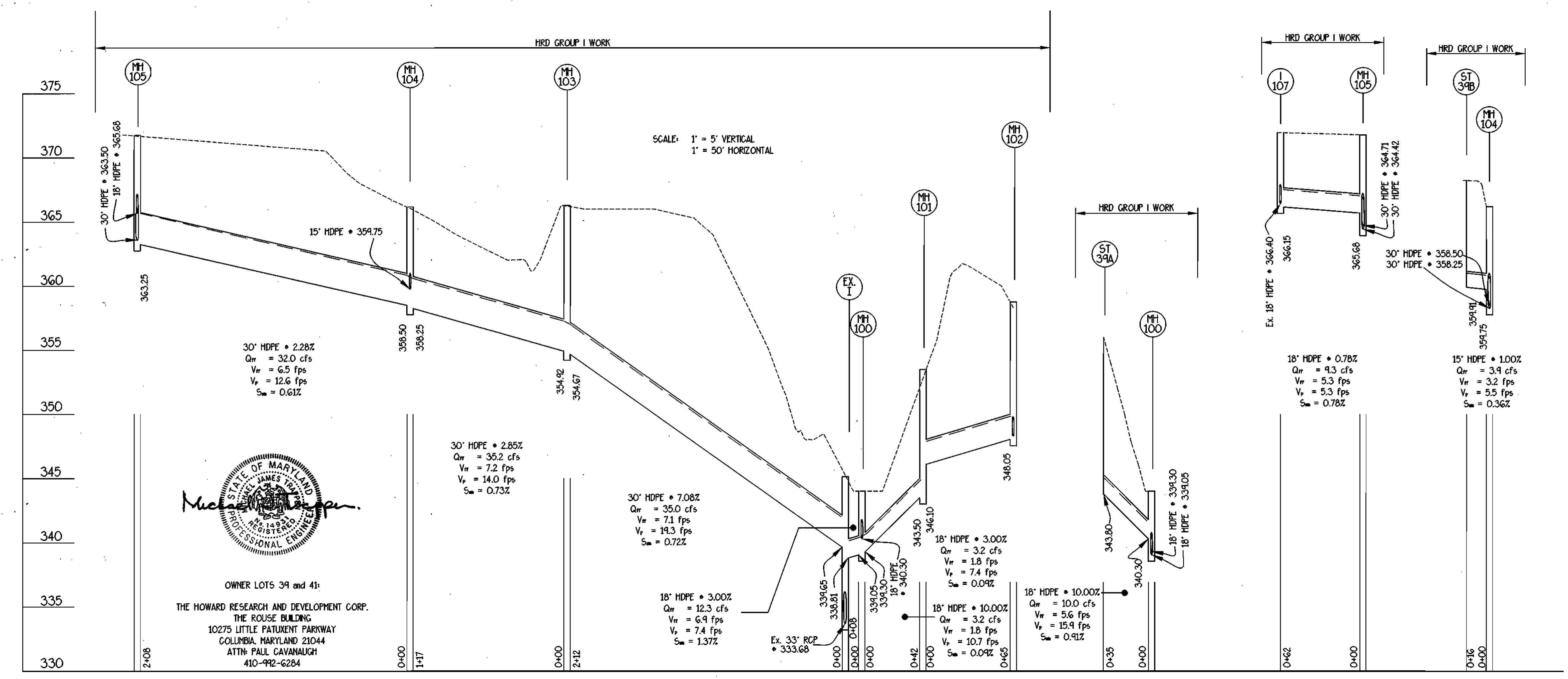
No.	TYPE	WIDTH	TOP ELEVATION	INVERT ELEVATION	STANDARD DETAIL	NOTES
I-107	Type S Met	2'-7"	---	---	---	---
MH-105	5" MH	5'-0"	---	---	---	---
MH-104	5" MH	5'-0"	---	---	---	---
MH-103	5" MH	5'-0"	---	---	---	---
MH-102	5" MH	5'-0"	---	---	---	---
MH-101	5" MH	5'-0"	---	---	---	---
MH-100	5" MH	5'-0"	---	---	---	---

**PIPE SCHEDULE**

SIZE	TYPE	QUANTITY (L.F.)	REMARKS
12"	HDPE	120	ADS or Equivalent
15"	HDPE	16	ADS or Equivalent
18"	HDPE	555	ADS or Equivalent
24"	HDPE	87	ADS or Equivalent
30"	HDPE	683	ADS or Equivalent
6"	AL-1 CMP	5	CONTECH or Equivalent
18"	AL-1 CMP	5	CONTECH or Equivalent

SEE SHEET 13 FOR ROOF DRAIN MANFOLD PIPE SCHEDULE

Scales: 1" = 50' Horizontal  
1" = 5' Vertical



OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
410-942-6284

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK  
BURTONSVILLE, MARYLAND 20866  
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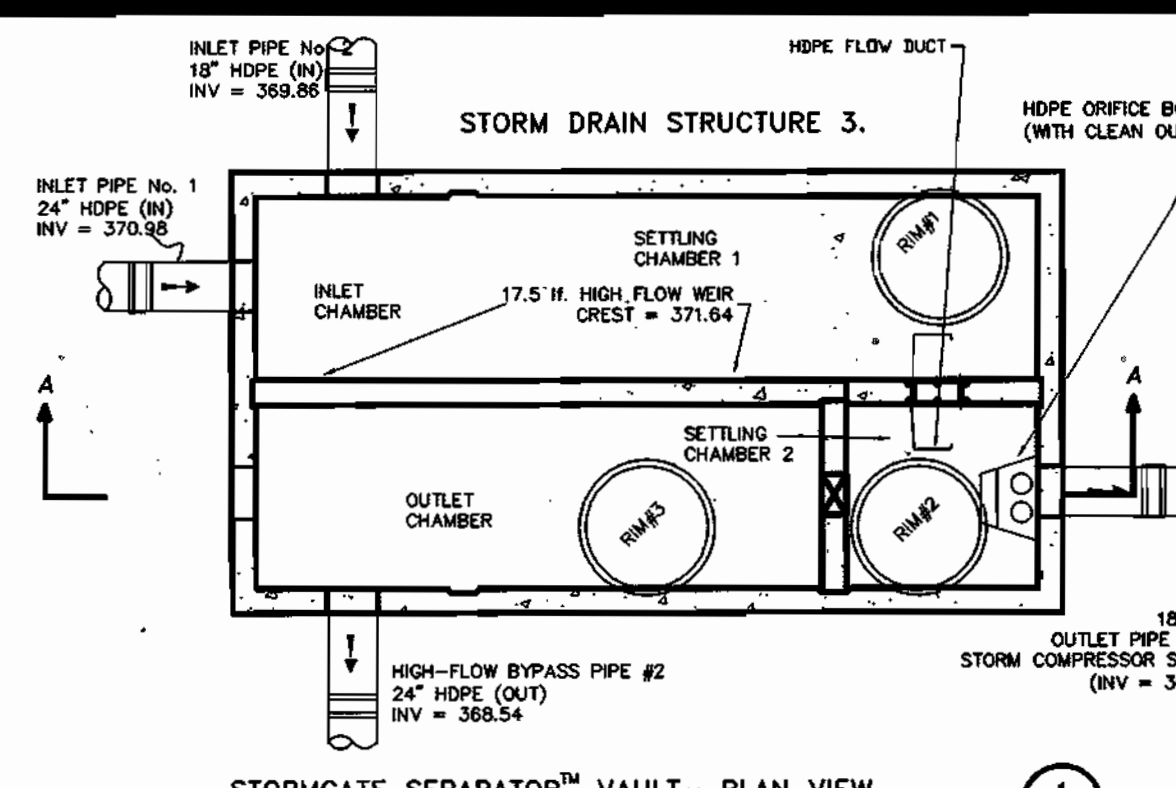
DATE	REVISION	BY	APPR.

PREPARED FOR: & OWNER:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
C/O RMJ DEVELOPMENT GROUP, INC.  
1650 TYSONS BOULEVARD, SUITE 850  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT GANSTADT  
TELE: (703) 905-9557

**UTILITY PROFILES**  
**COLUMBIA TOWN CENTER**  
**SECTION 2 AREA 8, PARCEL A**  
**SECTION 2 AREA 1, LOTS 39 & 41**  
PLAT No. 10223, 10224, 10225, 10226

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	30-19&20	14 OF 20

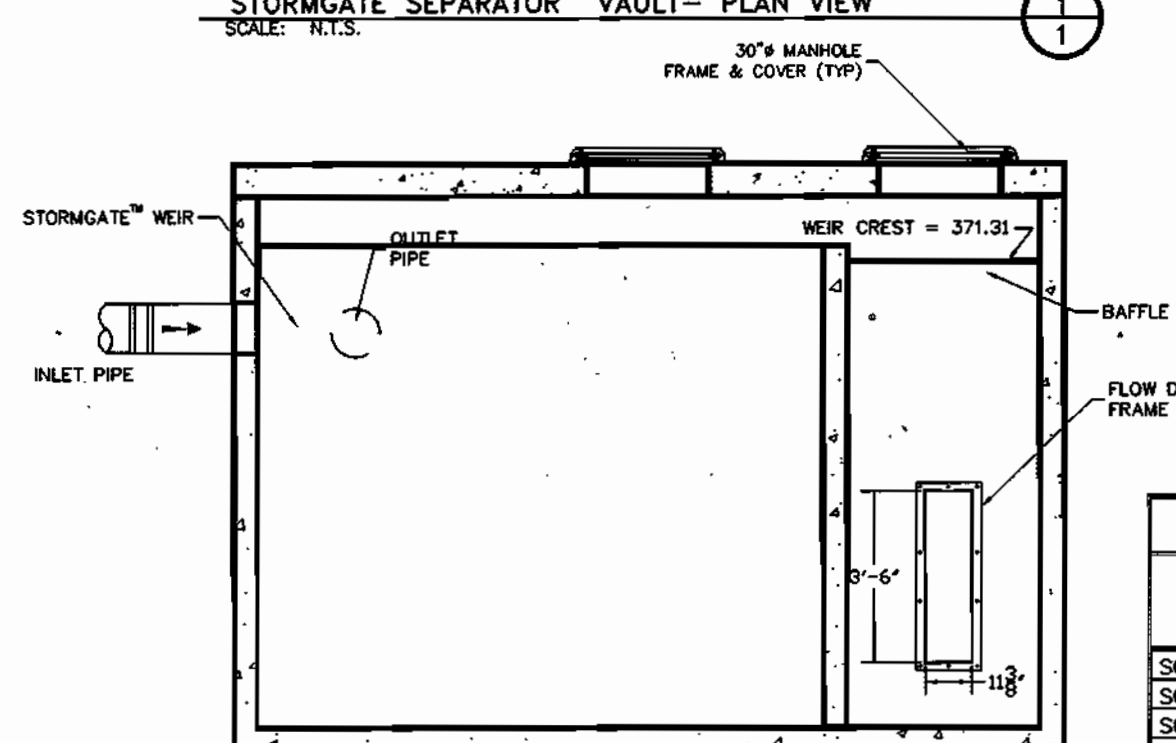




- GENERAL NOTES:**
- 1) STORMGATE SEPARATOR BY STORMWATER MANAGEMENT, INC., PORTLAND, OREGON (800-548-4667).
  - 2) ALL WATER QUALITY FACILITIES REQUIRE REGULAR MAINTENANCE. MINIMUM ANNUAL MAINTENANCE INCLUDES INSPECTION OF COMPONENTS AND REMOVAL OF SEDIMENTS. FOLLOW ALL LOCAL, STATE, & FEDERAL SAFETY GUIDELINES.
  - 3) PRECAST CONCRETE VAULT CONSTRUCTED IN ACCORDANCE WITH ASTM C856.
  - 4) EXTERNAL PIPING AND COUPLINGS PROVIDED BY OTHERS.
  - 5) FLEXIBLE COUPLINGS TO BE SET 18" OUTSIDE FACE OF WALL. PERIOD OF ENGINEER APPROVED.
  - 6) SEE PRECAST STORMGATE SEPARATOR DATA BLOCK FOR MODEL NUMBER, ORIFICE BOX CONFIGURATION AND WEIR SETTING.
  - 7) CONTRACTOR TO ADJUST WEIR TO DESIGN ELEVATION. WHEN SETTING SCREENS ON WEIR PLATE DO NOT EXCEED 5.0 FT-LBS TORQUE.
  - 8) SEAL WEIR WITH SILICONE SEALANT AFTER FINAL ADJUSTMENT.
  - 9) ORIFICE BOX AND FLOW DUCTS PROVIDED BY SSM. TO BE INSTALLED BY CONTRACTOR.
  - 10) LOCATION OF COMPONENTS TO BE RECOMMENDED BY SSM.

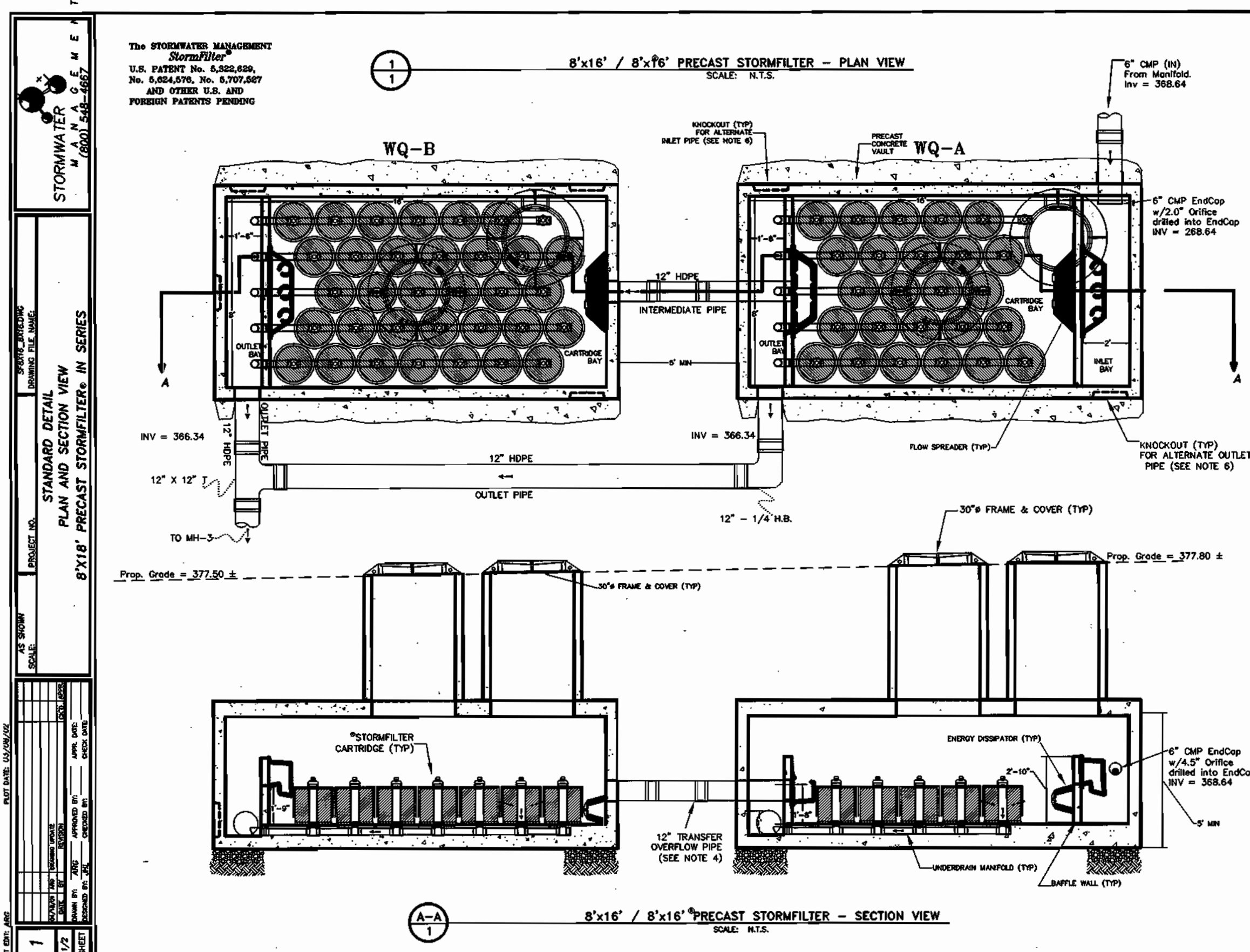
**STORMGATE SEPARATOR™ DATA**

SGS MODEL NUMBER	6700-V
WATER QUALITY FLOW RATE (CFS)	N/A
PEAK FLOW RATE (CFS)	17.1 CFS
I.E. MATERIAL DIAMETER	
INLET PIPE #1	370.98 HDPE 24-INCH
INLET PIPE #2	368.86 HDPE 18-INCH
OUTLET PIPE #1	368.64 HDPE 18-INCH
OUTLET PIPE #2	368.54 HDPE 24-INCH
ORIFICE BOX OPENINGS:	
NUMBER	3
SIZE	6-INCH
VAULT DIMENSIONS (FT X FT)	
WIDTH	8' X 18'
DEPTH	7'
WEIR ELEVATION	371.64
TOP OF BAFFLE WALL ELEVATION	N/A
TRANSFER HOLE ELEVATION	361.50
FLOOR ELEVATION	360.44
RIM #1 ELEVATION = 377.8	
RIM #2 ELEVATION = 377.9	
RIM #3 ELEVATION = 378.0	



**THE STORMGATE SEPARATOR™ TYPICAL SIZING TABLE**

MODEL NUMBER	STORAGE CAPACITY (US Gal.)	OIL CAPACITY (US Gal.)	SEDIMENT CAPACITY (US Gal.)	VAULT DIMENSIONS (FT X FT)	HT. OF ORIFICES (ft-in)	ORIFICE BOX DEPTH (ft-in)
SGS 1100-V	1045	180	180	6 X 10	4.0	3'-2"
SGS 1400-V	1353	180	180	6 X 10	5.0	3'-3"
SGS 2000-V	2013	180	180	6 X 12	5.7	4'-2"
SGS 2800-V	2745	360	360	6 X 12	7.7	5'-2"
SGS 3300-V	3232	360	360	8 X 16	4.5	5'-2"
SGS 4200-V	4125	360	360	8 X 16	5.8	5'-3"
SGS 5500-V	5522	597	597	8 X 16	7.7	5'-3"
SGS 6700-V	6705	628	628	8 X 18	9.1	6'-3"
SGS 8200-V	8157	838	838	8 X 18	9.8	6'-3"

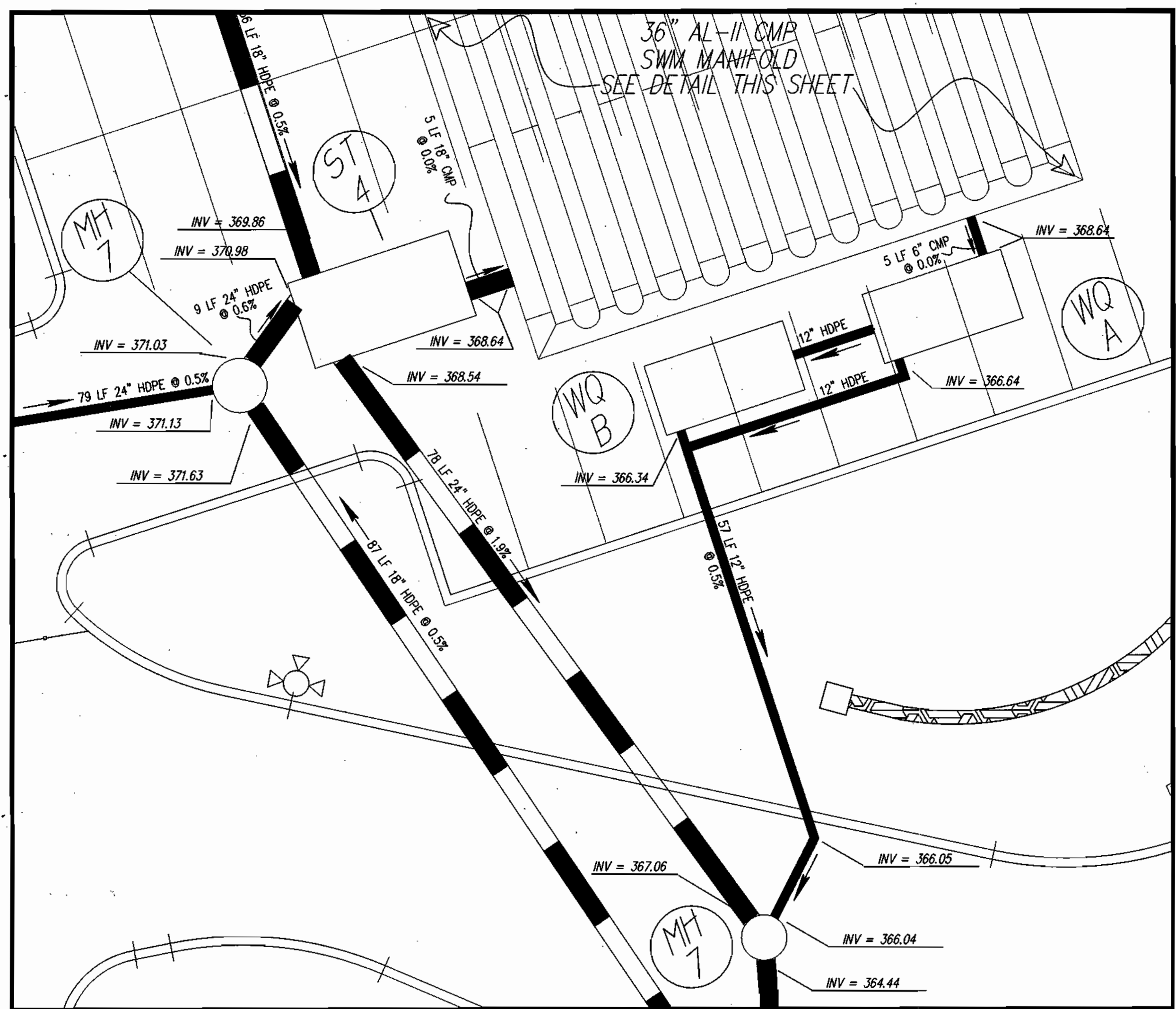


**UPSTREAM STORMFILTER™ DATA**

DESIGN WATER QUALITY FLOW (cfs)	0.96
PEAK FLOW (cfs)	N/A
RETURN PERIOD OF PEAK FLOW (yrs)	N/A
# OF CARTRIDGES REQUIRED	25
MEDIA TYPE: XFCSF	
(In-Out)=2.3" Min. I.E. MATERIAL DIAMETER	
INLET PIPE #1	368.64 HDPE 6-inch
INLET PIPE #2	367.06 HDPE 12-inch
OUTLET PIPE #1	368.34 HDPE 12-inch
OUTLET PIPE #2	368.34 HDPE 12-inch
ANTI-FLOATATION BALLAST (USE N/A IF NOT REQUIRED)	
WIDTH	N/A
HEIGHT	N/A

**DOWNSTREAM STORMFILTER™ DATA**

DESIGN WATER QUALITY FLOW (cfs)	0.96
PEAK FLOW (cfs)	N/A
RETURN PERIOD OF PEAK FLOW (yrs)	N/A
# OF CARTRIDGES REQUIRED	33
MEDIA TYPE: XFCSF	
(In-Out)=2.3" Min. I.E. MATERIAL DIAMETER	
INLET PIPE #1	367.06 HDPE 12-inch
INLET PIPE #2	N/A N/A N/A
OUTLET PIPE	368.34 HDPE 12-inch
ANTI-FLOATATION BALLAST (USE N/A IF NOT REQUIRED)	
WIDTH	N/A
HEIGHT	N/A



- GENERAL NOTES:**
- 1) STORMFILTER BY STORMWATER MANAGEMENT, PORTLAND, OREGON (800-548-4667).
  - 2) ALL STORMFILTERS REQUIRE REGULAR MAINTENANCE. REFER TO OPERATIONS AND MAINTENANCE GUIDELINES FOR DETAILS.
  - 3) PRECAST CONCRETE VAULT TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM C856. INLET AND OUTLET PIPING TO BE SPECIFIED BY ENGINEER AND PROVIDED BY CONTRACTOR.
  - 4) ANTI-FLOATATION 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.
  - 5) PRECAST STORMFILTER EQUIPPED WITH KNOCKOUTS AT ALT. INLET/OUTLET LOCATIONS. CORINGS AVAILABLE WHEN SPECIFIED.
  - 6) DETAIL REFLECTS DESIGN INTENT ONLY. ACTUAL VAULT DIMENSIONS AND CONFIGURATION WILL BE SHOWN ON THE PRODUCTION SHOP DRAWING.

**APPROVED**  
PLANNING BOARD  
OF HOWARD COUNTY

DATE: 05/01/03

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT

*Barbara M. ...* 10/7/03  
County Health Officer

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

*David ...* 10/14/03  
Director

*Chris ...* 10/14/03  
Chief, Division of Land Development

*Chad ...* 10/16/03  
Chief, Development Engineering Division

**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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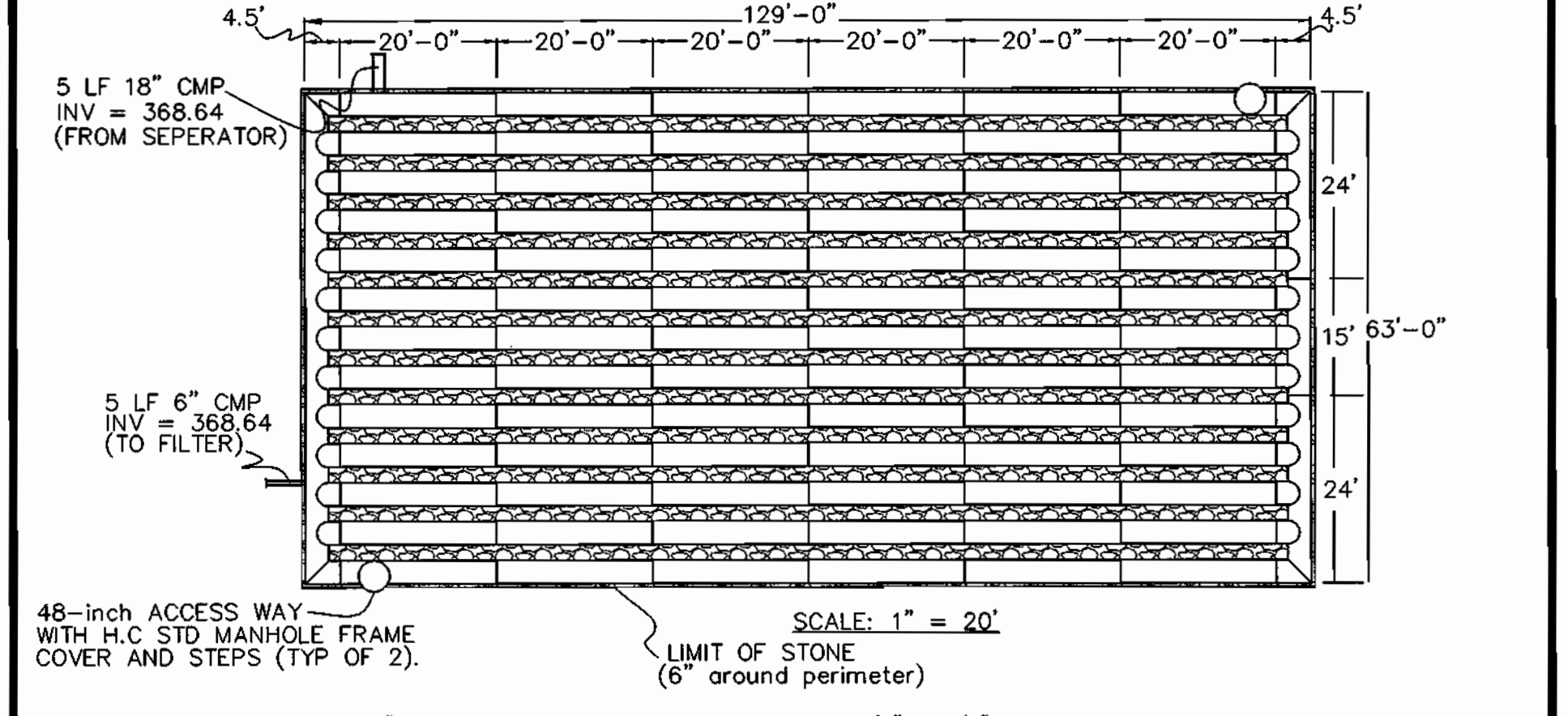
NO.	DATE	REVISION	BY	APPR.

PREPARED FOR:  
& OWNER PARCEL A:  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o RIM DEVELOPMENT GROUP, INC.  
1650 TYSONS BOULEVARD, SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT OLKSTEAD  
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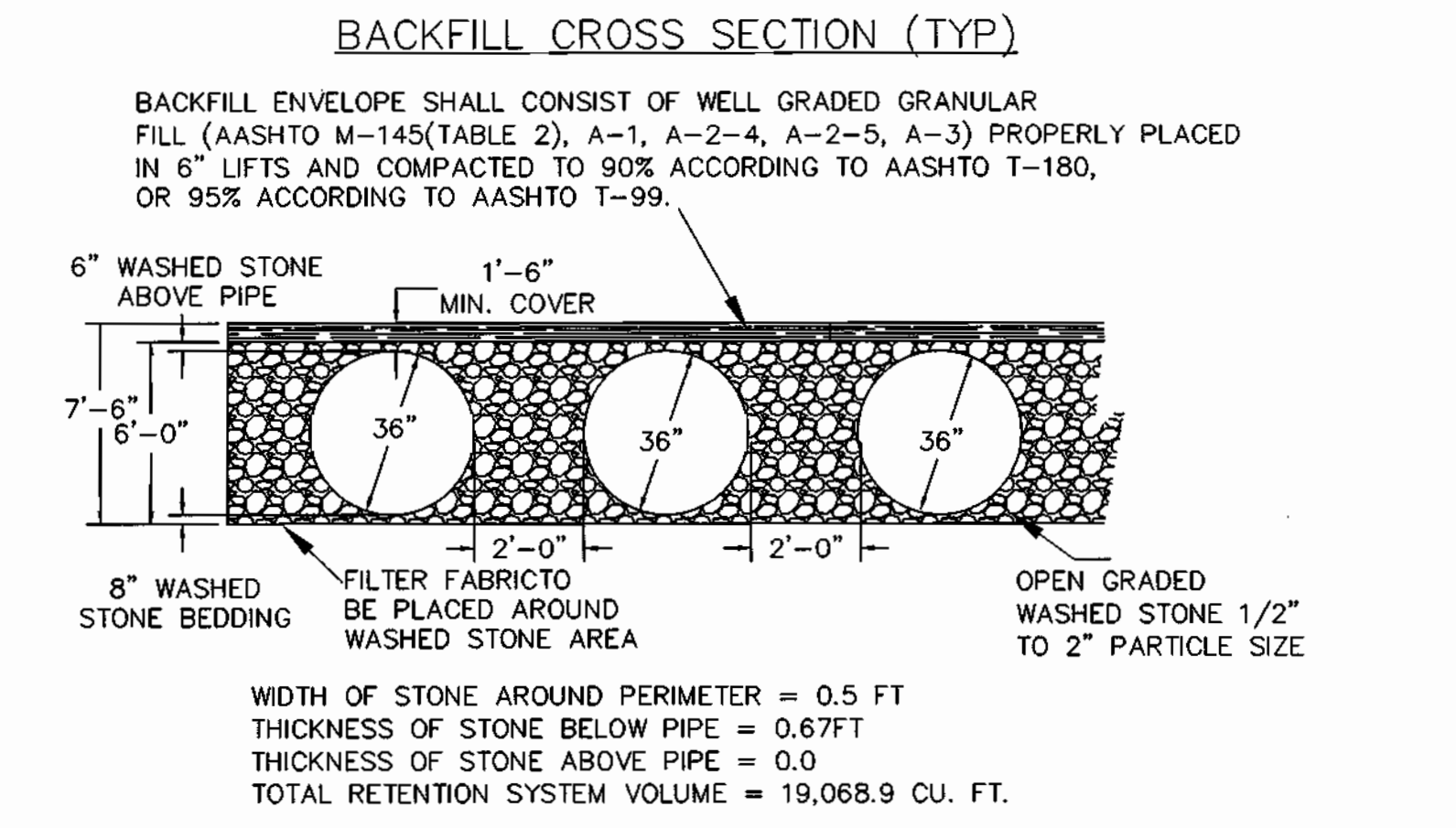
ELECTION DISTRICT No. 5

**STORMWATER MANAGEMENT DETAILS**  
**COLUMBIA TOWN CENTER**  
SECTION 2 AREA 8, PARCEL A  
SECTION 2 AREA 1, LOTS 39 & 41  
PLAT No. 102202

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	30-1&19	15 OF 20



- NOTES:**
1. PIPE IS 36" ALUMINIZED TYPE 2 STEEL, 16 GAGE 2-2/3" X 1/2" CORRUGATIONS AND PERFORATED.
  2. ALL REINFORCING IN COMPLIANCE WITH ASTM A998.
  3. ALL PIPE DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
  4. ALL RISER AND STUB ELEVATIONS, DIMENSIONS, LOCATIONS AND ANGLES TO BE VERIFIED BY PROJECT ENGINEER.



NOTE: WHERE LAYERS OF FILL THAT VARY IN GRADATION ARE ADJACENT TO EACH OTHER, A FILTER FABRIC BARRIER SHOULD BE USED TO PREVENT MIGRATION OF FINES. (I.E. WHERE A FINER GRAINED SELECT FILL IS PLACED ON TOP OF, OR BELOW, AN OPEN-GRADED STONE FILL.)

**CONSTRUCTION LOAD GUIDELINES**

TEMPORARY COVER FOR CONSTRUCTION LOADS

HEIGHT OF COVER

CONSTRUCTION LOADS:

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

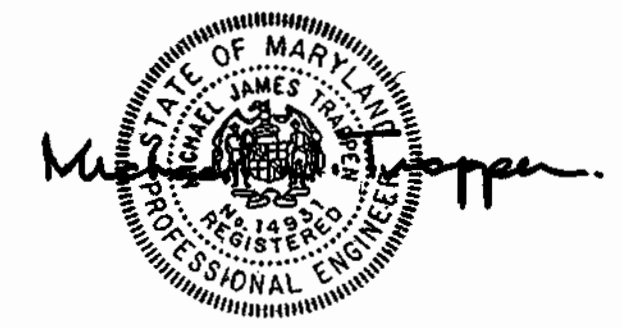
**MINIMUM HEIGHT OF COVER REQUIREMENTS**

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

\* MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

**36" UNDERGROUND STORMWATER MANIFOLD DETAILS**  
NTS

OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
410-992-6284

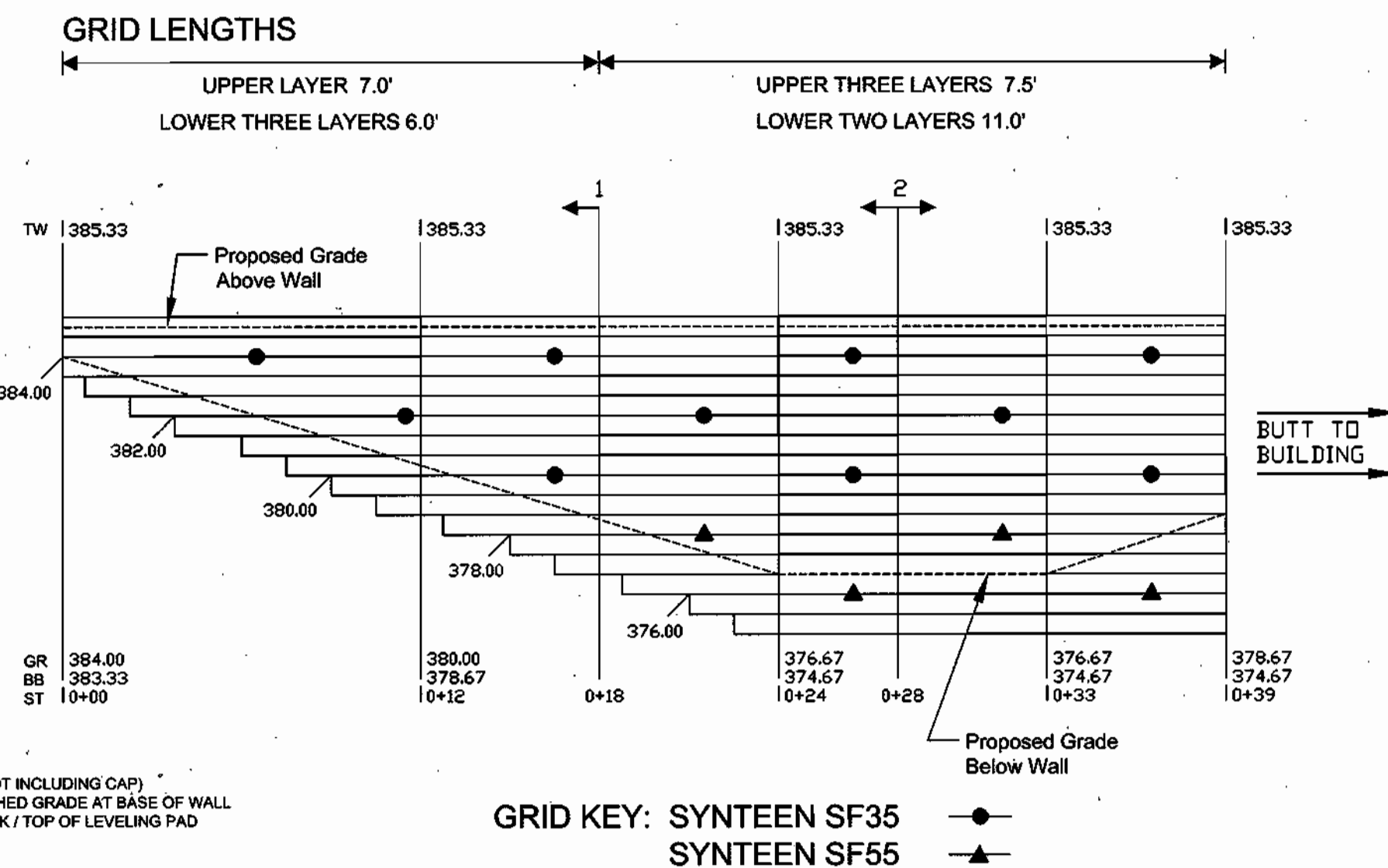




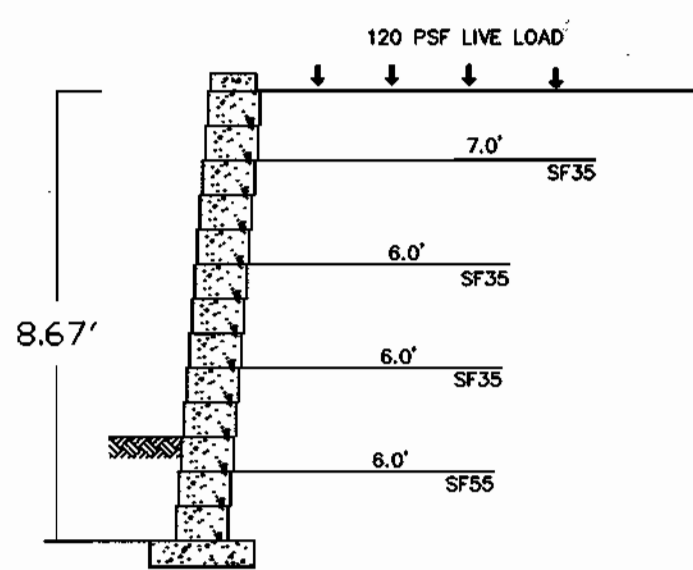
**GENERAL NOTES**

- SOIL PARAMETERS:** Based on the "Preliminary Subsurface Exploration and Geotechnical Engineering Analyses" dated 07/19/2002 prepared by ECS (Hanover, MD office), an internal angle of friction of 28° was used for the foundation soils (under the walls' gravel leveling pads) and retained soils (behind the walls' reinforced geogrid zones) in these designs. Even though the soils are primarily classified as sand and decomposed rock, this is for a worst case ML (silt) soil type since the borings indicate some silt is present on the site. This was done as a conservative measure in the event silt is encountered under the walls or behind the walls. An internal angle of friction of 30° was used for the infill soils (within the walls' reinforced geogrid zones). The soils used to backfill the walls must be the more granular SM (silty sand), SP (sand) and W (decomposed rock). CH (fat clay), CL (lean clay), MH (elastic silt) and OH/OJ/PT (organic) soils are not acceptable for wall construction. If these unsuitable soils are encountered in the foundation or retained zones they shall be removed and replaced with soils that meet or exceed the design friction angle of 28°. The site geotechnical engineer shall monitor this closely during the construction process. No cohesion was used any of the calculations. NOTE: A 30° internal angle of friction was used for all soils (foundation, infill and retained) for the global stability analysis on Wall #1-A (see item 10 below).
- BEARING CAPACITY:** The sub-grades must be tested prior to installation of the gravel leveling pads and have net allowable bearing capacities of 2,500 PSF. The sub-grades must be virgin (natural undisturbed soil) or fill compacted to 95% of a standard proctor maximum dry density. The actual highest bearing pressures exerted by these walls (including any slopes and surcharges above) are Wall #1-A: 1,626 PSF and Wall #1-B: 2,228 PSF. Any areas of the sub-grades that test below these maximum pressures will require undercutting or enlarged grid reinforced leveling pads.
- CONSTRUCTION OVERSIGHT:** The foundation soils must be examined by the site geotechnical engineer to assure that the actual foundation soil strength meets or exceeds that required in the "Bearing Capacity" section (item number 2 above). The construction of these walls must be performed under the observation of a Maryland Registered Professional Engineer to ensure that they are built in accordance with the Ryan & Associates (RA) specifications.
- SPECIFICATIONS:** Construction and materials must conform to the attached "Ryan & Associates segmental retaining wall specifications and installation guidelines for Keystone".
- EMBEDMENT: Wall #1-A:** 1 block increasing to 2 blocks from station 0+00 to 0+12, 2 blocks increasing to 3 blocks from 0+12 to 0+24, 3 blocks from 0+24 to 0+33 and 3 blocks increasing to 6 blocks from 0+33 to 0+39. **Wall #1-B:** 2 blocks from station 0+00 to 0+30, 2 blocks increasing to 3 blocks from 0+30 to 0+65, 3 blocks decreasing to 2 blocks from 0+65 to 0+78, 2 blocks increasing to 3 blocks from 0+78 to 0+90, 3 blocks from 0+90 to 0+99, 3 blocks decreasing to 2 blocks from 0+99 to 1+29 and 2 blocks increasing to 4 blocks from 1+29 to 1+36.5.
- SLOPES & SURCHARGES:** A 120 PSF live load surcharge was applied to both walls for pedestrian and sidewalk loads. There are no proposed slopes above these walls.
- WALL PROFILES:** The elevation drawings were done to represent the grade changes necessary on the civil drawings and were done in even block course increments of .667' (8"). Minor field changes may be necessary by the wall installer. Lineal footage may be added or subtracted as needed if the walls' heights are equal to or less than the design heights. If the walls need to be raised in height, RA shall be notified and a new structural cross section(s) must be provided before the wall installer proceeds. NOTE: the cap height of .333' (4") is not shown on the profile drawings, however its height may have been used in some cases to achieve the desired TW elevation.
- FACTORS OF SAFETY:** The following factors of safety have been met in these designs: Sliding 1.5, Overturning 2.0, Bearing Capacity 2.0, Grid Overstress 1.5, Grid Pullout 1.5 (from the soil and from the block) and Global Stability 1.3.
- BLOCK SYSTEM:** These designs are valid only for the Keystone Compac II system. Each segmental wall system has unique dimensions, connection devices and interacts differently with geogrids; therefore substitutions of other block types are not permitted.
- GLOBAL STABILITY:** Global stability analyses were performed for both walls since they rest on front slopes. For Wall #1-B the same parameters were used for the global analysis as the internal and external calculations (28° foundation & retained and 30° infill). For Wall #1-A a 30° friction angle was used for all soils (should be accurate since the site soils are predominantly sand and decomposed rock). This was necessary to keep the geogrid lengths reasonable. A 28° friction angle for foundation and retained soils with zero cohesion for Wall #1-A would dictate very long geogrids. Therefore the site geotechnical engineer must verify that the front slope at Wall #1-A meets or exceeds 30° (must be classified as a gravel or sand). RA must be notified if the front slope at Wall #1-A is not ≥ 30°. Factors of safety of 1.3 were met for the global analyses and copies of the G-Slope output are included behind the walls' cross sections.
- YARD DRAIN INTERSECTING WALL #1-A:** A PVC pipe from a yard drain intersects Wall #1-A at approximate station 0+05. The wall or wall leveling pad may not bear on plastic or steel pipes (such as ADS, CMP, HDPE, PVC, SILCPP, etc.) at all (such as electric, gas, telephone or water lines). This pipe must be bridged by a grade beam (if under or within the leveling pad) or a lintel (if within the wall) if it is less than 42" below the bottom of the block. This grade beam or lintel shall be cast in place in the field and constructed of 3,000 PSI concrete with minimum dimensions of 1' wide X 4' long (maximum free span of 4.5') X 8" (on block course) high. Three #5 grade 60 bars shall be placed 5" down from the top (5" up from the bottom). The two outer bars shall be 3" in from the sides and the middle bar evenly spaced in between. A grade beam shall bear a minimum of 12" on 95% compacted gravel or soil and a lintel shall bear a minimum of 9" (half a block width) on the blocks on either side. As an alternate the installer may opt to use precast concrete block lintels. Three 4" X 8" X 4' block lintels (manufactured by York Lintel & Cast Stone or equivalent with an allowable load of 1,150 lbs./lineal ft.) may be placed side by side to accommodate the load.
- WALL BATTER:** The 0.5° near vertical batter (front pin position: 1/16" setback per block course) was used for these walls. NOTE: during wall stake out the civil engineer/surveyor and wall installer should predetermine the amount of wall batter and move the walls forward as necessary if there are critical dimensions above the walls that must be met.
- 8 1/2" X 11" SUBMITTAL:** A separate 8 1/2" X 11" package has also been submitted and includes the additional information: individual cross sections with calculations, a partial copy of the civil plan with wall numbering and stationing and copies of the global stability analyses.
- GEOGGRIDS:** Synteen SF35 and SF55 geogrids, which have LTDs (Long Term Design Strengths) of 1,371 and 2,303 respectively, were used in these designs. All geogrid substitutions must have prior approval of RA.
- SPECIAL HOWARD COUNTY RETAINING WALL SPECIFICATIONS:**
  - Retaining walls shall only be constructed under the observation of a Registered Professional Engineer and a (NICET, WACEL, or equivalent) certified soils technician.
  - The required bearing pressure beneath the footing of the wall shall be verified in the field by a certified soils technician. Testing documentation shall be provided to the Howard County Inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer Test ASTM STP-399.
  - The suitability of the fill material shall be confirmed by the on-site soils technician. Each eight inch lift must be compacted to 95% Standard Proctor Density and the testing report shall be made available to the Howard County Inspector upon completion of the construction.
  - For walls over ten feet in height, one soil boring is required every 100 feet along the length of the wall, copies of the boring reports shall be provided to the Howard County Inspector prior to the start of construction.

**WALL #1-A**  
Scale: Horizontal: 1" = 5' Vertical: 1" = 5'



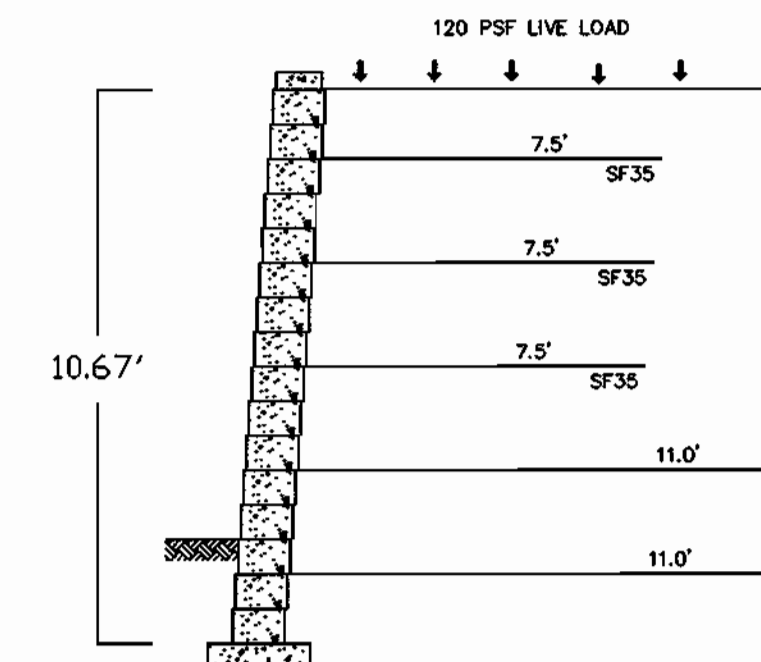
**WALL #1-A SECTION 1**



**FACTORS OF SAFETY**

SLIDING	MINIMUM 1.5	ACTUAL 1.78
OVERTURNING	MINIMUM 2.0	ACTUAL 3.13
BEARING CAPACITY	MINIMUM 2.0	ACTUAL 5.02
Maximum Bearing Pressure	1596 psf	

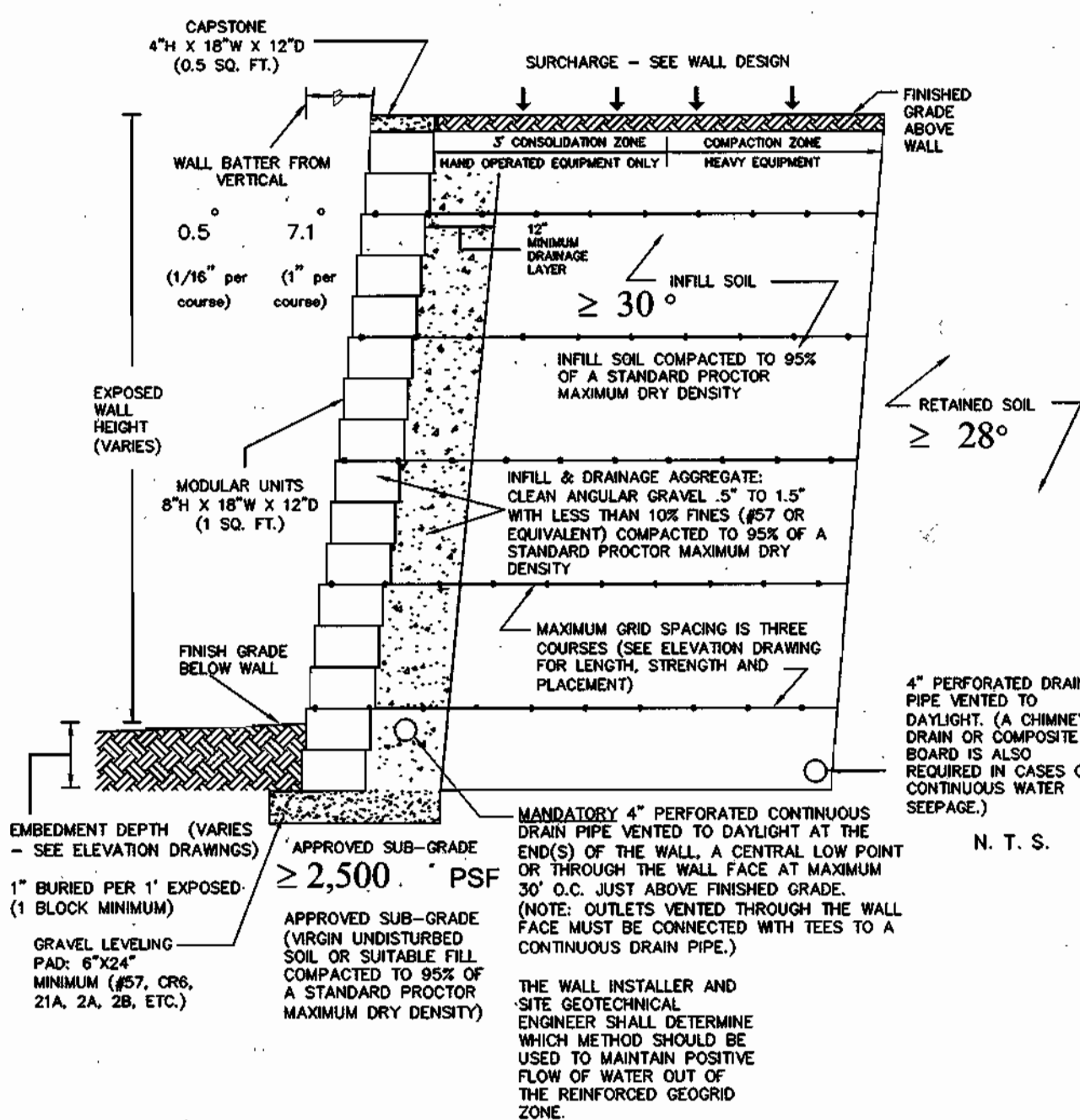
**WALL #1-A SECTION 2**



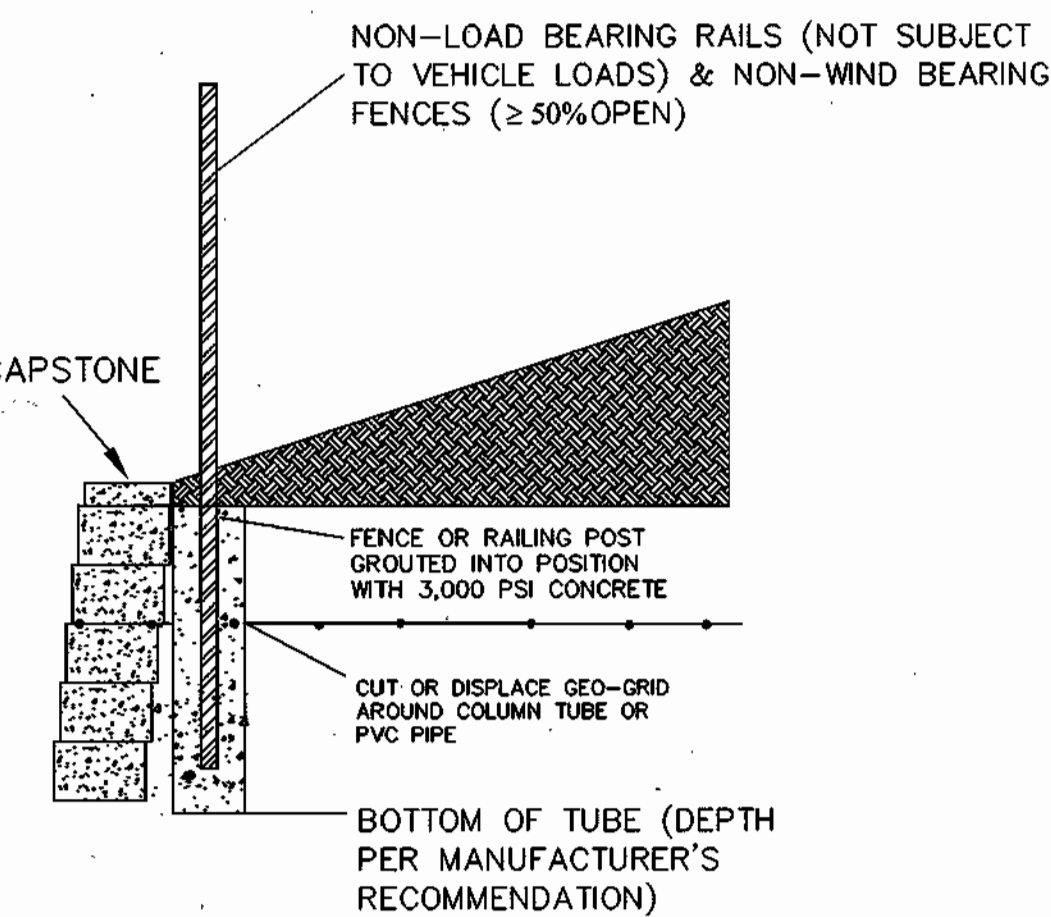
**FACTORS OF SAFETY**

SLIDING	MINIMUM 1.5	ACTUAL 2.65
OVERTURNING	MINIMUM 2.0	ACTUAL 7.29
BEARING CAPACITY	MINIMUM 2.0	ACTUAL 6.60
Maximum Bearing Pressure	1626 psf	

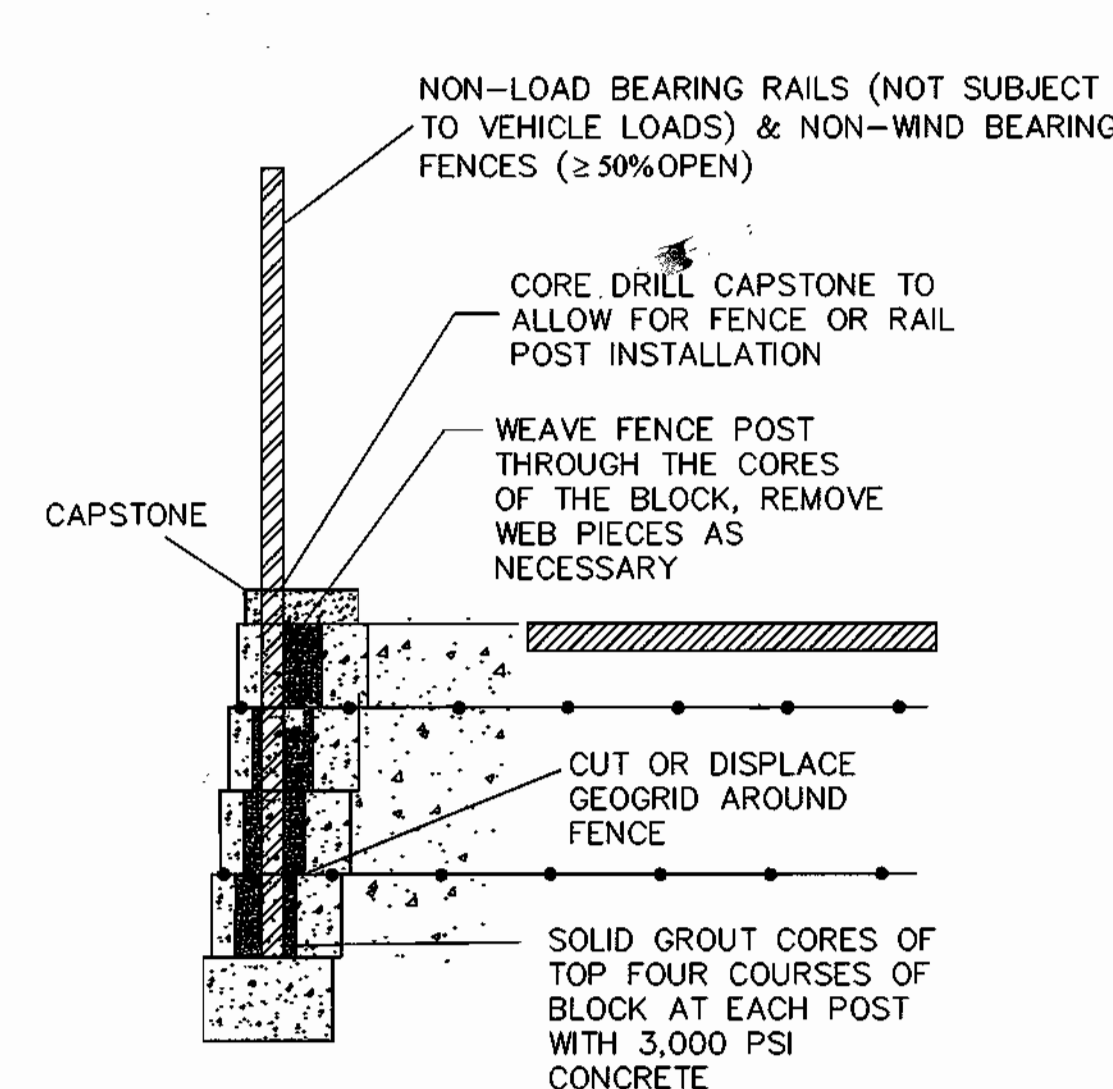
**KEYSTONE COMPAC II**



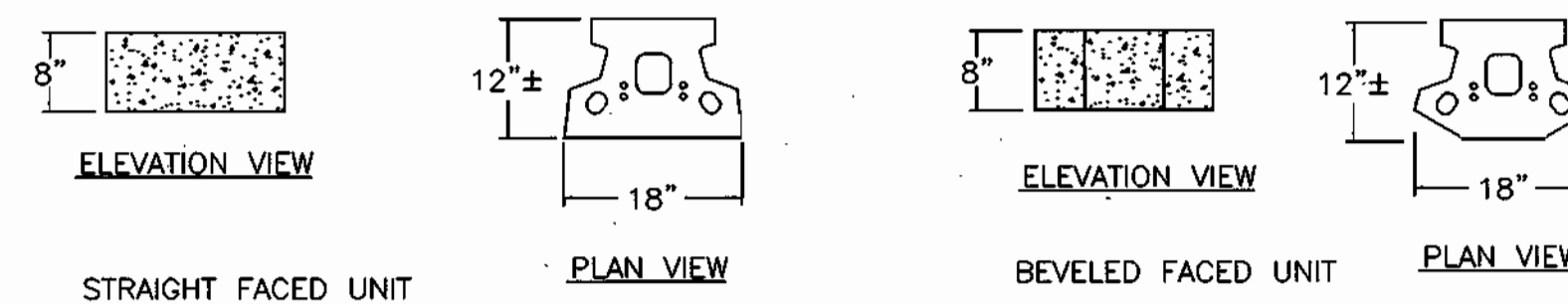
**NON-LOAD BEARING & NON-WIND BEARING FENCE AND RAILING DETAIL (INSTALLED BEHIND WALL)**



**NON-LOAD BEARING & NON-WIND BEARING FENCE AND RAILING DETAIL (INSTALLED IN WALL)**



**KEYSTONE COMPAC DIMENSIONS**

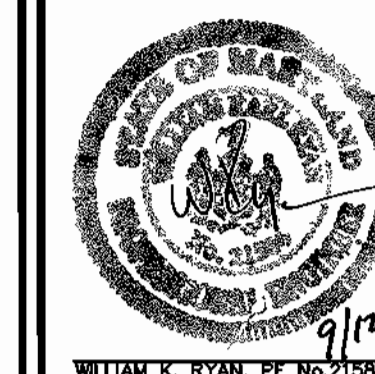


OWNER PARCEL AT:  
RMJ DEVELOPMENT GROUP, LLC  
1650 TYSIDNS BOULEVARD  
SUITE 650  
MCLEAN, VIRGINIA 22102  
ATTN: JOHN D. RHOD, JR.  
(703)965-9557

NO.	REVISION	DATE

KEYSTONE RETAINING WALL DESIGNS  
COLUMBIA TOWN CENTER  
SECTION 2 AREA 8, PARCEL A  
SECTION 2 AREA 1, LOTS 39 & 41  
PLAT No. 102204120000120000  
HOWARD COUNTY, MARYLAND

RYAN AND ASSOCIATES  
68 W. KING STREET  
SHIPPENSBURG, PENNSYLVANIA 17257-0006  
PHONE: (717) 477-8400  
FAX: (717) 477-8410



DESIGN BY: DKS  
DRAWN BY: MMH  
CHECKED BY: DKS  
DATE: MAY, 2003  
SCALE: AS SHOWN  
W.D. NO.:

APPROVED PLANNING BOARD OF HOWARD COUNTY  
DATE: 05/01/03

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
HOWARD COUNTY HEALTH DEPARTMENT  
Penny Lorenstein, M.D., J.D.  
County Health Officer      10/7/03  
Date

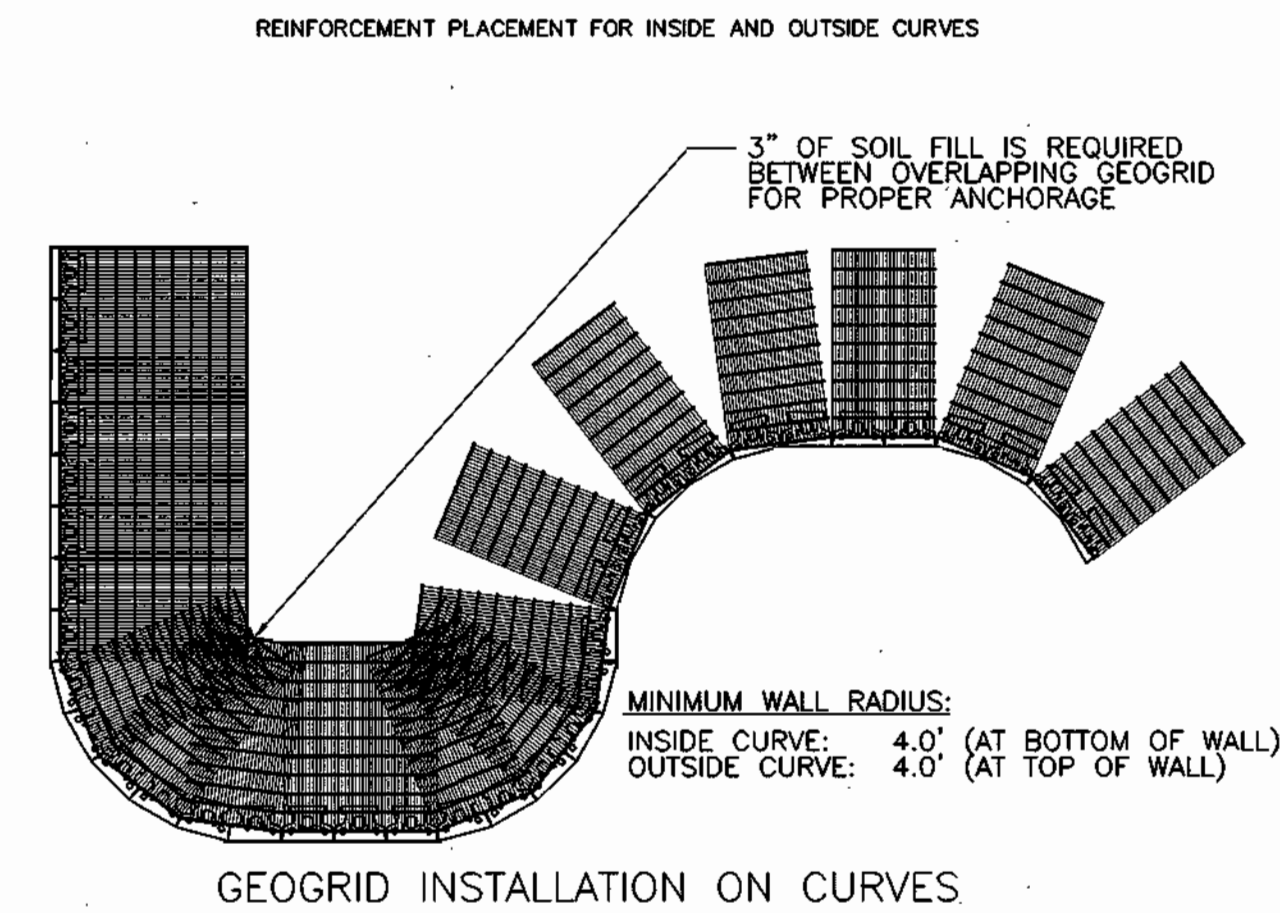
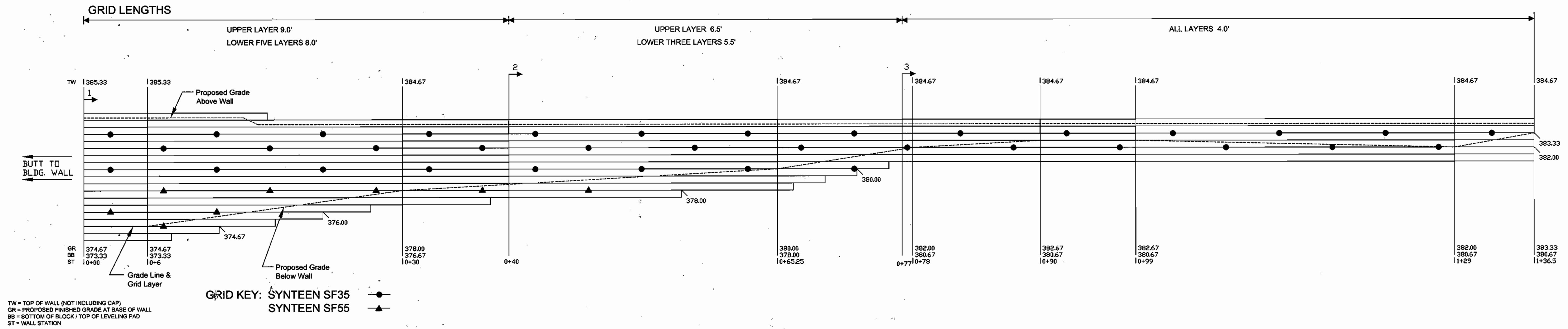
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
Hank A. Layer  
Director      10/14/03  
Date

Clady Hemetta  
Chief, Division of Land Development      10/14/03  
Date

Chief, Development Engineering Division MK      10/16/03  
Date



WALL #1-B  
 Scale: Horizontal: 1" = 5' Vertical: 1" = 5'



WALL	TOTAL (1.0 S.F.)		(0.5 S.F.)		CNRS.	PINS	SQ YDS	SQ YDS	CU. YDS.		FT.	FT.
	SQ.FT.	BLOCK	CAPS**	SF35			SF55	DRAIN	PAD	DRAIN	WALL	
1-A	339	325	28	0	598	120	60	20	3	41	39	
1-B	948	900	96	0	1,617	270	90	56	11	144	137	
<b>Totals</b>	<b>1,287</b>	<b>1,225</b>	<b>124</b>	<b>0</b>	<b>2,215</b>	<b>390</b>	<b>150</b>	<b>76</b>	<b>14</b>	<b>185</b>	<b>176</b>	

\* Ryan & Associates is not responsible for extras or shortages based on this take-off. It is the contractor's responsibility to verify the accuracy of this design by reviewing the site/grading plan for this project. Totals include 3% extra for block and caps, 15% for grid and 5% for gravel.

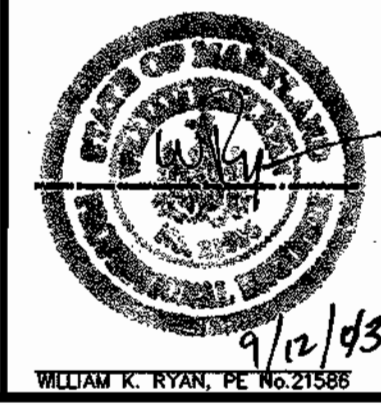
\*\* Includes one extra cap per step down on top of the wall for double capping.

APPROVED  
 PLANNING BOARD  
 of HOWARD COUNTY  
 DATE 05/01/03

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS,  
 HOWARD COUNTY HEALTH DEPARTMENT  
 County Health Officer *Penny Borenstein M.D.* 10/7/03  
 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING  
 Director *Mark DeLuigi* 10/14/03  
 Date  
 Chief, Division Land Development *Andy Hamilton* 10/14/03  
 Date  
 Chief, Development Engineering Division *Mike* 10/16/03  
 Date

OWNER PARCEL A:  
 RMJ DEVELOPMENT GROUP, LLC  
 1650 TYSONS BOULEVARD  
 SUITE 650  
 MCLEAN, VIRGINIA 22102  
 ATTN: JOHN B. RHEAD, JR.  
 (703) 905-9557



DESIGN BY: DKS  
 DRAWN BY: MMH  
 CHECKED BY: DKS  
 DATE: MAY, 2003  
 SCALE: AS SHOWN  
 W.O. NO.: 9/12/03

17 SHEET OF 20

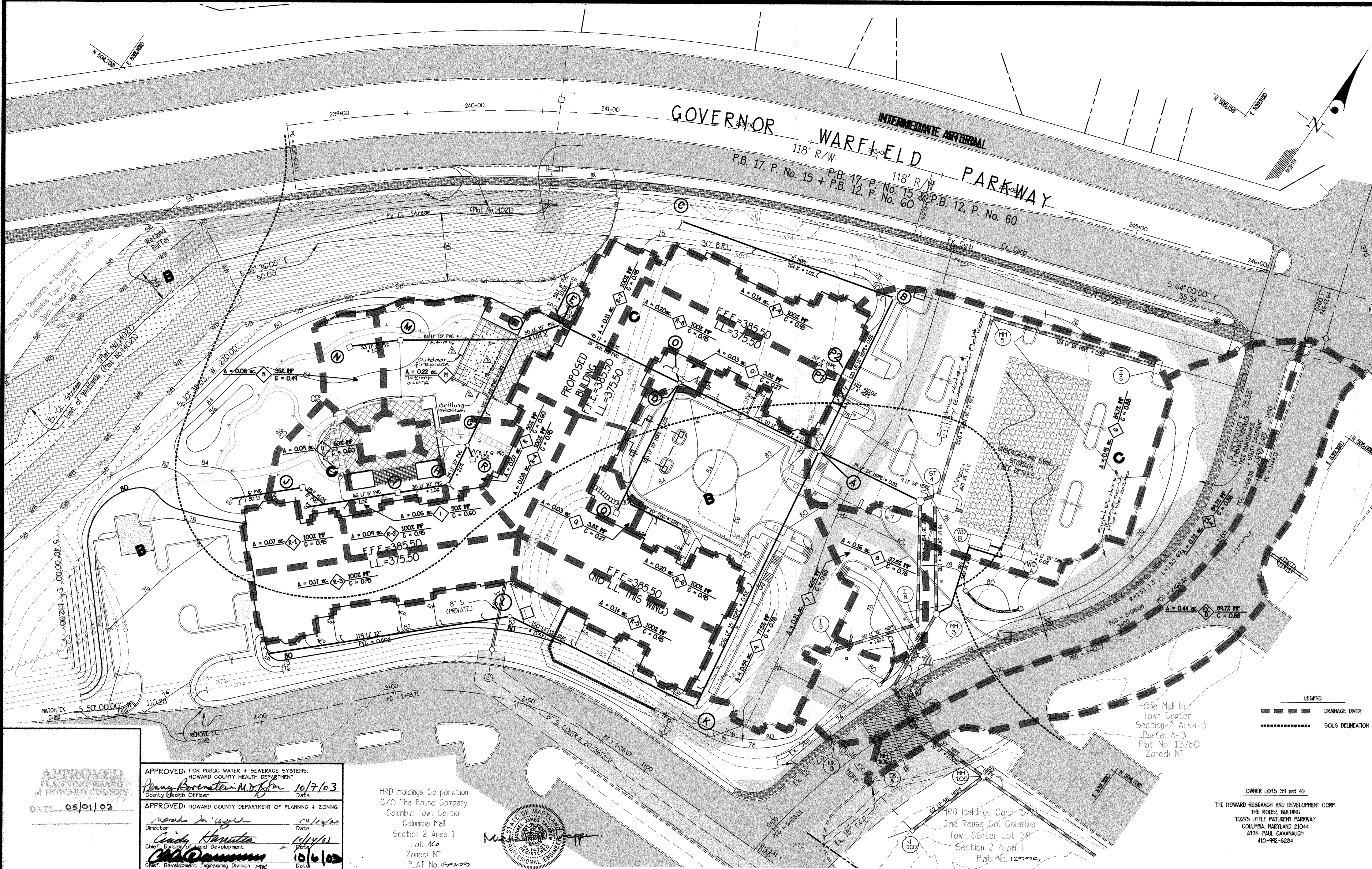
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SDP-03-080









**APPROVED**  
PLANNING BOARD  
OF HOWARD COUNTY

DATE 05/01/03

APPROVED FOR PUBLIC WATER + SEWERAGE SYSTEMS.  
HOWARD COUNTY HEALTH DEPARTMENT  
*Pring Borenstein M.D.* 10/7/03  
County Health Officer Date

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING + ZONING  
*David J. ...* 10/14/02  
Director Date

*Cindy ...* 11/14/02  
Chief, Division of Land Development Date

*Chad ...* 10/16/03  
Chief, Development Engineering Division Date

HRD Holdings Corporation  
C/O The Rouse Company  
Columbia Town Center  
Columbia Mall  
Section 2 Area 1  
Lot 40  
Zoned: NT  
PLAT No. 15009



**LEGEND**  
--- DRAINAGE DIVIDE  
..... SOLS DELINEATION

One Mail Inc.  
Town Center  
Section 2 Area 3  
Parcel A-3  
Plat No. 13780  
Zoned: NT

OWNER LOTS 39 and 41:  
THE HOWARD RESEARCH AND DEVELOPMENT CORP.  
THE ROUSE BUILDING  
10275 LITTLE PATUXENT PARKWAY  
COLUMBIA, MARYLAND 21044  
ATTN: PAUL CAVANAUGH  
410-992-6284

**GLWGUTSCHICK LITTLE & WEBER, P.A.**  
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS  
3609 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

DATE	REVISION	BY	APPR.
10/16/03	Add outdoor fireplace, Grilling area & Pergola	JL	MAJ

PREPARED FOR:  
OWNER PARCEL A  
EVERGREENS AT COLUMBIA TOWN CENTER, LLC  
c/o RMJ DEVELOPMENT GROUP, INC.  
1650 TYSONS BOULEVARD, SUITE 620  
MCLEAN, VIRGINIA 22102  
ATTN: SCOTT OLKSTEAD  
TELE: (703) 905-9557

**STORM DRAIN DRAINAGE AREA MAP AND S.D. MANIFOLD PLAN**  
**COLUMBIA TOWN CENTER**  
**SECTION 2 AREA 1, LOTS 39 & 41**  
PLAT No. 15009

ELECTION DISTRICT No. 6

SCALE	ZONING	G. L. W. FILE No.
1"=30'	NT	02033
DATE	TAX MAP - GRID	SHEET
Sept., 2003	36&30-1&19	19 OF 20

SDP-03-80



