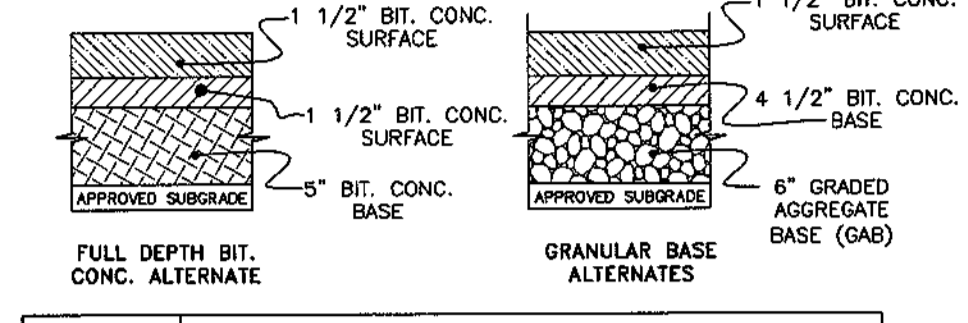


CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

PAVING NOTES

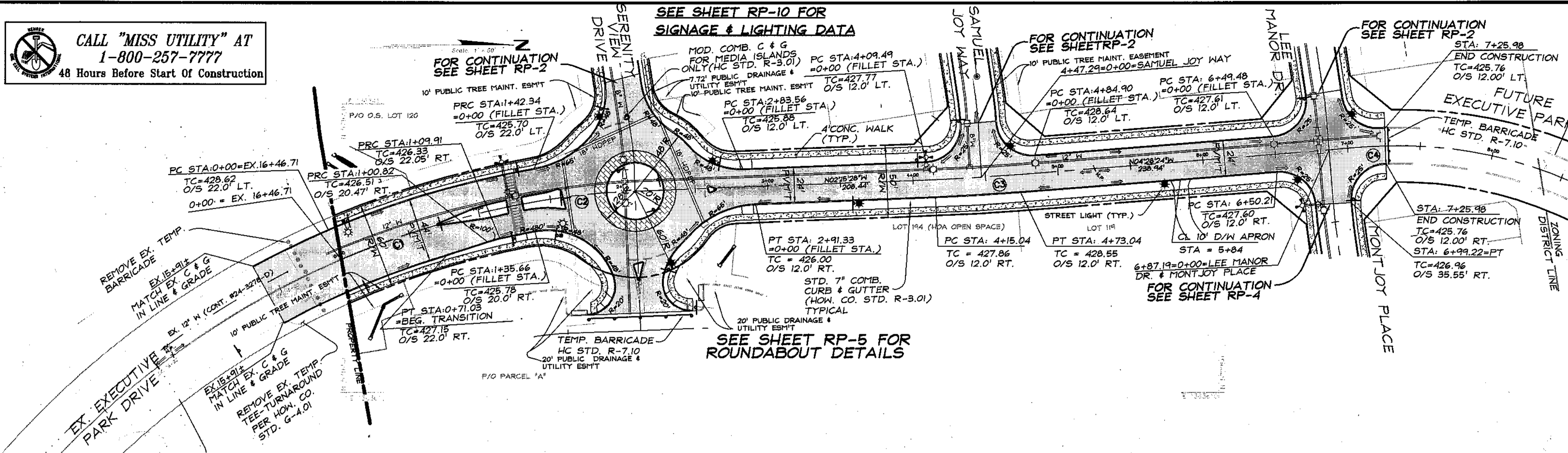
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND SPECIFICATIONS OF HOWARD COUNTY PLUS SHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- ALL CONNECTIONS AT EXISTING IMPROVEMENTS SHALL BE WITH A CLEAN VERTICAL JOINT. SEE HOWARD COUNTY STANDARD DETAIL G4.01.
- ALL SPOT GRADES SHOWN ARE FLOW LINE ELEVATIONS (FL) UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 48 HOURS IN ADVANCE OF ANY EXCAVATION.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT PUBLIC WORK/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- CURBS, GUTTERS, SIDEWALKS, AND ALL PAVING SHALL BE INSTALLED IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE OF ALL AREAS SO THERE IS NO ACCUMULATION OF SURFACE WATER.
- WHERE PROPOSED CURB MEETS EX. CURB, THE CONTRACTOR SHALL MATCH EX. CURB & GUTTER IN LINE AND ON GRADE OR AS DIRECTED BY THE INSPECTOR.
- FOR SIDEWALK HANDICAP RAMP DETAIL & CONSTRUCTION SPECIFICATIONS, SEE HOWARD COUNTY STANDARD DETAIL R-4.02.
- ALL CURB AND GUTTERS SHOWN ON THE PLANS ARE HOWARD COUNTY STANDARDS AND DETAILS.
- ALL ROADWAY SUBGRADE SHALL MEET HOWARD COUNTY STANDARD AND SPECIFICATIONS.
- ALL DRIVEWAY APRON SHALL BE CONSTRUCTED PER HOWARD COUNTY STANDARD DETAIL R-6.01.
- ALL CURB FILLET RADIUS SHALL BE 25' UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL PROVIDE SPILL GUTTER ON CURB FILLETS AS NEEDED TO CONVEY WATER ACROSS INTERSECTIONS.
- GRADE ALL DISTURBED AREAS TO PROVIDE POSITIVE DRAINAGE.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN, OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORK AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.



SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-3	RESIDENTIAL ZONES MINOR AND MAJOR COLLECTORS COMMERCIAL-INDUSTRIAL ZONES LOCAL AND CUL-DE-SAC STREETS ALLEYS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEVY TRUCKS PER DAY*

* TRAVELWAYS ARE DEFINED AS THE ROADWAYS LEADING TO THE PARKING BAYS AND HEAVY TRUCK DEFINED AS THOSE WITH 6 WHEEL OR MORE, INCLUDING GARBAGE TRUCKS.

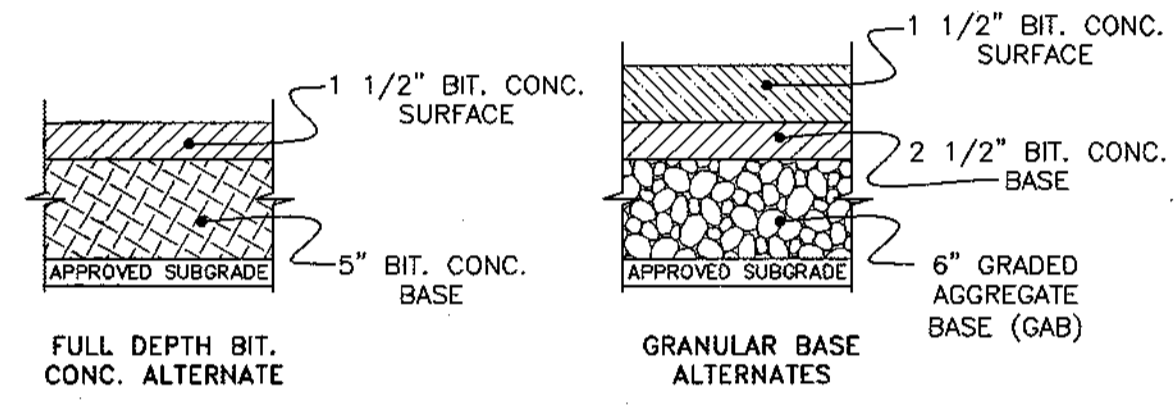
EXECUTIVE PARK DRIVE - FROM STA. 0+00 TO STA. 2+83.56, INCLUDING THE ROUNDABOUT



EXECUTIVE PARK DRIVE
PUBLIC LOCAL ROAD - SPEED LIMIT = 30 MHP (60' R/W FROM STA. 0+00 TO 2+08.62) AND
PUBLIC ACCESS STREET - SPEED LIMIT = 30 MPH (50' R/W FROM STA. 2+81.99 TO 7+25.98)

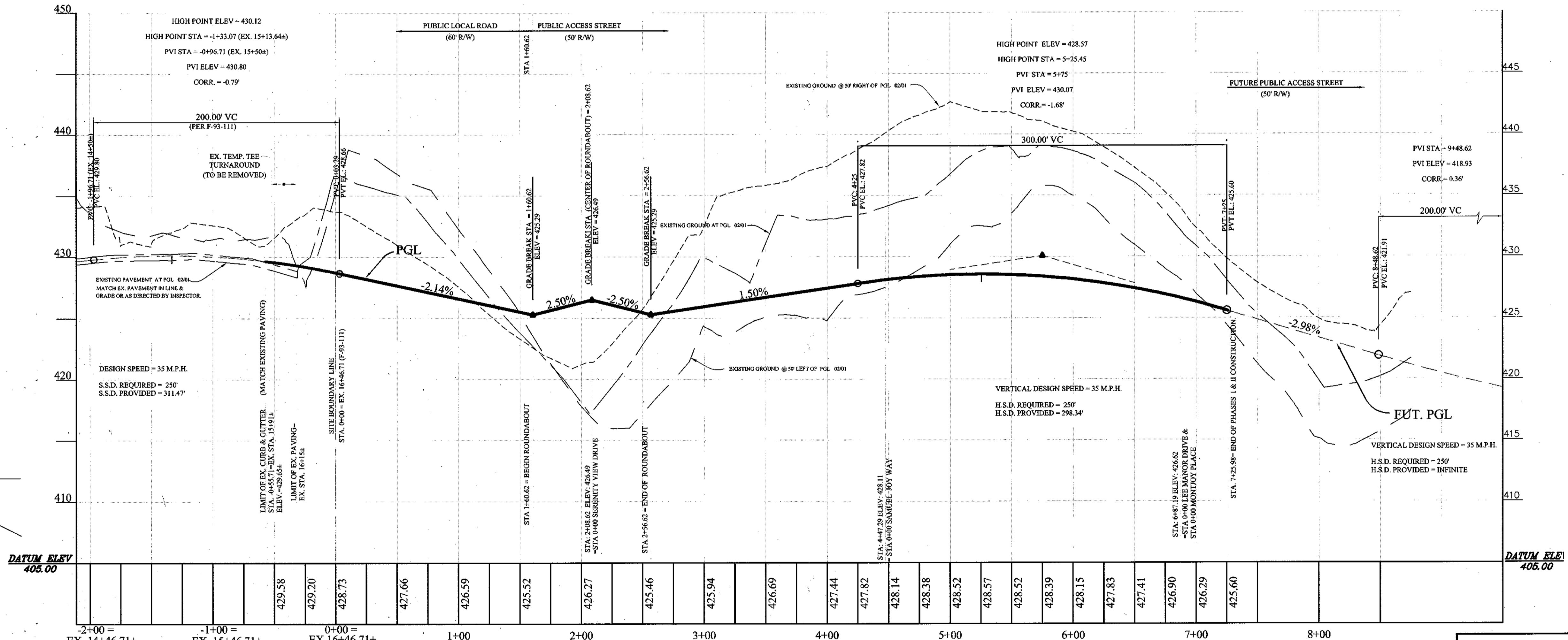
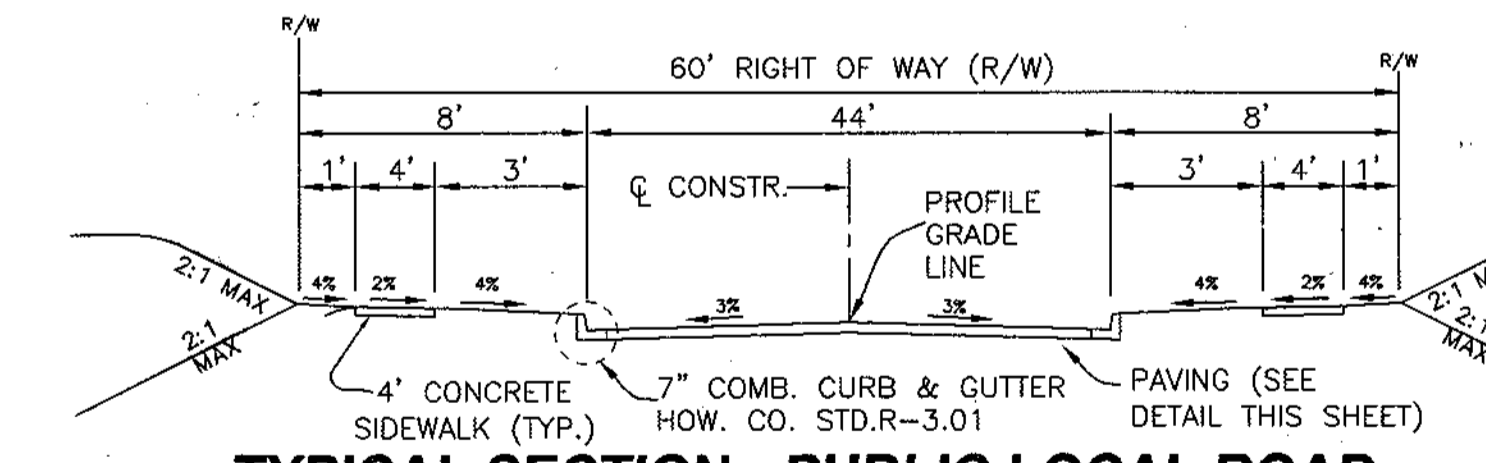
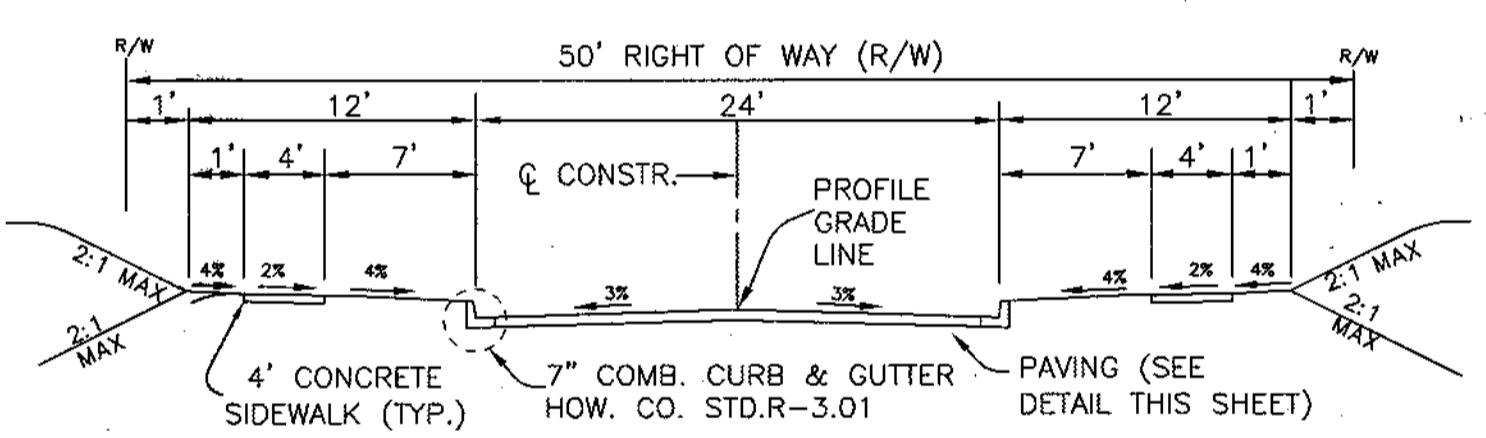
PLAN VIEW
SCALE: 1"=50'

CURVE #	RAD.	ARC	TANG	DELTA	CHORD	CH. BEARING	PC STATION	PT STATION
1	600.00'	126.83'	63.95'	127°05'32"	126.39'	N172°05'W	0+00.00	1+26.63
2	500.00'	79.97'	40.07'	09°09'51"	79.89'	N06°50'23"W	1+26.63	2+06.60
3	1500.00'	58.00'	29.00'	02°12'56"	58.00'	N03°21'56"W	4+15.04	4+73.04
4	295.00'	14.01'	7.00'	02°43'13"	14.01'	N03°06'47"W	7+11.97	7+25.98



SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-2	RESIDENTIAL ZONES LOCAL, CUL-DE-SAC STS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEVY TRUCKS PER DAY*

EXECUTIVE PARK DRIVE - FROM STA. 2+83.56 TO STA. 7+25.98



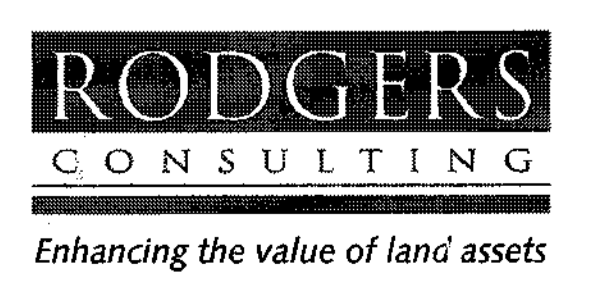
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Karl Shearman 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Walker 8-21-03
CHIEF, BUREAU OF HIGHWAY

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

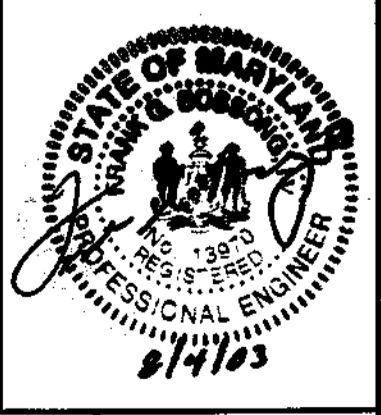
EXECUTIVE PARK DRIVE
PUBLIC LOCAL ROAD - SPEED LIMIT = 30 MHP (60' R/W FROM STA. 0+00 TO 2+08.62) AND
PUBLIC ACCESS STREET - SPEED LIMIT = 30 MPH (50' R/W FROM STA. 2+81.99 TO 7+25.98)

(PUBLIC LOCAL / ACCESS STREET)
EXECUTIVE PARK DRIVE
PLAN & PROFILE



Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

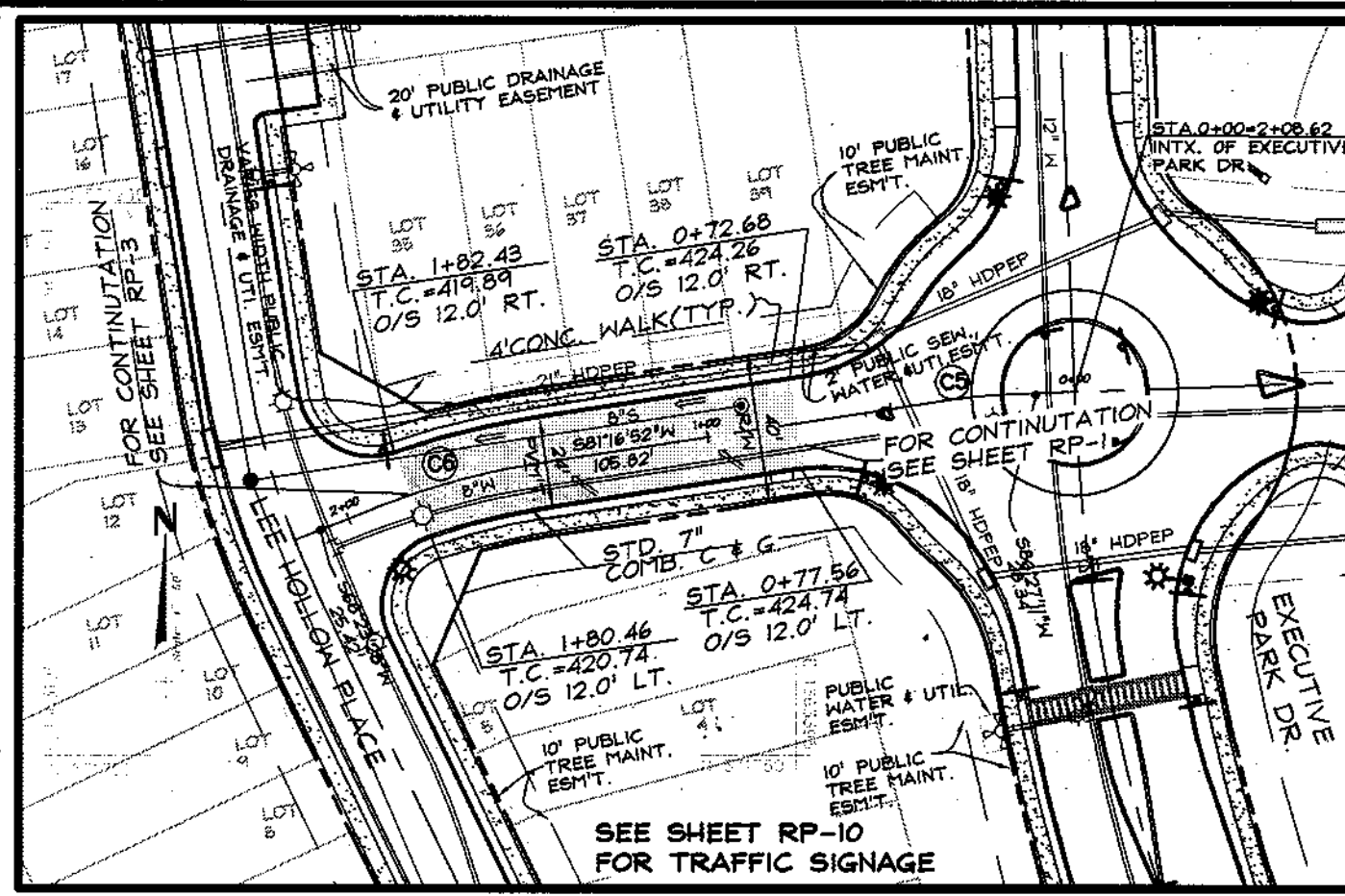
* PHASES I, II, & III
Montjoy
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-02-18, P-02-19, P-02-20, P-02-21, P-02-22, P-02-23, P-02-24, P-02-25, P-02-26, P-02-27, P-02-28, P-02-29, P-02-30, P-02-31, P-02-32, P-02-33, P-02-34, P-02-35, P-02-36, P-02-37, P-02-38, P-02-39, P-02-40, P-02-41, P-02-42, P-02-43, P-02-44, P-02-45, P-02-46, P-02-47, P-02-48, P-02-49, P-02-50, P-02-51, P-02-52, P-02-53, P-02-54, P-02-55, P-02-56, P-02-57, P-02-58, P-02-59, P-02-60, P-02-61, P-02-62, P-02-63, P-02-64, P-02-65, P-02-66, P-02-67, P-02-68, P-02-69, P-02-70, P-02-71, P-02-72, P-02-73, P-02-74, P-02-75, P-02-76, P-02-77, P-02-78, P-02-79, P-02-80, P-02-81, P-02-82, P-02-83, P-02-84, P-02-85, P-02-86, P-02-87, P-02-88, P-02-89, P-02-90, P-02-91, P-02-92, P-02-93, P-02-94, P-02-95, P-02-96, P-02-97, P-02-98, P-02-99, P-02-100



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		YSL/RC	
	DRAWN		YSL	
	REVIEWED		PFB/RF	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. &
Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

SCALE AS SHOWN
JOB NO. 506V3
DATE: 12-20-02
INDEX NO. RP-1
SHEET NO. 2 OF 50



SERENITY VIEW DRIVE

PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)

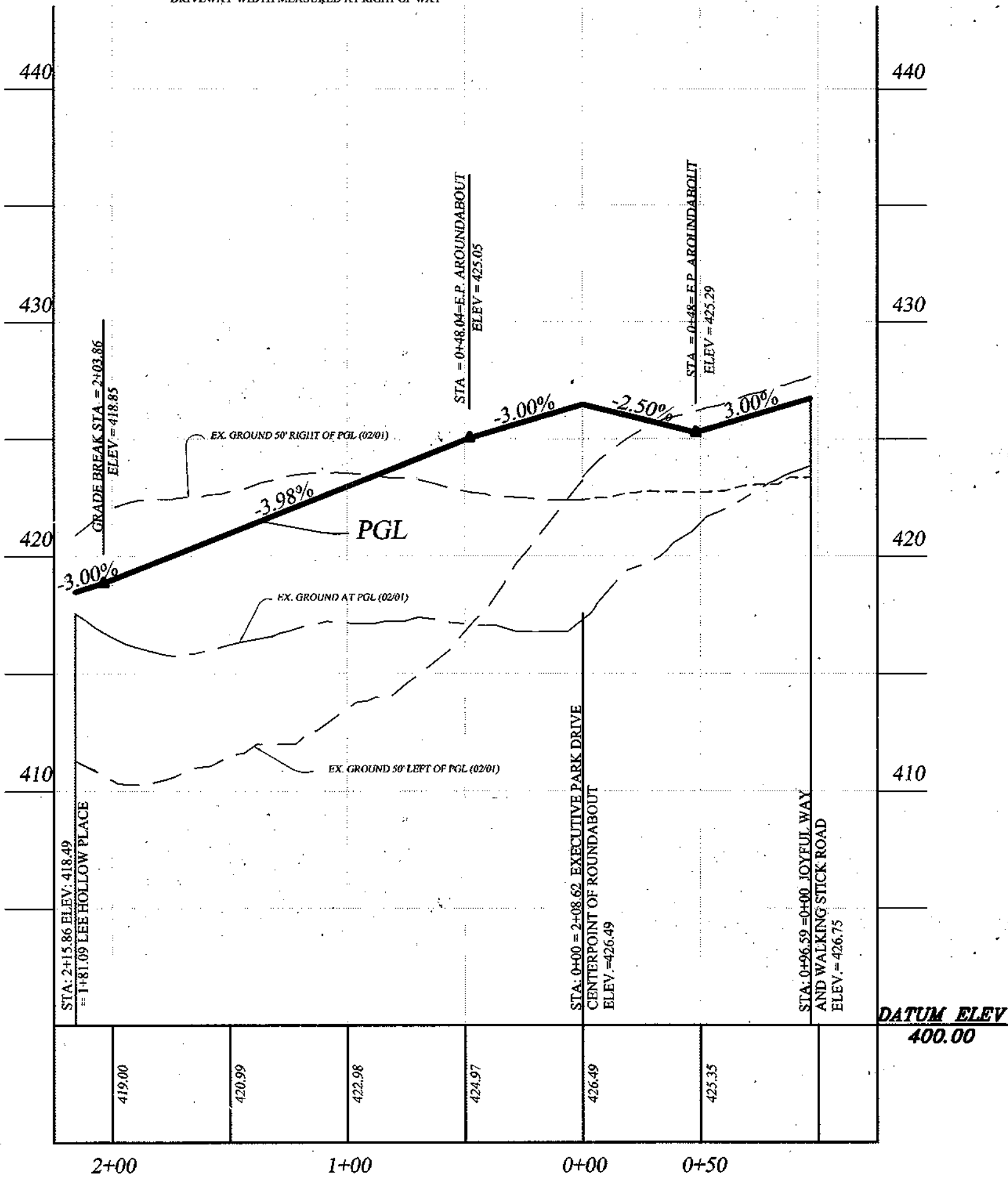
PLAN VIEW
SCALE: 1"=50'

CURVE #	RAD.	ARC	TANG	DELTA	CHORD	CH. BEARING	PC STATION	PT STATION
5	125.00'	11.28'	5.62'	051°10'14"	11.28'	S83°20'01"W	0+28.34	0+38.63
6	200.00'	44.89'	22.59'	125°32'44"	44.89'	S74°50'10"W	1+45.44	1+90.44

DRIVEWAY LOCATION DATA

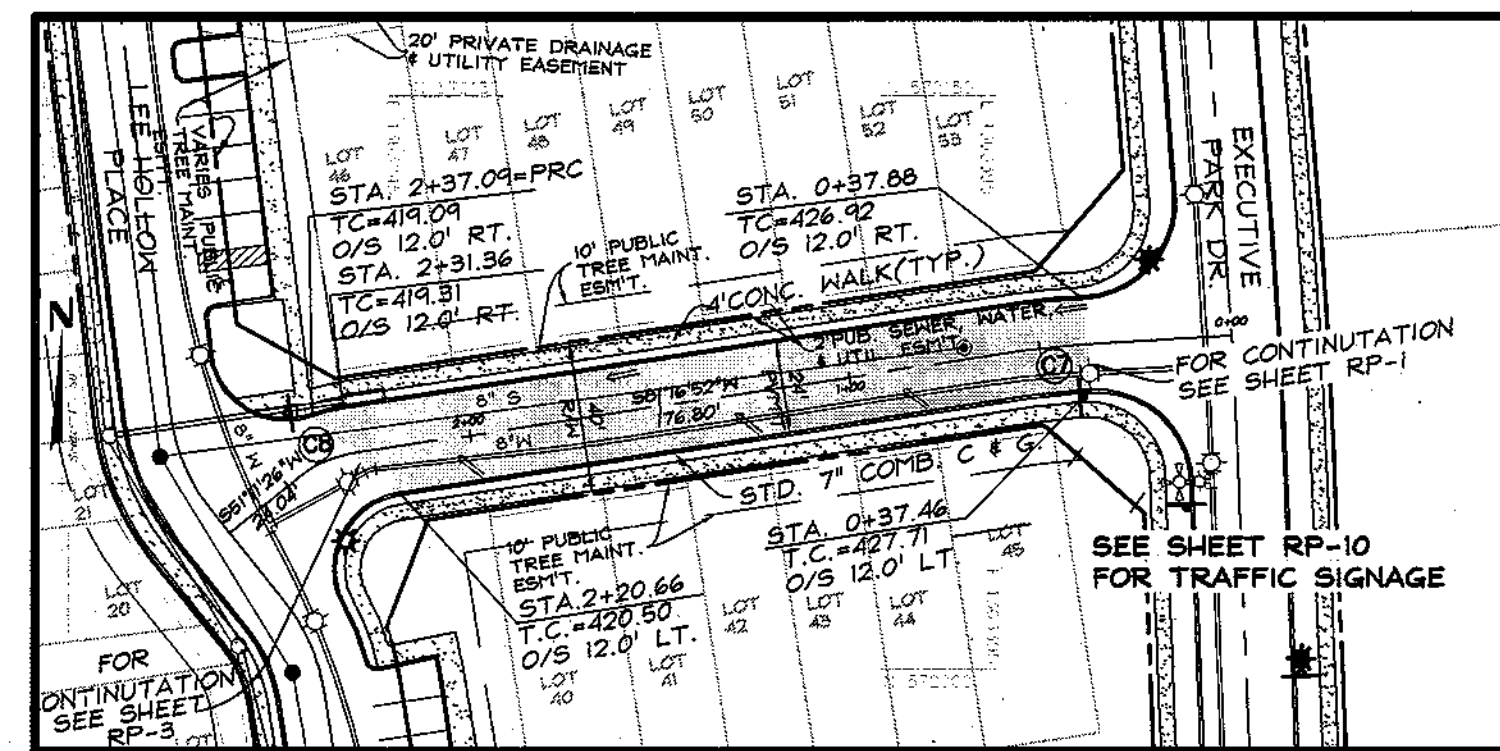
LOT #	LOCATION	STREET NAME	WIDTH
35	C.L. 1+65	SERENITY VIEW DRIVE	20'
36	C.L. 1+90	SERENITY VIEW DRIVE	10'
37	C.L. 1+28	SERENITY VIEW DRIVE	10'
38	C.L. 1+06	SERENITY VIEW DRIVE	10'
39	C.L. 0+79	SERENITY VIEW DRIVE	20'

NOTE: THE BUILDERS IS RESPONSIBLE FOR ALL EXPENSE IF THE CONSTRUCTED DRIVEWAY(S) IS BEING RELOCATED. DRIVEWAY WIDTH MEASURED AT RIGHT OF WAY



SERENITY VIEW DRIVE

PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)



SAMUEL JOY WAY

PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)

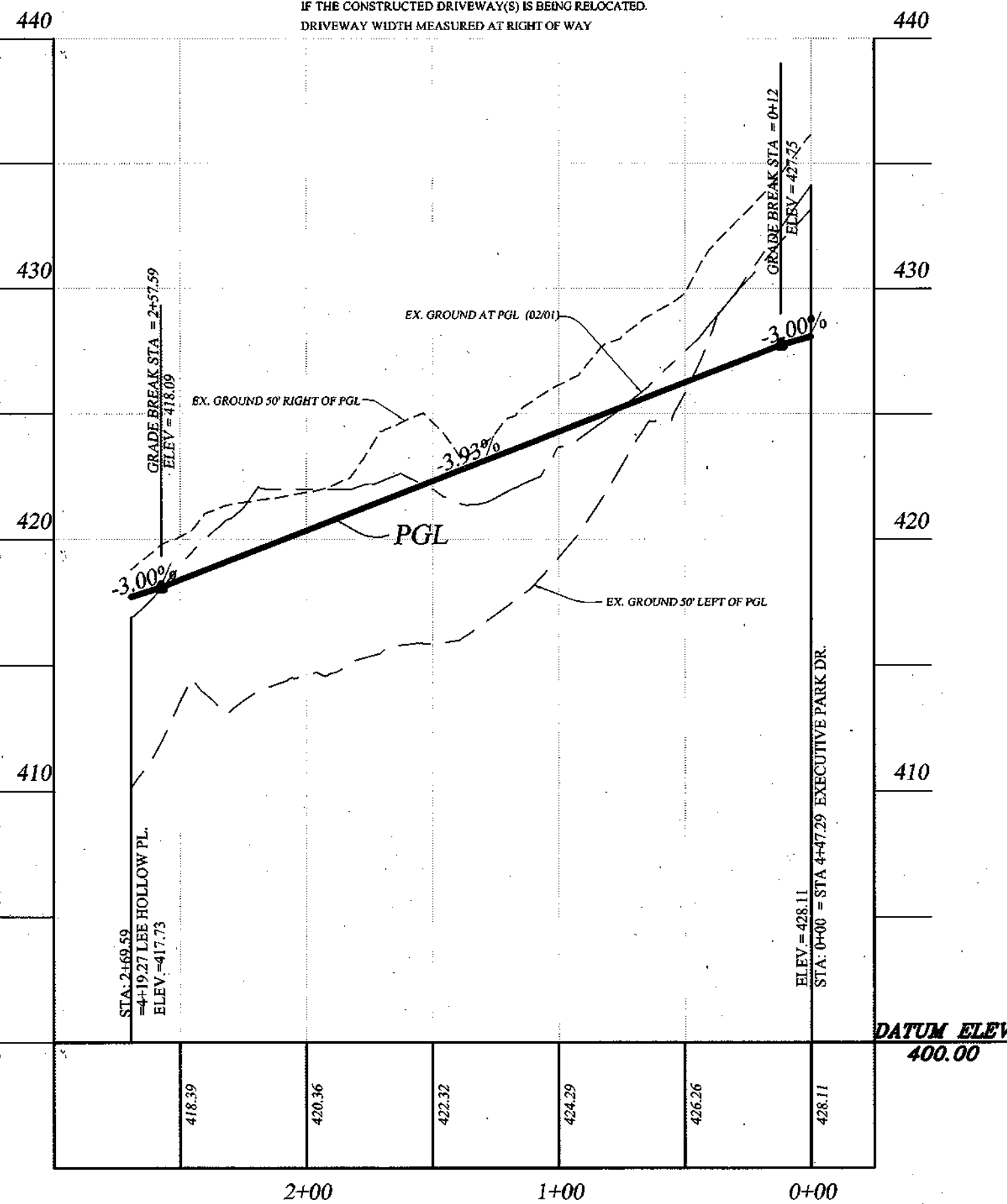
PLAN VIEW
SCALE: 1"=50'

CURVE #	RAD.	ARC	TANG	DELTA	CHORD	CH. BEARING	PC STATION	PT STATION
7	180.00'	13.59'	6.80'	051°14'14"	13.59'	S83°52'41"W	0+40.88	0+54.26
8	27.00'	14.18'	7.28'	305°28'28"	14.02'	S88°14'08"W	2+31.38	2+45.54

DRIVEWAY LOCATION DATA

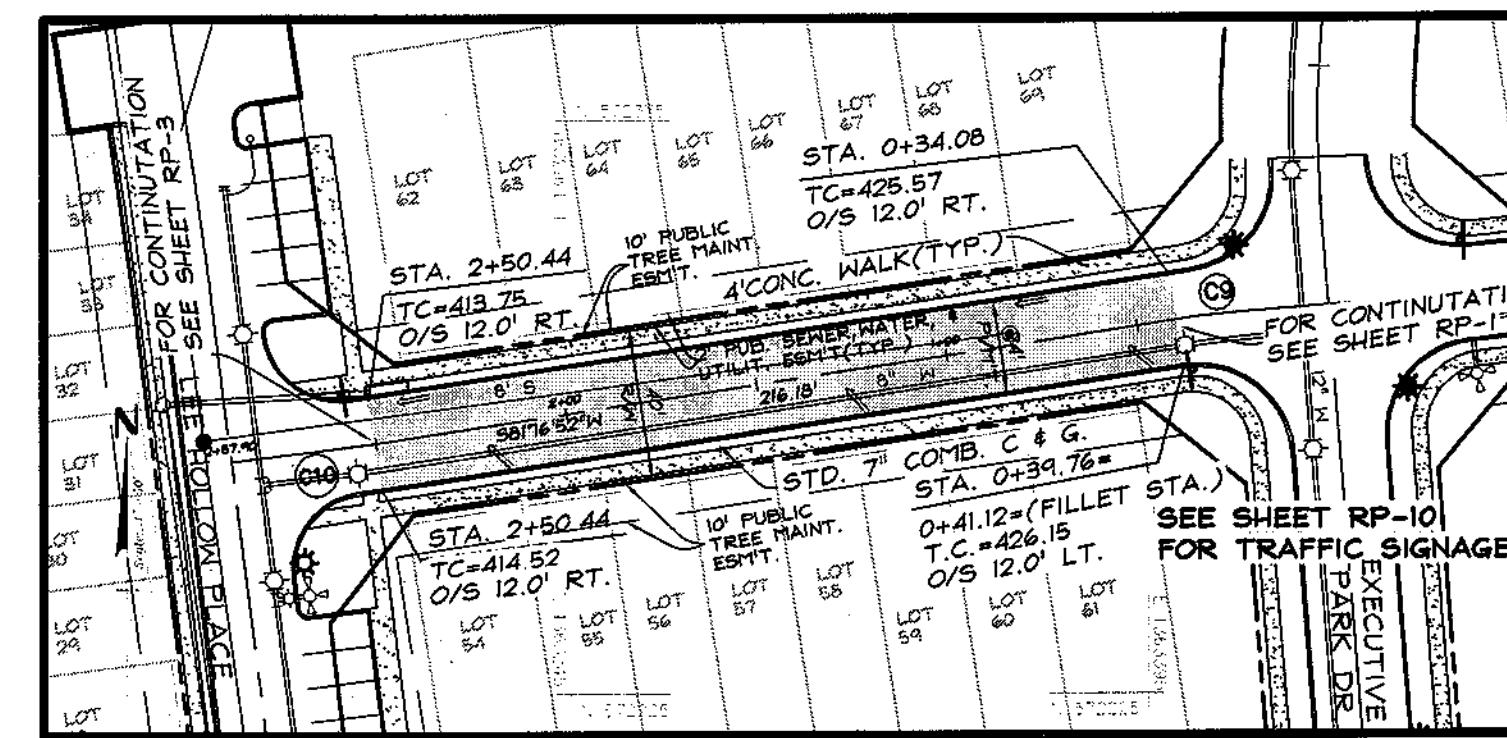
LOT #	LOCATION	STREET NAME	WIDTH
40	C.L. 1+79	SAMUEL JOY WAY	20'
41	C.L. 1+65	SAMUEL JOY WAY	10'
42	C.L. 1+40	SAMUEL JOY WAY	10'
43	C.L. 1+15	SAMUEL JOY WAY	10'
44	C.L. 0+90	SAMUEL JOY WAY	10'
45	C.L. 0+65	SAMUEL JOY WAY	20'
46	C.L. 2+10	SAMUEL JOY WAY	12'
47	C.L. 1+95	SAMUEL JOY WAY	10'
48	C.L. 1+70	SAMUEL JOY WAY	10'
49	C.L. 1+45	SAMUEL JOY WAY	10'
50	C.L. 1+20	SAMUEL JOY WAY	10'
51	C.L. 1+00	SAMUEL JOY WAY	10'
52	C.L. 0+85	SAMUEL JOY WAY	10'
53	C.L. 0+59	SAMUEL JOY WAY	20'

NOTE: THE BUILDERS IS RESPONSIBLE FOR ALL EXPENSE IF THE CONSTRUCTED DRIVEWAY(S) IS BEING RELOCATED. DRIVEWAY WIDTH MEASURED AT RIGHT OF WAY



SAMUEL JOY WAY

PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)



LEE MANOR DRIVE

PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)

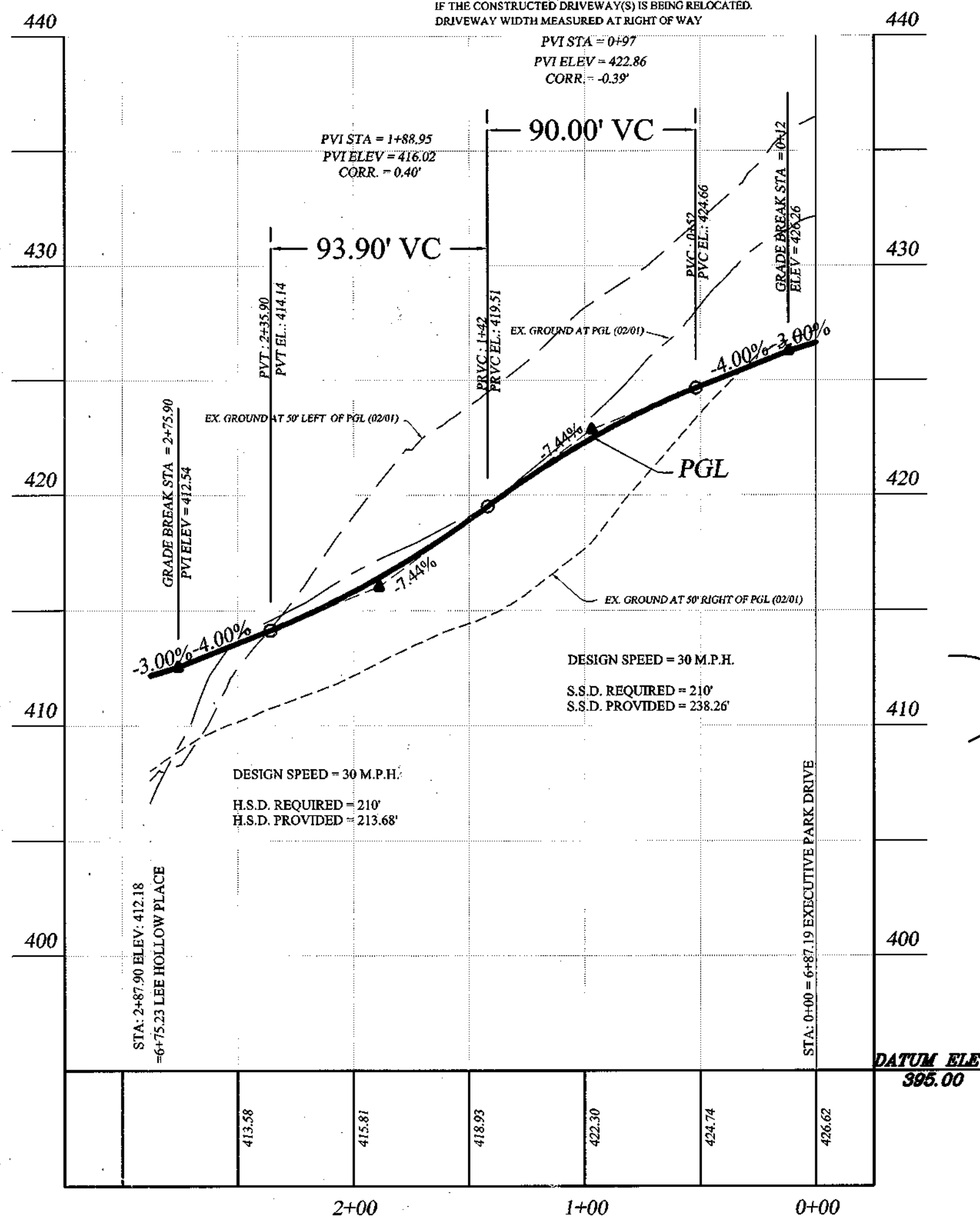
PLAN VIEW
SCALE: 1"=50'

CURVE #	RAD.	ARC	TANG	DELTA	CHORD	CH. BEARING	PC STATION	PT STATION
9	150.00'	11.17'	5.59'	041°44'14"	11.17'	S83°24'14"W	0+23.14	0+34.29
10	180.00'	4.17'	2.09'	073°35'28"	4.17'	S82°04'41"W	2+50.44	2+54.61

DRIVEWAY LOCATION DATA

LOT #	LOCATION	STREET NAME	WIDTH
54	C.L. 2+26	LEE MANOR DRIVE	20'
55	C.L. 2+09	LEE MANOR DRIVE	10'
56	C.L. 1+47	LEE MANOR DRIVE	10'
57	C.L. 1+65	LEE MANOR DRIVE	10'
58	C.L. 1+43	LEE MANOR DRIVE	10'
59	C.L. 1+21	LEE MANOR DRIVE	10'
60	C.L. 0+99	LEE MANOR DRIVE	10'
61	C.L. 0+72	LEE MANOR DRIVE	20'
62	C.L. 2+23	LEE MANOR DRIVE	20'
63	C.L. 2+05	LEE MANOR DRIVE	10'
64	C.L. 1+83	LEE MANOR DRIVE	10'
65	C.L. 1+61	LEE MANOR DRIVE	10'
66	C.L. 1+29	LEE MANOR DRIVE	10'
67	C.L. 1+11	LEE MANOR DRIVE	10'
68	C.L. 0+95	LEE MANOR DRIVE	10'
69	C.L. 0+68	LEE MANOR DRIVE	20'

NOTE: THE BUILDERS IS RESPONSIBLE FOR ALL EXPENSE IF THE CONSTRUCTED DRIVEWAY(S) IS BEING RELOCATED. DRIVEWAY WIDTH MEASURED AT RIGHT OF WAY

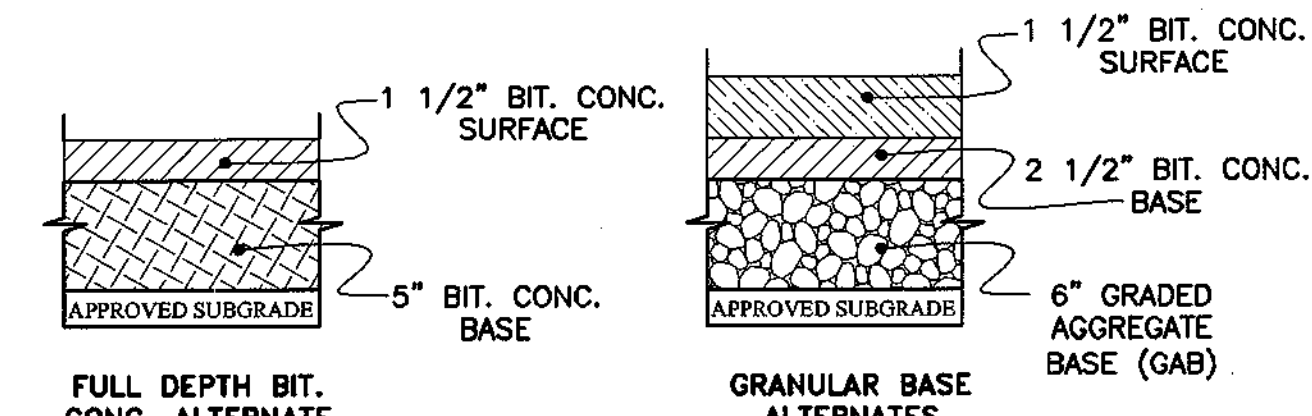


LEE MANOR DRIVE

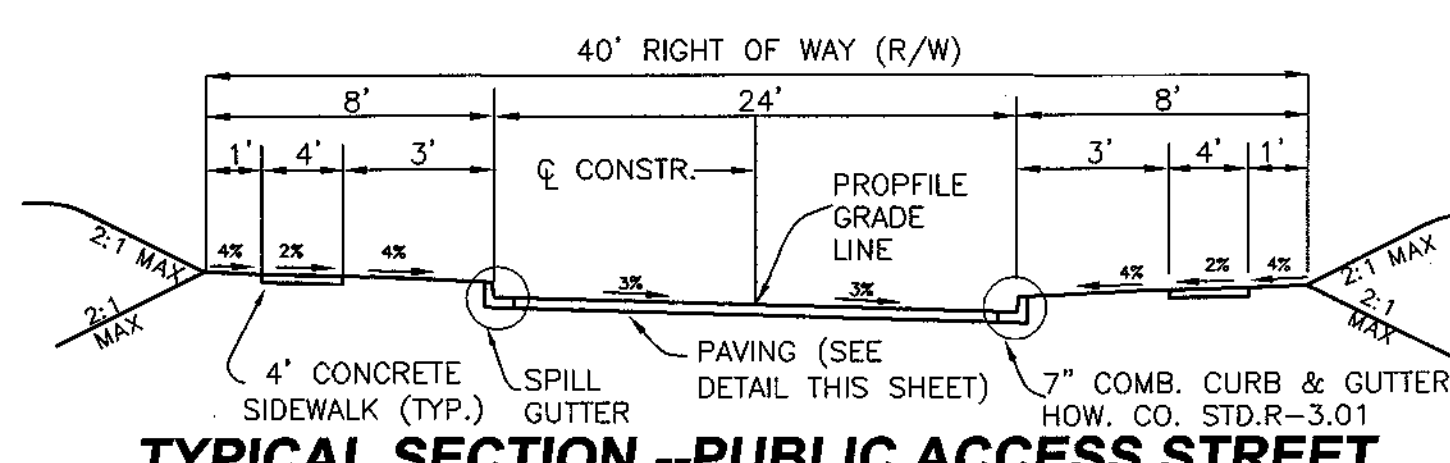
PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)

PAVING NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND SPECIFICATIONS OF HOWARD COUNTY PLUS SHS STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- ALL CONNECTIONS AT EXISTING IMPROVEMENTS SHALL BE WITH A CLEAN VERTICAL JOINT. SEE HOWARD COUNTY STANDARD DETAIL G4.01.
- ALL SPOT GRADES SHOWN ARE FLOW LINE ELEVATIONS (FL) UNLESS OTHERWISE NOTED.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 48 HOURS IN ADVANCE OF ANY EXCAVATION.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT PUBLIC WORK/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- CURBS, GUTTERS, SIDEWALKS, AND ALL PAVING SHALL BE INSTALLED IN SUCH A MANNER AS TO PROVIDE POSITIVE DRAINAGE OF ALL AREAS SO THERE IS NO ACCUMULATION OF SURFACE WATER.
- WHERE PROPOSED CURB MEETS EX. CURB, THE CONTRACTOR SHALL MATCH EX. CURB & GUTTER IN LINE AND ON GRADE OR AS DIRECTED BY THE INSPECTOR.
- FOR SIDEWALK HANDICAP RAMP DETAIL & CONSTRUCTION SPECIFICATIONS, SEE HOWARD COUNTY STANDARD DETAIL R-4.02.
- ALL CURB AND GUTTERS SHOWN ON THE PLANS ARE HOWARD COUNTY STANDARDS AND DETAILS.
- ALL ROADWAY SUBGRADE SHALL MEET HOWARD COUNTY STANDARD AND SPECIFICATIONS.
- ALL DRIVEWAY APRON SHALL BE CONSTRUCTED PER HOWARD COUNTY STANDARD DETAIL R-6.01
- ALL CURB FILLET RADIUS SHALL BE 25' UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL PROVIDE SPILL GUTTER ON CURB FILLETS AS NEEDED TO CONVEY WATER ACROSS INTERSECTIONS.
- GRADE ALL DISTURBED AREAS TO PROVIDE POSITIVE DRAINAGE.
- INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS, WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN, OR TWELVE (12) INCHES, WHICHEVER IS LESS, CONTACT THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORK AND THE APPROPRIATE UTILITY OWNER BEFORE PROCEEDING WITH CONSTRUCTION.



SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-2	RESIDENTIAL ZONES LOCAL, CUL-DE-SAC STS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEVY TRUCKS PER DAY*



(NOT TO SCALE)
SERENITY VIEW DRIVE - FROM STA. 0+72.68 TO STA. 1+82.43
SAMUEL JOY WAY - FROM STA. 0+37.46 TO STA. 2+37.09
LEE MANOR DRIVE - FROM STA. 0+34.26 TO STA. 2+50.44
HOWARD COUNTY STANDARD FIGURE 2.09c
MINIMUM DESIGN SPEED - 25 MPH

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kathleen J. ... 9-10-03
CHIEF, DIVISION OF LAND DEVELOPMENT

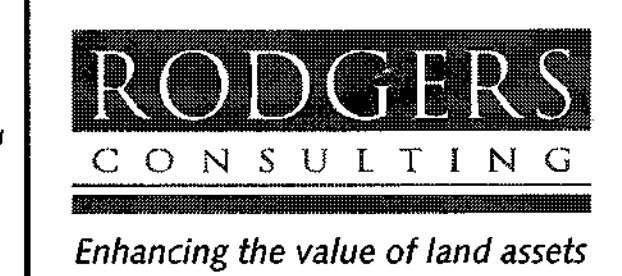
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. ... 8-21-03
CHIEF, BUREAU OF HIGHWAY

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start of Construction

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		YSL/RC	
	DRAWN		YSL	
	REVIEWED		PFB/RF	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

(PUBLIC ACCESS STREET)
SERENITY VIEW DRIVE, SAMUEL JOY WAY, & LEE MANOR DRIVE
PLANS & PROFILES



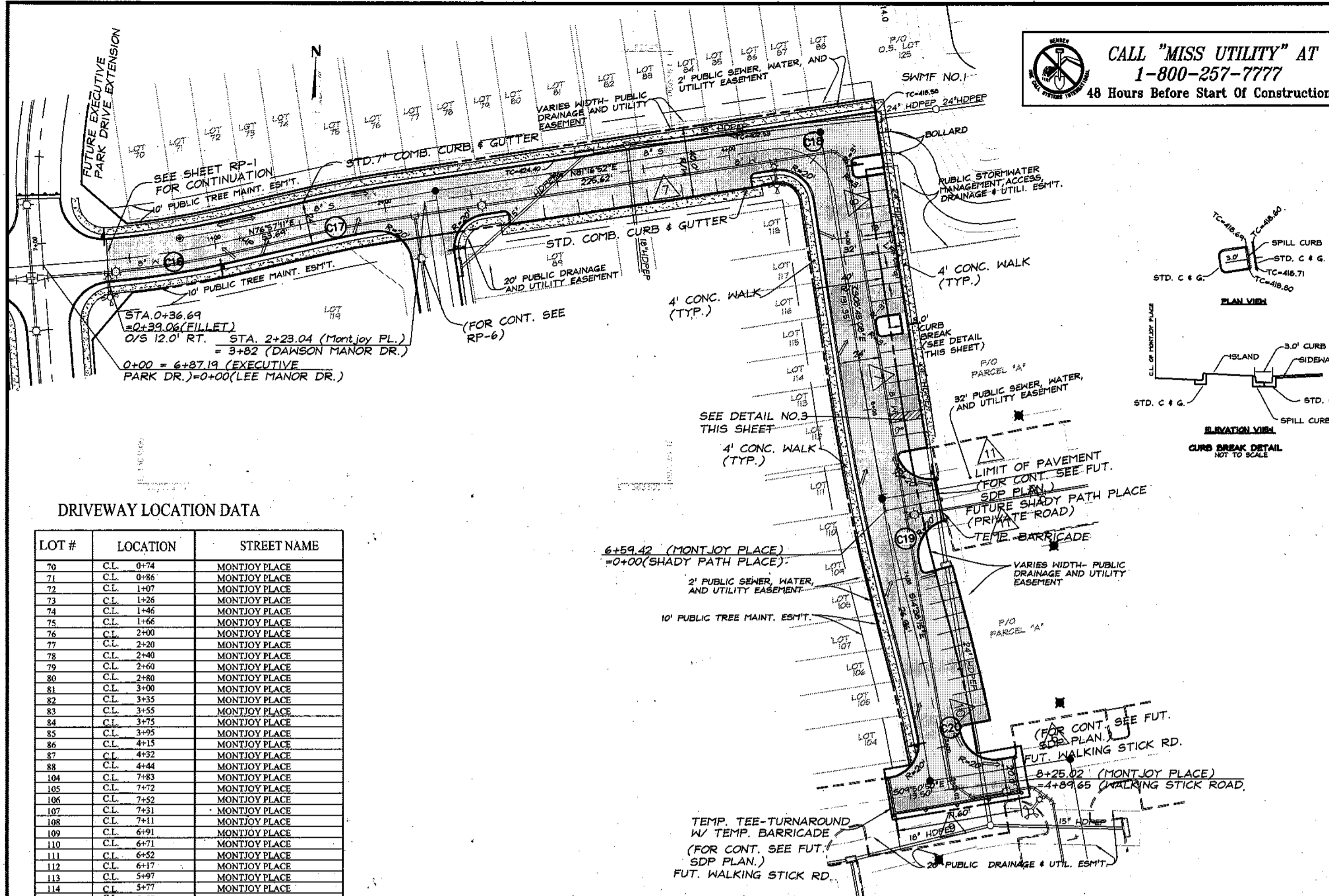
Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

SCALE: AS SHOWN
JOB No. 506V3
DATE: 12-20-02
INDEX No. RP-2
SHEET No. 3 OF 50

* PHASES I, II, & III
Montjoy
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03



CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction



DRIVEWAY LOCATION DATA

LOT #	LOCATION	STREET NAME
70	C.L. 0+74	MONTJOY PLACE
71	C.L. 0+86	MONTJOY PLACE
72	C.L. 1+07	MONTJOY PLACE
73	C.L. 1+26	MONTJOY PLACE
74	C.L. 1+46	MONTJOY PLACE
75	C.L. 1+66	MONTJOY PLACE
76	C.L. 1+86	MONTJOY PLACE
77	C.L. 2+06	MONTJOY PLACE
78	C.L. 2+26	MONTJOY PLACE
79	C.L. 2+46	MONTJOY PLACE
80	C.L. 2+66	MONTJOY PLACE
81	C.L. 2+86	MONTJOY PLACE
82	C.L. 3+06	MONTJOY PLACE
83	C.L. 3+26	MONTJOY PLACE
84	C.L. 3+46	MONTJOY PLACE
85	C.L. 3+66	MONTJOY PLACE
86	C.L. 3+86	MONTJOY PLACE
87	C.L. 4+06	MONTJOY PLACE
88	C.L. 4+26	MONTJOY PLACE
89	C.L. 4+46	MONTJOY PLACE
90	C.L. 4+66	MONTJOY PLACE
91	C.L. 4+86	MONTJOY PLACE
92	C.L. 5+06	MONTJOY PLACE
93	C.L. 5+26	MONTJOY PLACE
94	C.L. 5+46	MONTJOY PLACE
95	C.L. 5+66	MONTJOY PLACE
96	C.L. 5+86	MONTJOY PLACE
97	C.L. 6+06	MONTJOY PLACE
98	C.L. 6+26	MONTJOY PLACE
99	C.L. 6+46	MONTJOY PLACE
100	C.L. 6+66	MONTJOY PLACE
101	C.L. 6+86	MONTJOY PLACE
102	C.L. 7+06	MONTJOY PLACE
103	C.L. 7+26	MONTJOY PLACE
104	C.L. 7+46	MONTJOY PLACE
105	C.L. 7+66	MONTJOY PLACE
106	C.L. 7+86	MONTJOY PLACE
107	C.L. 8+06	MONTJOY PLACE
108	C.L. 8+26	MONTJOY PLACE
109	C.L. 8+46	MONTJOY PLACE
110	C.L. 8+66	MONTJOY PLACE
111	C.L. 8+86	MONTJOY PLACE
112	C.L. 9+06	MONTJOY PLACE
113	C.L. 9+26	MONTJOY PLACE
114	C.L. 9+46	MONTJOY PLACE
115	C.L. 9+66	MONTJOY PLACE
116	C.L. 9+86	MONTJOY PLACE
117	C.L. 10+06	MONTJOY PLACE
118	C.L. 10+26	MONTJOY PLACE

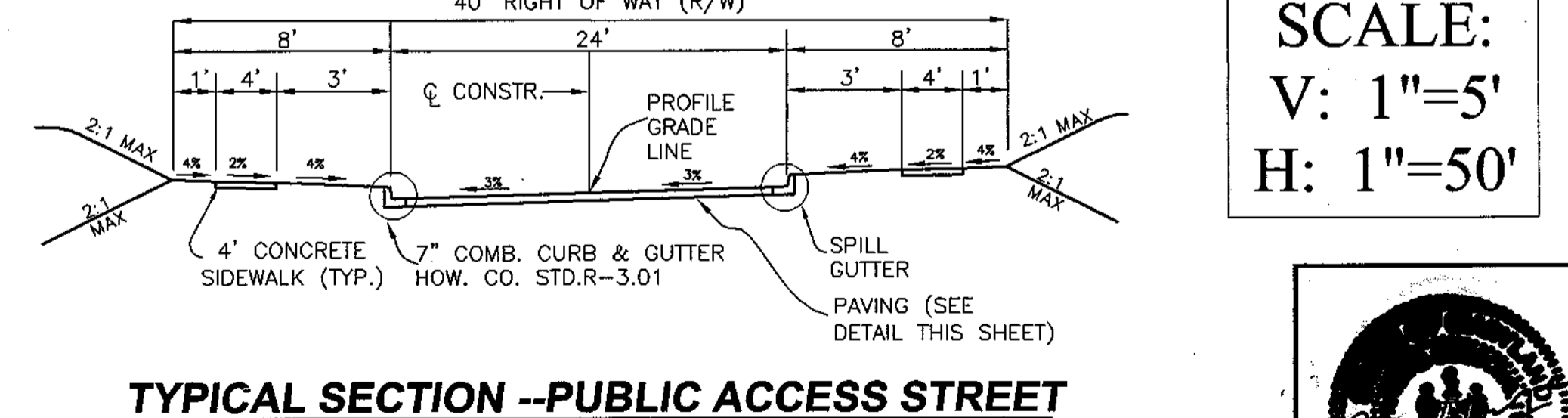
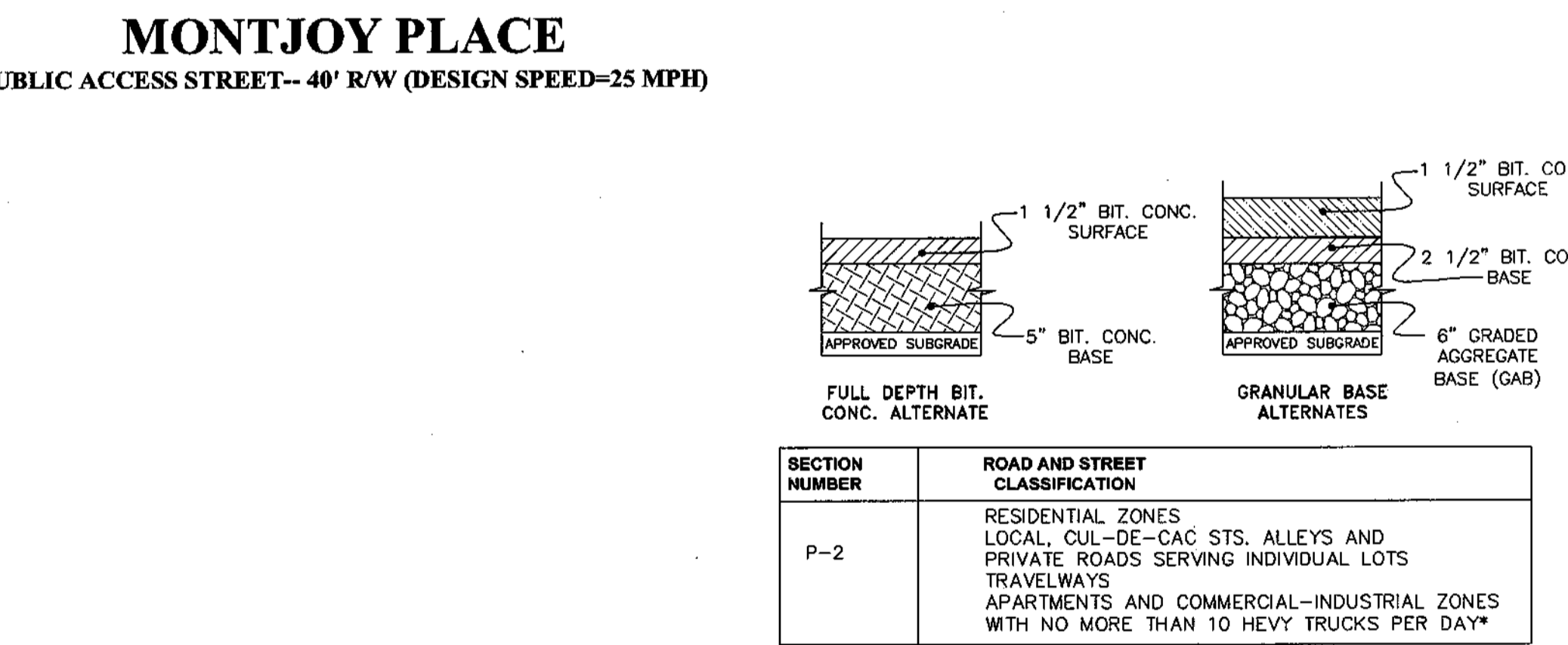
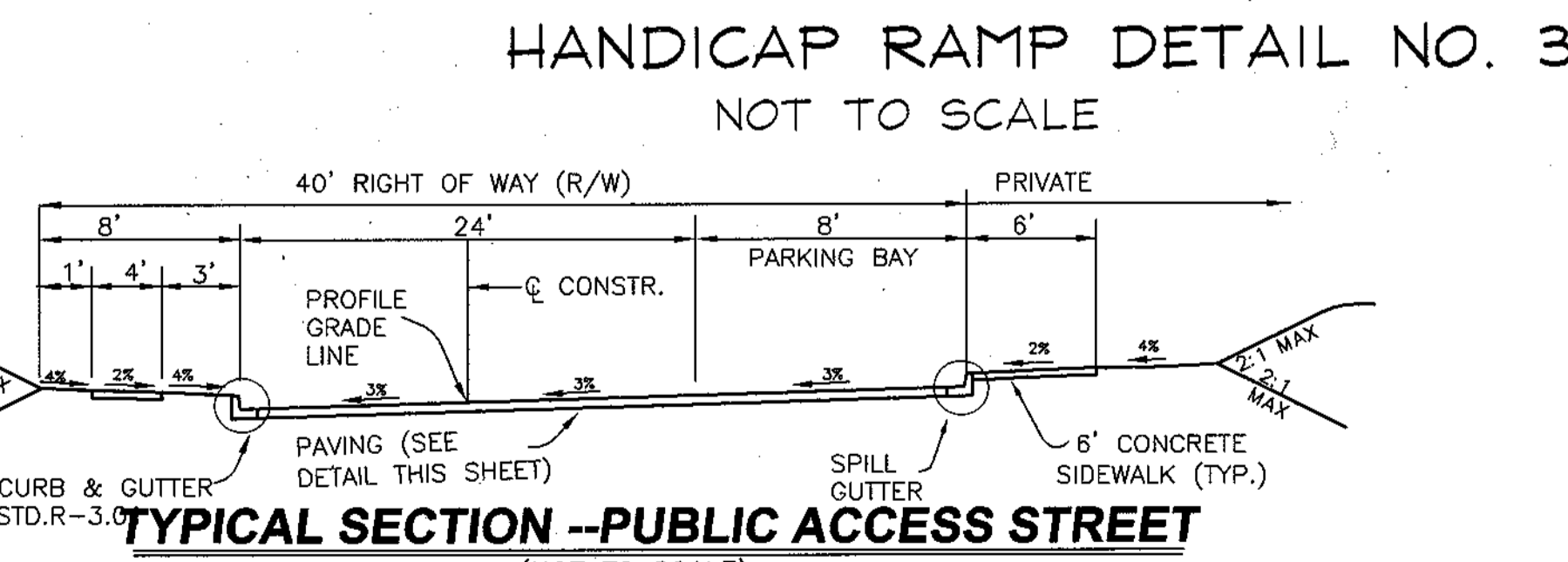
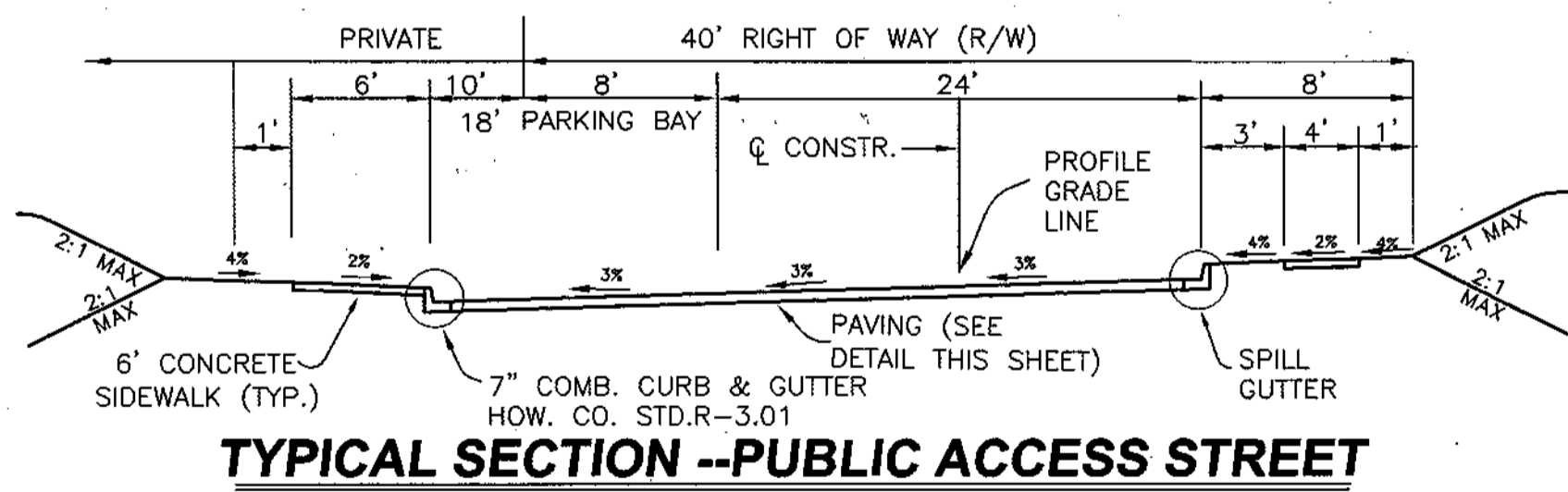
MONTJOY PLACE
PUBLIC ACCESS STREET-- 40' R/W (DESIGN SPEED=25 MPH)
PLAN VIEW
SCALE: 1"=50'

MONTJOY PLACE CURB STATION OFFSET AND ELEVATION TABLE

STATION	OFFSET	ELEVATION
PRC STA: 0+37.67	0+42.72(FILLET)- 12.00 LT.	T/C = 428.23
PT STA: 1+07.33	- 12.00 LT.	T/C = 428.23
PC STA: 1+61.02	- 12.00 LT.	T/C = 428.36
PT STA: 1+98.79	- 12.00 LT.	T/C = 427.88
PT STA: 1+98.79	- 12.00 LT.	T/C = 427.88
PT STA: 4+61.80	- 14.08 LT.	T/C = 419.05
PT STA: 4+62.98	- 15.17 LT.	T/C = 419.14
PT STA: 4+64.28	- 16.68 LT.	T/C = 418.66
PT STA: 4+70.57	- 30.51 LT.	T/C = 418.60
PT STA: 4+74.67	- 30.00 LT.	T/C = 418.55
PC STA: 4+74.67	- 15.00 LT.	T/C = 419.00
PT STA: 4+80.67	- 12.00 LT.	T/C = 419.11
PC STA: 4+86.67	- 12.00 LT.	T/C = 419.17
PT STA: 4+89.67	- 15.00 LT.	T/C = 419.11
PT STA: 4+94.67	- 30.00 LT.	T/C = 418.66
PT STA: 4+97.31	- 30.00 LT.	T/C = 419.42
PC STA: 4+97.31	- 15.42 LT.	T/C = 420.18
PRC STA: 4+91.03	0+00(FILLET)- 12.49 LT.	T/C = 420.26
PRC STA: 4+74.13	0+26.34(FILLET)- 30.85' LT.	T/C = 420.13
PRC STA: 4+72.04	0+30.29(FILLET)- 30.67' LT.	T/C = 420.90
PRC STA: 4+92.64	0+00(FILLET)- 12.00 LT.	T/C = 421.17
PT STA: 7+00.04	- 15.03 LT.	T/C = 421.19
PC STA: 7+00.04	- 30.00 LT.	T/C = 420.74
PT STA: 7+04.32	- 30.00 LT.	T/C = 420.88
PC STA: 7+36.28	- 30.00 LT.	T/C = 421.24
PT STA: 7+89.64	- 30.00 LT.	T/C = 422.04
PC STA: 7+89.64	- 15.00 LT.	T/C = 422.54
PRC STA: 7+93.66	0+00(FILLET)- 12.00 LT.	T/C = 422.69
PRC STA: 0+36.69	0+39.06(FILLET)- 12.00 RT.	T/C = 427.71
PT STA: 1+90.51	0+00(FILLET)- 12.00 RT.	T/C = 428.79
PT STA: 2+55.04	0+00(FILLET)- 12.00 RT.	T/C = 427.07
PC STA: 2+67.04	- 12.00 RT.	T/C = 426.59
PT STA: 2+70.04	- 15.00 RT.	T/C = 426.56
STA: 2+70.04	- 20.00 RT.	T/C = 426.71
STA: 4+10.04	- 20.00 RT.	T/C = 421.23
PC STA: 4+10.04	- 15.00 RT.	T/C = 421.08
PT STA: 4+13.04	- 12.00 RT.	T/C = 420.92
PC STA: 4+24.41	0+00(FILLET)- 12.00 RT.	T/C = 420.66
PT STA: 4+74.67	0+31.42(FILLET)- 12.00 RT.	T/C = 419.84
PC STA: 4+06.05	- 12.00 RT.	T/C = 420.64
PT STA: 7+04.32	- 12.00 RT.	T/C = 422.14
PC STA: 7+36.28	- 12.00 RT.	T/C = 422.60
PRC STA: 7+91.89	0+00(FILLET)- 12.00 RT.	T/C = 423.43

CENTERLINE CURVE DATA

CURVE #	RAD.	ARC	TANG	DELTA	CHORD	CH. BEARING	PC STATION	PT STATION
16	500.00'	74.82'	37.48'	08°34'25"	74.75'	N81°14'24"E	0+32.51	1+07.33
17	500.00'	37.77'	18.89'	04°19'41"	37.76'	N79°07'02"E	1+61.02	1+98.79
18	32.00'	50.27'	32.00'	90°00'00"	45.25'	S53°43'08"E	4+24.41	4+74.67
19	1000.00'	103.30'	51.69'	05°55'07"	103.25'	S11°40'41"E	6+06.03	7+09.32
20	900.00'	75.24'	37.64'	04°47'25"	75.22'	S12°14'32"E	7+36.28	8+11.52



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kathleen Spent 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
W. Wilson T. ... 8/21/03
CHIEF, BUREAU OF HIGHWAY
DATE

DATE	REVISION	DATE	BY	DATE
08-29-03	FINAL SUBMITTAL FOR SPONSOR	08-29-03	YSL/RC	
09-10-03	REV. FOR HOWARD CO. DPZ COMMENTS OF 05/12/03	09-10-03	YSL	
09-28-03	REV. FOR HOWARD CO. DPZ COMMENTS OF 02/12/03	09-28-03	YSL	
12-29-03	SUBMITTED FOR REVIEW	12-29-03	YSL	

Developer/Owner:
Winchester Homes, Inc. &
Winchester Homes, Inc., as nominee for Stringtown Investments, LLC.
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

(PUBLIC ACCESS STREET)
MONTJOY PLACE
PLAN & PROFILE

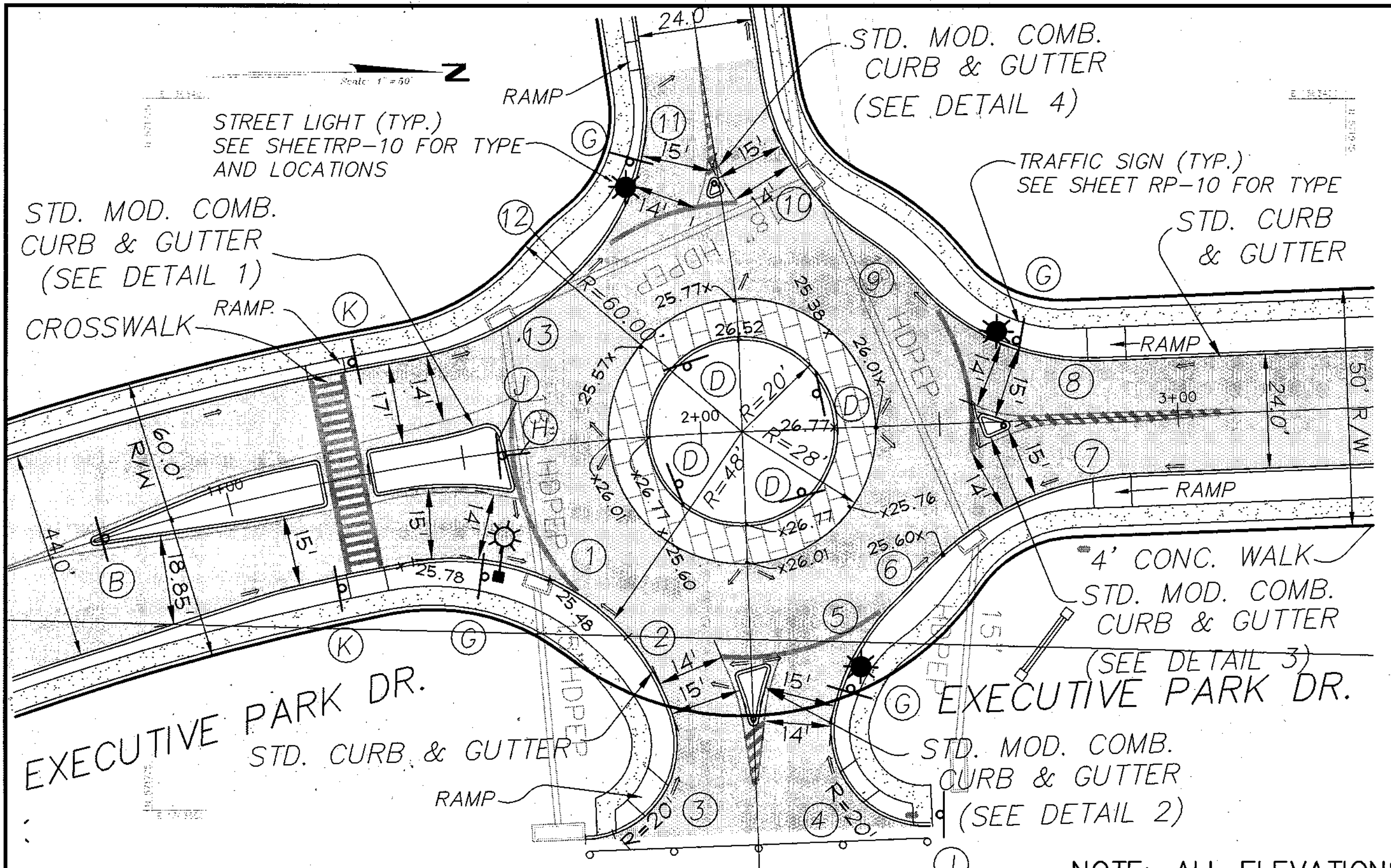
RODGERS CONSULTING
Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II, & III
Montjoy
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE	AS SHOWN
JOB NO.	506V3
DATE:	12-20-02
INDEX NO.	RP-4
SHEET No.	5 of 50

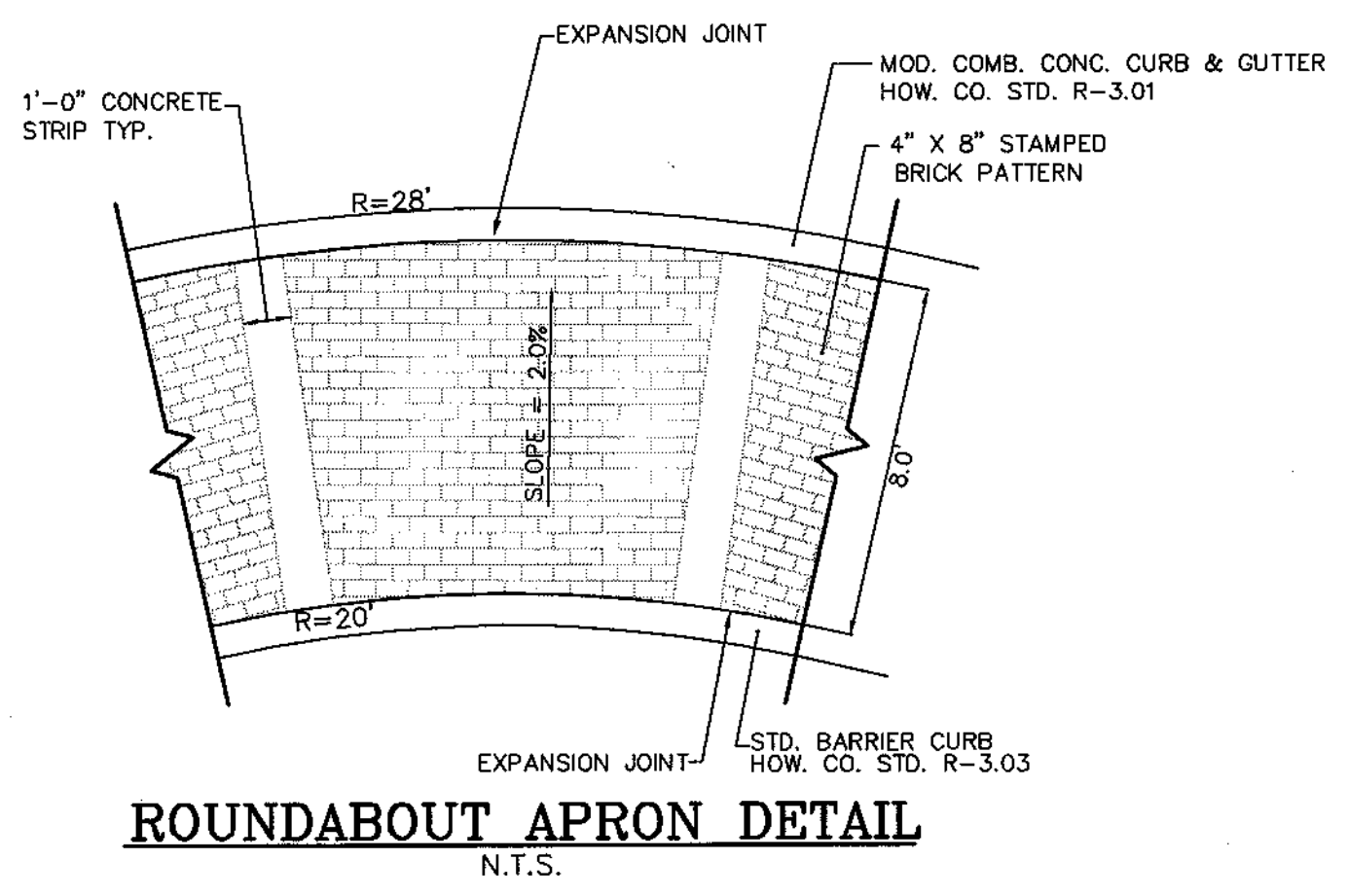
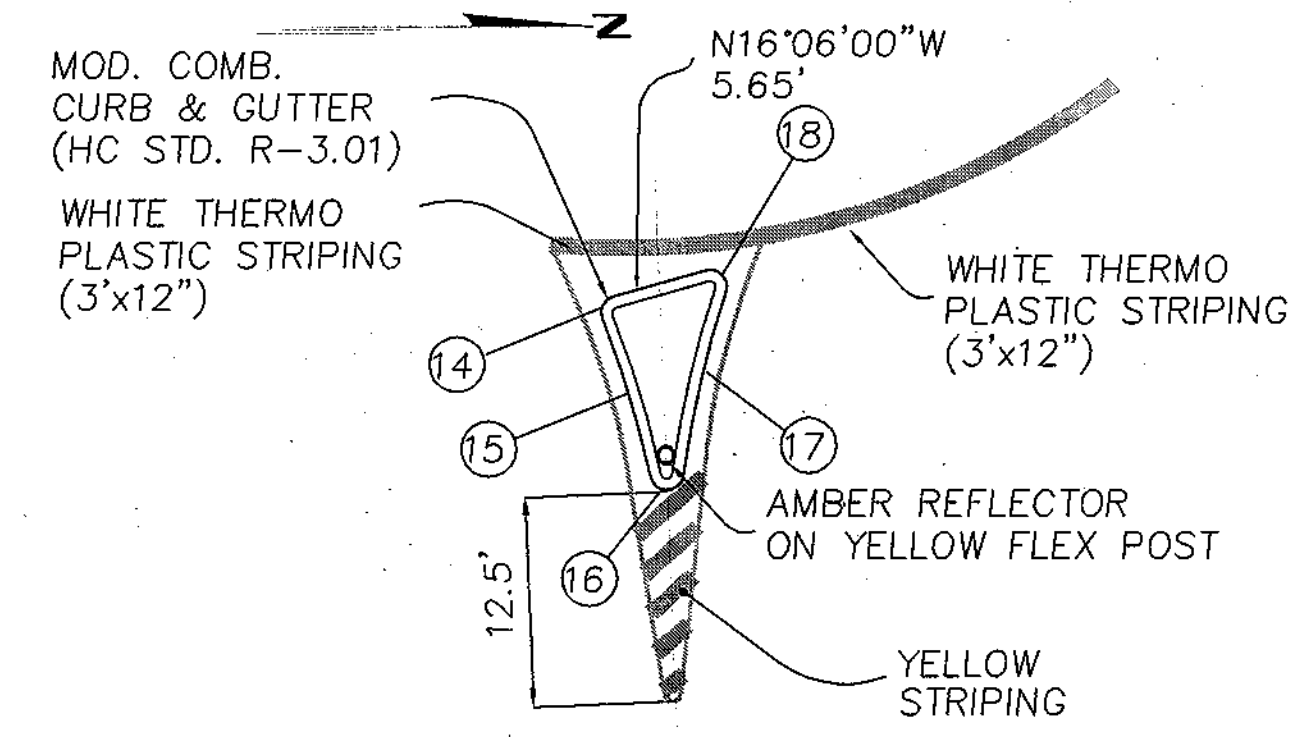
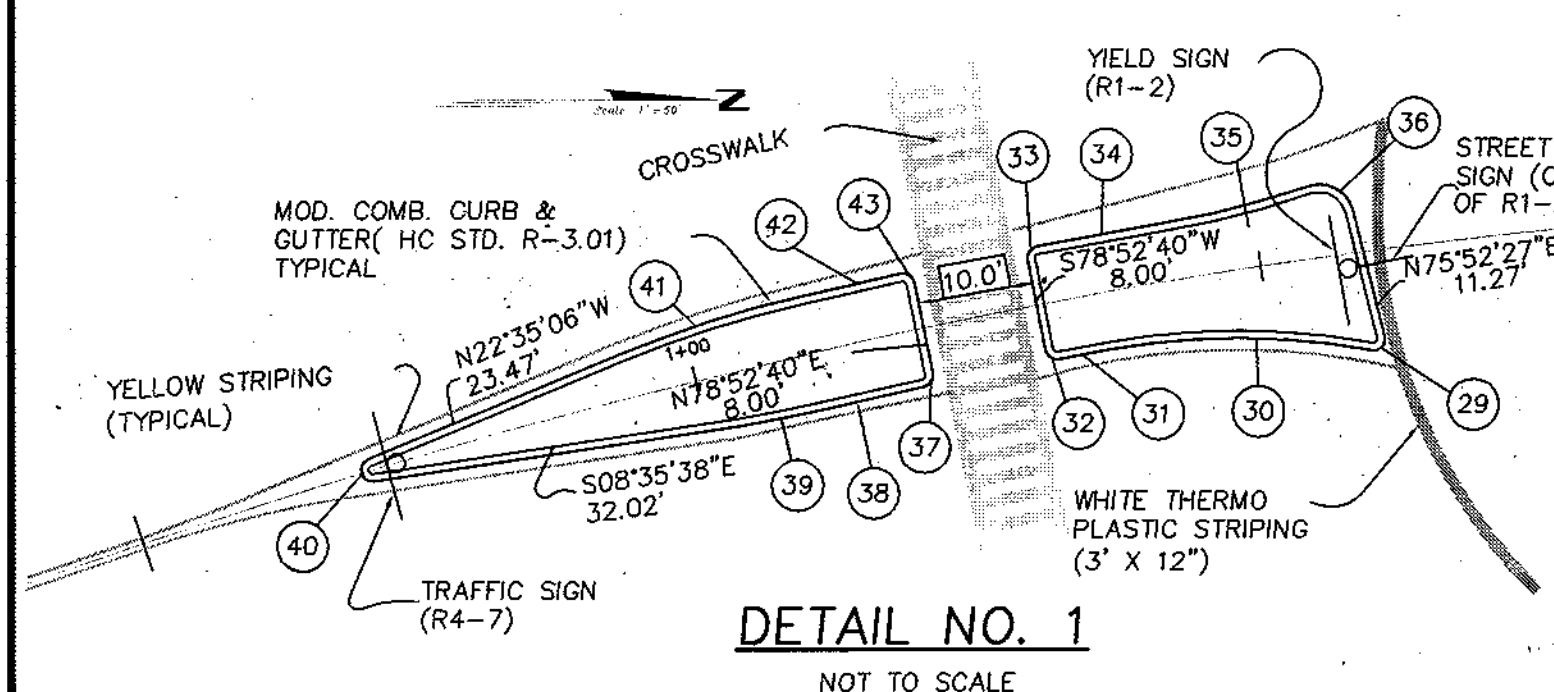
CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction



ROUNDABOUT CURB RADII DATA											
CURVE #	RAD.	ARC	TANG	DELTA	CHORD	CH. BEARING	PC STATION / OFFSET	TC ELEV. @ PC	PT STATION / OFFSET	TC ELEV. @ PT	REMARKS
1	48.40'	41.24'	21.99'	451°3'49"	39.99'	N147°34'2"E	1+35.66 / 20.0' RIGHT	425.78	1+74.81 / 35.23' RIGHT	425.48	EXECUTIVE PARK DR.
2	48.00'	27.68'	27.85'	330°2'20"	27.30'	N55°16'34"E	1+74.81 / 35.23' RIGHT	425.48	0+59.10 / 16.85' RIGHT	425.98	EXECUTIVE PARK DR. / ENT.
3	20.00'	36.98'	26.52'	105°56'48"	31.93'	S55°13'52"E	0+59.10 / 16.85' RIGHT	425.98	0+36.08 / 12.00' RIGHT	426.72	ENT. / JOYFUL WAY
4	20.00'	36.98'	26.52'	105°56'48"	31.93'	N50°42'56"E	0+36.08 / 12.00' LEFT	427.47	0+59.10 / 12.00' LEFT	428.44	WALKING STICK / ENT.
5	48.00'	27.68'	14.24'	330°2'20"	27.30'	S59°47'30"E	0+59.10 / 16.85' LEFT	426.44	2+40.12 / 36.22' RIGHT	425.69	APT. ENTRANCE
6	48.00'	5.05'	2.53'	06°01'52"	5.05'	S46°17'16"E	2+40.12 / 36.22' RIGHT	425.69	2+43.75 / 32.71' RIGHT	426.00	EXECUTIVE PARK DR.
7	65.00'	53.37'	28.29'	47°02'44"	51.86'	S25°45'50"E	2+43.75 / 32.71' RIGHT	425.60	2+91.33 / 12.00' RIGHT	426.00	EXECUTIVE PARK DR.
8	48.00'	42.99'	23.06'	51°19'04"	41.57'	S23°24'04"W	2+83.56 / 12.00' LEFT	425.88	2+46.09 / 30.00' LEFT	425.17	EXECUTIVE PARK DR.
9	48.00'	14.01'	7.06'	16°43'39"	13.96'	S40°41'47"W	2+46.09 / 30.00' LEFT	425.17	2+35.87 / 39.52' LEFT	424.94	EXECUTIVE PARK DR.
10	48.00'	41.01'	21.85'	48°56'55"	39.77'	S56°48'25"W	2+35.87 / 39.52' LEFT	424.94	0+72.68 / 12.00' RIGHT	424.26	SERENITY VIEW DR.
11	48.00'	44.91'	24.25'	53°36'40"	43.29'	N71°54'48"W	0+72.68 / 12.00' LEFT	424.74	1+78.02 / 36.07' LEFT	425.25	SERENITY VIEW DR.
12	48.00'	0.43'	0.21'	90°30'34"	0.43'	N45°21'46"W	1+78.02 / 36.07' LEFT	425.25	1+77.72 / 35.79' LEFT	425.23	EXECUTIVE PARK DR.
13	65.00'	40.51'	20.94'	35°42'26"	39.86'	N27°45'50"W	1+77.72 / 35.79' LEFT	425.23	1+42.34 / 22.00' LEFT	425.70	EXECUTIVE PARK DR.
14	1.00'	1.66'	1.09'	85°11'30"	1.46'	N63°41'45"W	0+50.44 / 2.74' RIGHT	426.60	0+51.74 / 3.44' RIGHT	425.62	APT. ENTRANCE
15	63.00'	9.78'	4.90'	08°53'31"	9.77'	S73°09'16"W	0+51.74 / 3.44' RIGHT	425.62	0+61.19 / 0.98' RIGHT	425.98	APT. ENTRANCE
16	1.00'	2.79'	5.59'	159°42'59"	1.97'	S02°15'28"E	0+61.19 / 0.98' RIGHT	425.98	0+61.19 / 0.98' LEFT	425.98	APT. ENTRANCE
17	63.00'	11.19'	5.61'	10°10'34"	11.17'	S77°01'41"E	0+61.19 / 0.98' LEFT	425.98	0+50.41 / 3.92' LEFT	425.56	APT. ENTRANCE
18	1.00'	2.17'	1.89'	124°09'35"	1.77'	N45°58'48"E	0+50.41 / 3.92' LEFT	425.56	0+49.09 / 2.74' LEFT	425.34	APT. ENTRANCE
19	1.00'	1.66'	1.10'	85°19'53"	1.46'	N22°44'52"E	2+59.16 / 2.55' RIGHT	425.57	2+60.50 / 3.18' RIGHT	425.57	APT. ENTRANCE
20	80.00'	3.82'	1.91'	02°44'13"	3.82'	N23°32'59"W	2+60.50 / 3.18' RIGHT	425.57	2+64.06 / 1.79' RIGHT	425.67	APT. ENTRANCE
21	1.00'	2.48'	2.91'	142°01'11"	1.89'	S86°48'32"W	2+64.06 / 1.79' RIGHT	425.67	2+64.03 / 0.10' LEFT	425.72	EXECUTIVE PARK DR.
22	63.00'	4.79'	2.40'	04°21'36"	4.78'	S17°58'45"W	2+64.03 / 0.10' LEFT	425.72	2+59.54 / 1.76' LEFT	425.60	EXECUTIVE PARK DR.
23	1.00'	2.25'	2.13'	128°44'45"	1.81'	S44°42'48"E	2+59.54 / 1.76' LEFT	425.60	2+58.20 / 0.54' LEFT	425.61	EXECUTIVE PARK DR.
24	1.00'	1.64'	1.07'	84°06'08"	1.46'	N71°13'26"W	0+50.29 / 0.04' LEFT	425.28	0+51.59 / 0.63' RIGHT	425.21	SERENITY VIEW DR.
25	63.00'	1.82'	0.91'	01°39'56"	1.82'	S62°33'02"W	0+51.59 / 0.63' RIGHT	425.21	0+53.31 / 0.05' RIGHT	425.16	SERENITY VIEW DR.
26	1.00'	2.44'	2.71'	139°31'41"	1.88'	S08°23'15"E	0+53.31 / 0.05' RIGHT	425.16	0+53.39 / 1.82' LEFT	425.11	SERENITY VIEW DR.
27	63.00'	2.34'	1.17'	02°07'27"	2.34'	S75°05'22"E	0+53.39 / 1.82' LEFT	425.11	0+51.25 / 2.76' LEFT	425.16	SERENITY VIEW DR.
28	1.00'	2.27'	2.15'	130°08'44"	1.81'	N40°54'00"E	0+51.25 / 2.76' LEFT	425.16	0+49.86 / 1.59' LEFT	425.25	SERENITY VIEW DR.
29	1.00'	2.00'	1.56'	114°35'51"	1.69'	S46°49'38"E	1+59.82 / 7.55' RIGHT	425.43	1+58.49 / 8.62' RIGHT	425.40	EXECUTIVE PARK DR.
30	63.00'	22.94'	11.80'	20°31'30"	22.81'	S00°02'32"W	1+58.49 / 8.62' RIGHT	425.40	1+35.66 / 5.00' RIGHT	425.99	EXECUTIVE PARK DR.
31	495.04'	4.33'	2.17'	00°30'06"	4.33'	S10°38'16"E	1+35.66 / 5.00' RIGHT	425.99	1+31.28 / 5.00' RIGHT	426.09	EXECUTIVE PARK DR.
32	1.00'	1.57'	1.00'	89°45'59"	1.41'	S33°59'40"W	1+31.28 / 5.00' RIGHT	426.09	1+30.27 / 4.00' RIGHT	426.14	EXECUTIVE PARK DR.
33	1.00'	1.57'	1.00'	90°08'32"	1.42'	N56°03'04"W	1+30.27 / 4.00' LEFT	426.14	1+31.28 / 5.00' LEFT	426.14	EXECUTIVE PARK DR.
34	605.00'	11.29'	5.65'	01°04'10"	11.29'	N10°26'43"W	1+31.28 / 5.00' LEFT	426.09	1+42.43 / 5.04' LEFT	425.85	EXECUTIVE PARK DR.
35	82.00'	12.82'	6.42'	08°57'33"	12.81'	N14°23'24"W	1+42.43 / 5.04' LEFT	425.85	1+55.03 / 6.27' LEFT	425.54	EXECUTIVE PARK DR.
36	3.00'	4.96'	3.26'	94°44'37"	4.41'	N28°30'08"E	1+55.03 / 6.27' LEFT	425.54	1+58.55 / 3.65' LEFT	425.54	EXECUTIVE PARK DR.
37	1.00'	1.55'	0.98'	88°50'51"	1.40'	S56°41'55"E	1+20.20 / 5.00' RIGHT	426.36	1+19.19 / 5.01' RIGHT	426.35	EXECUTIVE PARK DR.
38	495.00'	8.29'	4.15'	00°57'36"	8.29'	S12°45'17"E	1+19.19 / 5.01' RIGHT	426.35	1+10.83 / 5.04' RIGHT	426.53	EXECUTIVE PARK DR.
39	100.00'	8.10'	4.05'	04°38'27"	8.10'	S10°54'51"E	1+10.83 / 5.04' RIGHT	426.53	1+02.68 / 4.70' RIGHT	426.71	EXECUTIVE PARK DR.
40	1.00'	2.90'	8.15'	168°00'32"	1.99'	S74°24'38"W	0+70.72 / 1.00' RIGHT	427.51	0+70.76 / 0.99' LEFT	427.51	EXECUTIVE PARK DR.
41	100.00'	16.81'	8.43'	09°37'57"	16.79'	N17°48'08"W	0+93.97 / 3.82' LEFT	428.93	1+10.60 / 5.00' LEFT	426.53	EXECUTIVE PARK DR.
42	605.00'	8.81'	4.40'	00°50'03"	8.81'	N12°32'07"W	1+10.60 / 5.00' LEFT	426.53	1+19.33 / 5.00' LEFT	426.34	EXECUTIVE PARK DR.
43	1.00'	1.59'	1.02'	90°59'46"	1.43'	N33°22'47"E	1+19.33 / 5.00' LEFT	426.34	1+20.33 / 3.98' LEFT	426.35	EXECUTIVE PARK DR.

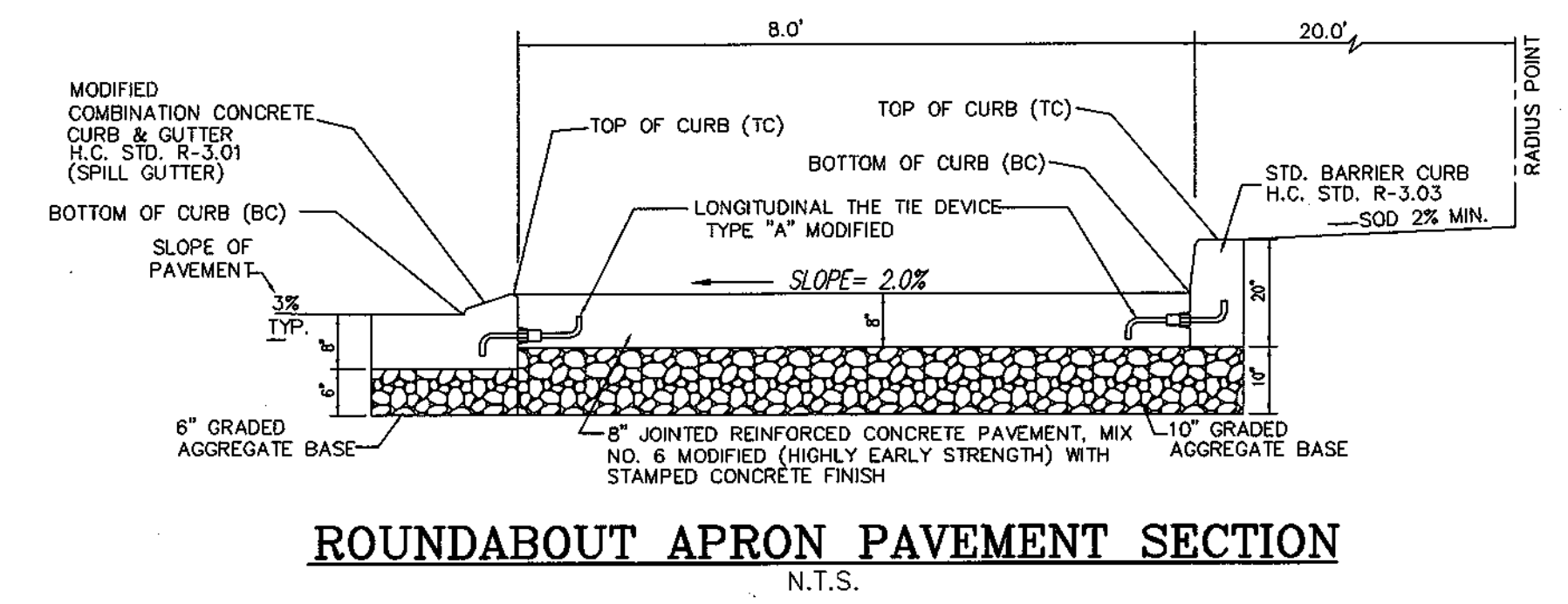
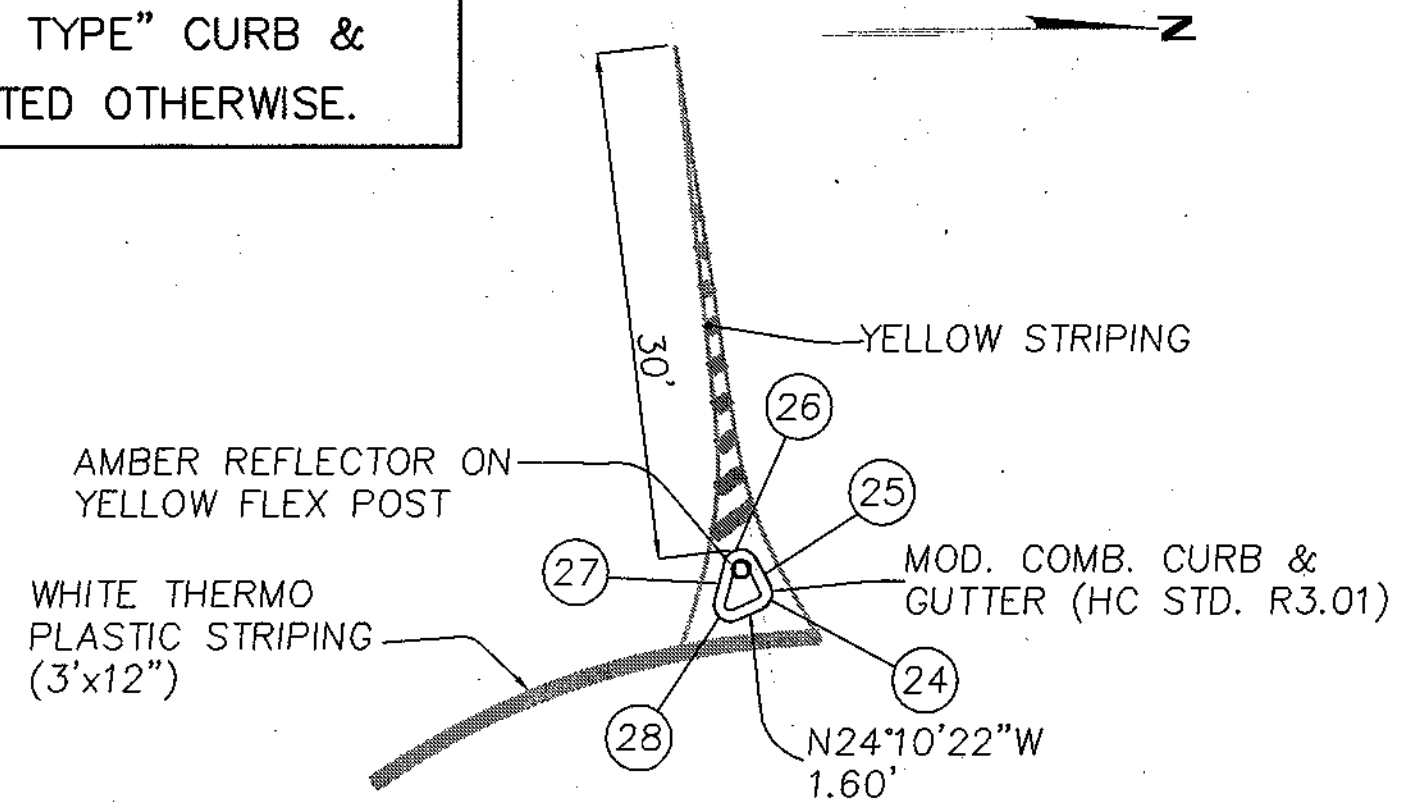
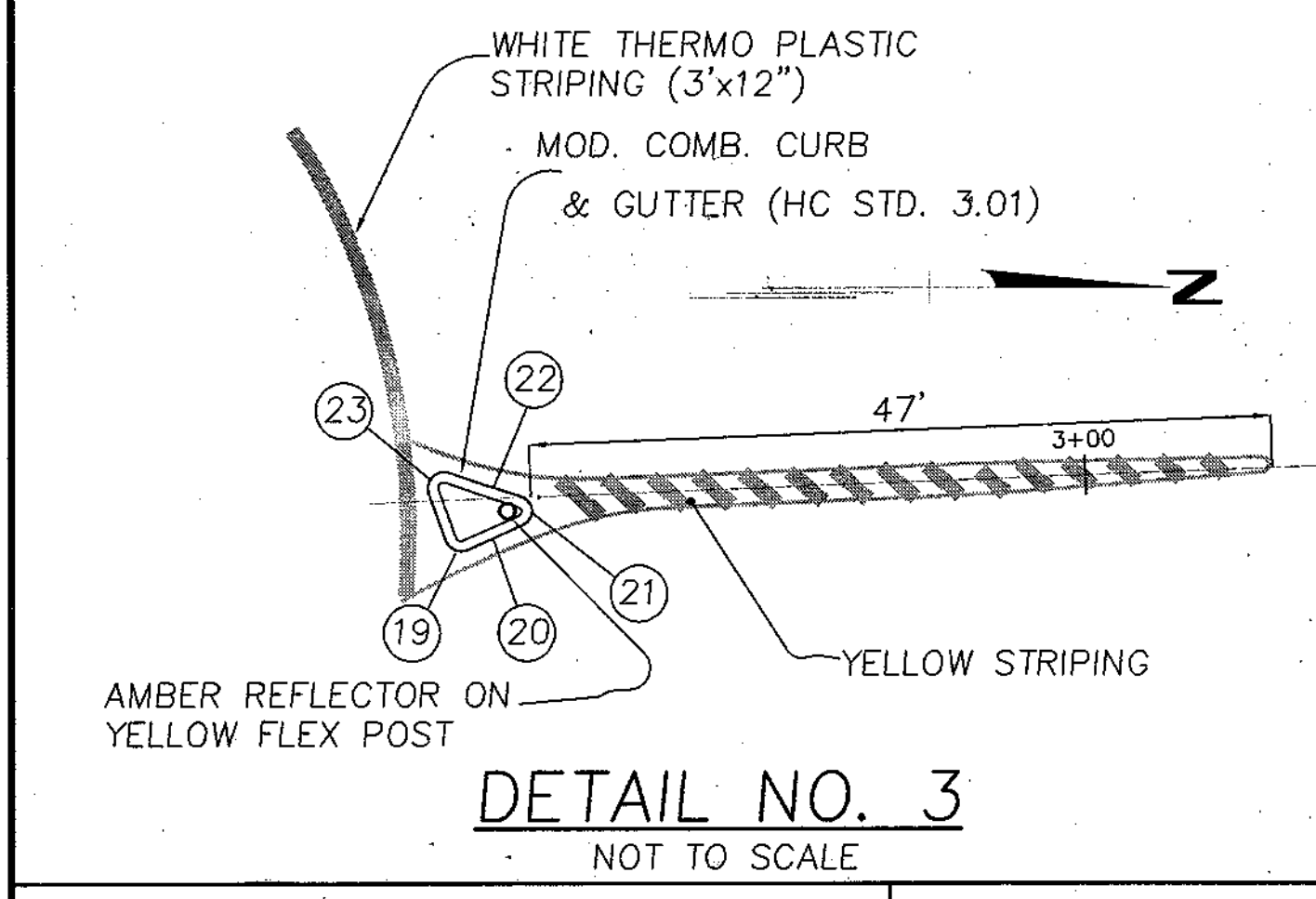
NOTE: ALL ELEVATIONS PROVIDED ARE TOP OF CURB.

PLAN VIEW
SCALE: 1"=20'



NOTE:
ALL ISLAND CURB & GUTTER SHALL
BE HOWARD CO. STD. R-3.01 MODIFIED
COMBINATION "SPILL TYPE" CURB &
GUTTER UNLESS NOTED OTHERWISE.

DETAIL NO. 2
NOT TO SCALE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Kent Galloway / JAC 9-4-03
 CHIEF, DIVISION OF LAND DEVELOPMENT JA DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Willie T. Madala / JAC 8-21-03
 CHIEF, BUREAU OF HIGHWAY JAC DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

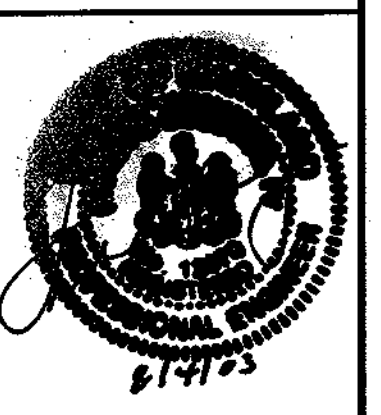
Developer/Owner:
 Winchester Homes, Inc. &
 Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803 - 4800

(PUBLIC LOCAL STREET)
**ROUNDABOUT AT
 EXECUTIVE PARK DRIVE
 PLAN AND DETAILS**

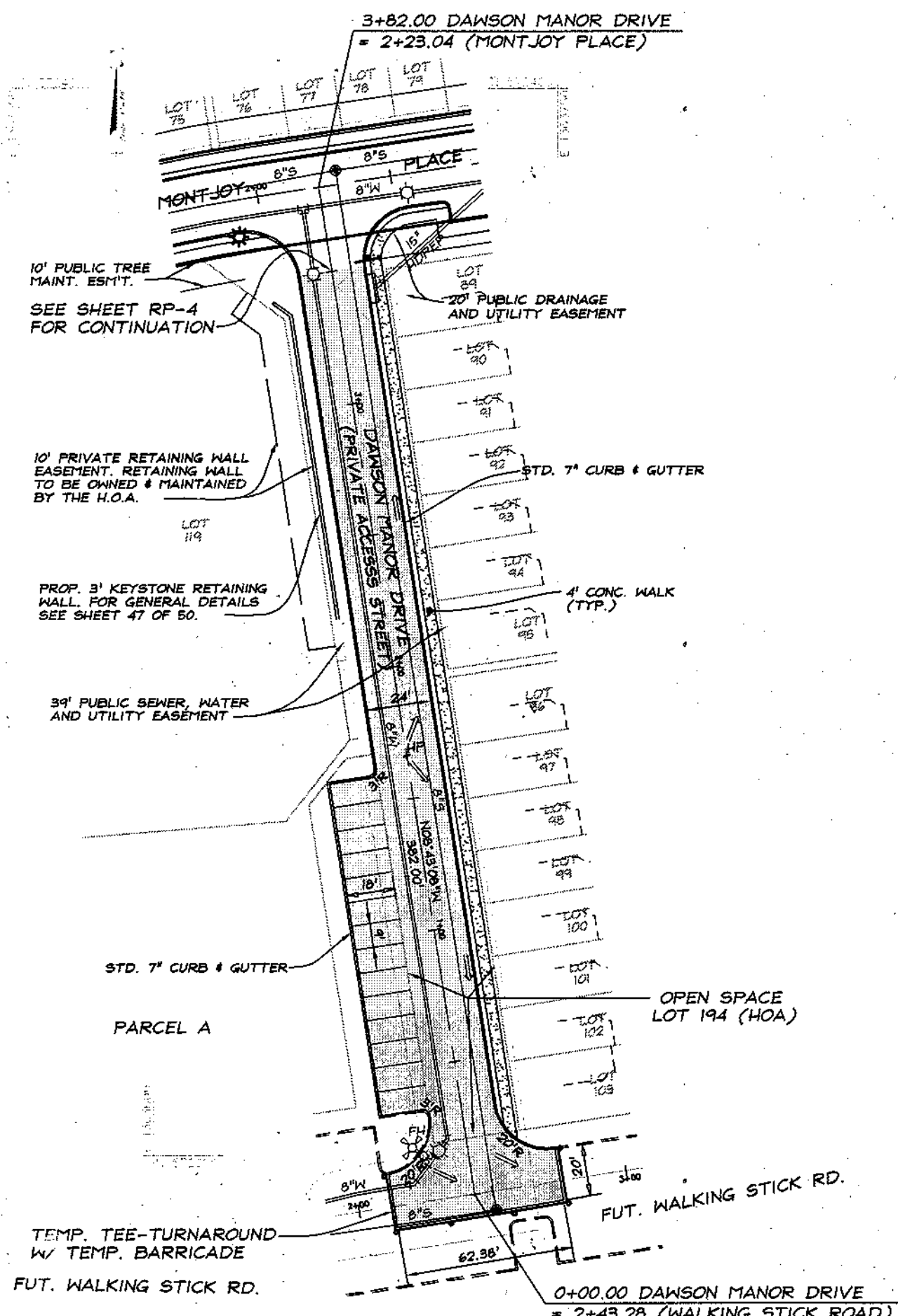


Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I, II, & III
Montjoy
 ELECTION DISTRICT NO. 2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID: 12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-76, P-02-10, P-02-17, P-03-03



SCALE: AS SHOWN
 JOB No. 506V3
 DATE: 12-20-02
 INDEX No. RP-5
 SHEET No. 6 of 50



DAWSON MANOR DRIVE
PRIVATE ACCESS STREET - 40' R/W (DESIGN SPEED=25 MPH)
PLAN VIEW
SCALE: 1"=50'

STATION	OFFSET	ELEVATION
PC STA: 0+12.00	- 32.00' RT.	T/C = 430.43
PC STA: 0+12.07	- 30.34' LT.	T/C = 431.24
PCC STA: 0+30.82	- 12.00' LT.	T/C = 431.81
PT STA: 0+32.00	- 12.00' RT.	T/C = 431.01
PC STA: 0+34.00	- 15.00' LT.	T/C = 431.98
COR STA: 0+34.00	- 30.00' LT.	T/C = 432.43
PT STA: 1+40.00	- 15.00' LT.	T/C = 434.23
COR STA: 1+60.00	- 30.00' LT.	T/C = 436.69
PT STA: 1+63.00	- 12.00' LT.	T/C = 434.14
PC STA: 3+49.94	- 12.00' LT. (FILLET)	T/C = 429.25
PT STA: 3+49.94	- 12.00' RT.	T/C = 428.48

DRIVEWAY LOCATION DATA

LOT #	LOCATION	STREET NAME
89	CL 3+27.50	DAWSON MANOR DRIVE
90	CL 3+07.50	DAWSON MANOR DRIVE
91	CL 2+87.50	DAWSON MANOR DRIVE
92	CL 2+67.50	DAWSON MANOR DRIVE
93	CL 2+47.50	DAWSON MANOR DRIVE
94	CL 2+27.50	DAWSON MANOR DRIVE
95	CL 2+07.50	DAWSON MANOR DRIVE
96	CL 1+72.50	DAWSON MANOR DRIVE
97	CL 1+52.50	DAWSON MANOR DRIVE
98	CL 1+32.50	DAWSON MANOR DRIVE
99	CL 1+12.50	DAWSON MANOR DRIVE
100	CL 0+92.50	DAWSON MANOR DRIVE
101	CL 0+72.50	DAWSON MANOR DRIVE
102	CL 0+52.50	DAWSON MANOR DRIVE
103	CL 0+41.50	DAWSON MANOR DRIVE

NOTE: THE BUILDER(S) IS RESPONSIBLE FOR ALL EXPENSE IF THE CONSTRUCTED DRIVEWAY(S) IS BEING RELOCATED.

NOTE: THE D/W LOCATIONS PROVIDED ARE FOR THE CENTERLINE OF D/W. D/W'S SHALL BE 10' WIDE AT PROPERTY LINE UNLESS NOTED OTHERWISE.

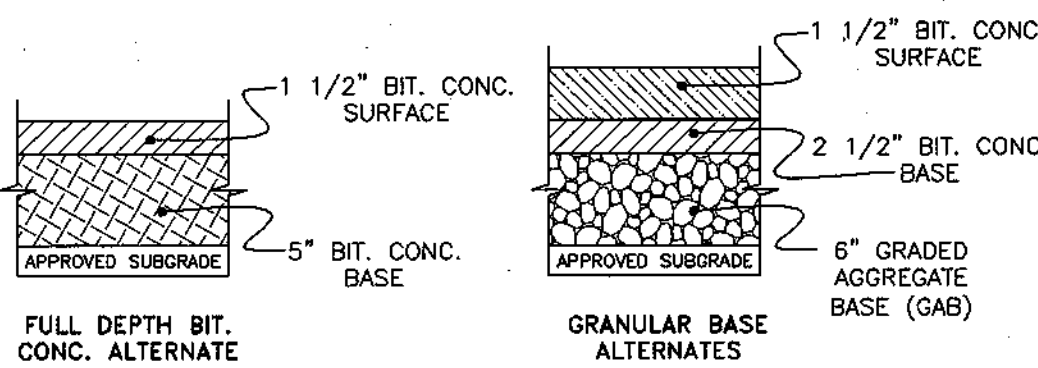
CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start of Construction

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

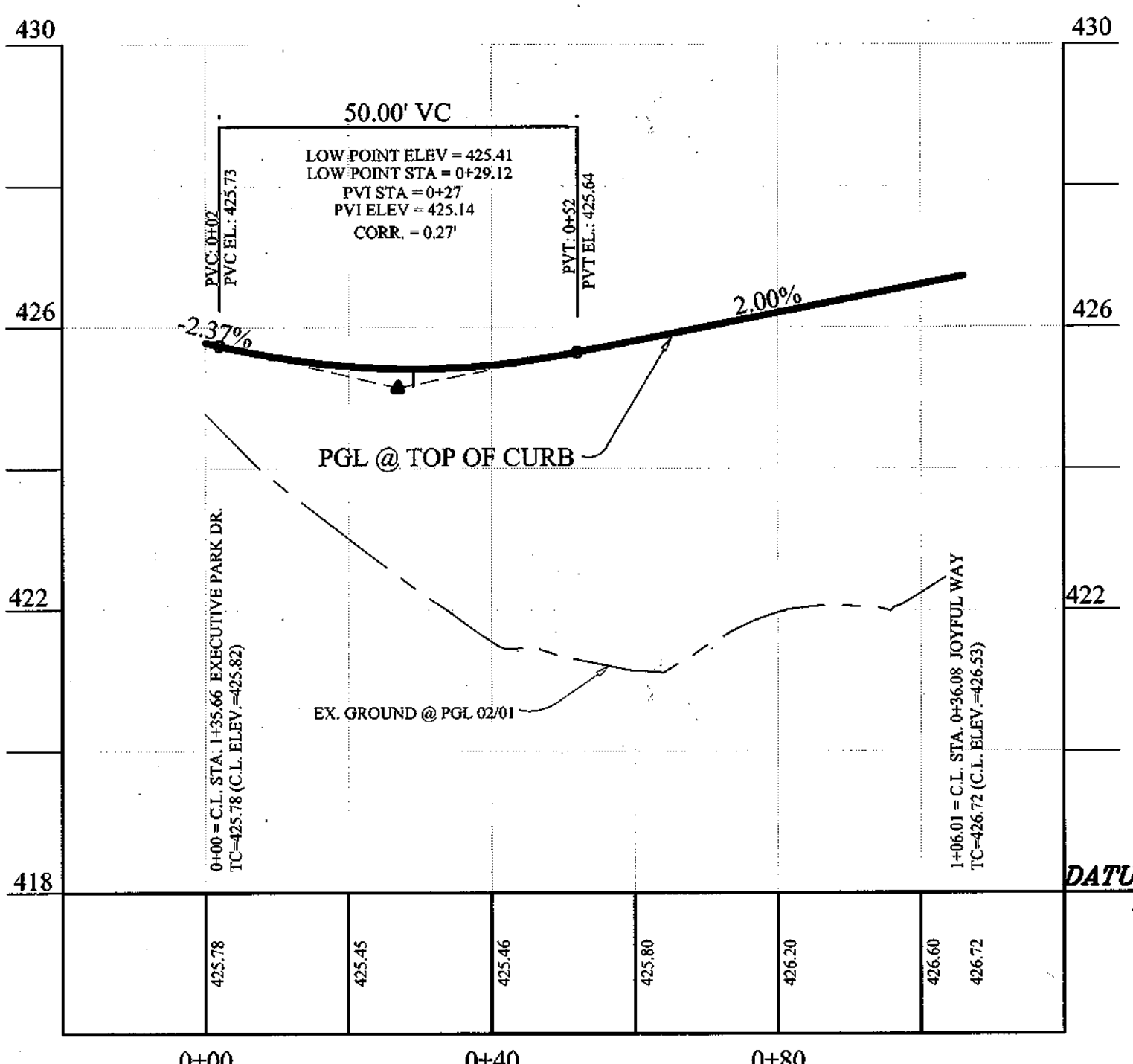
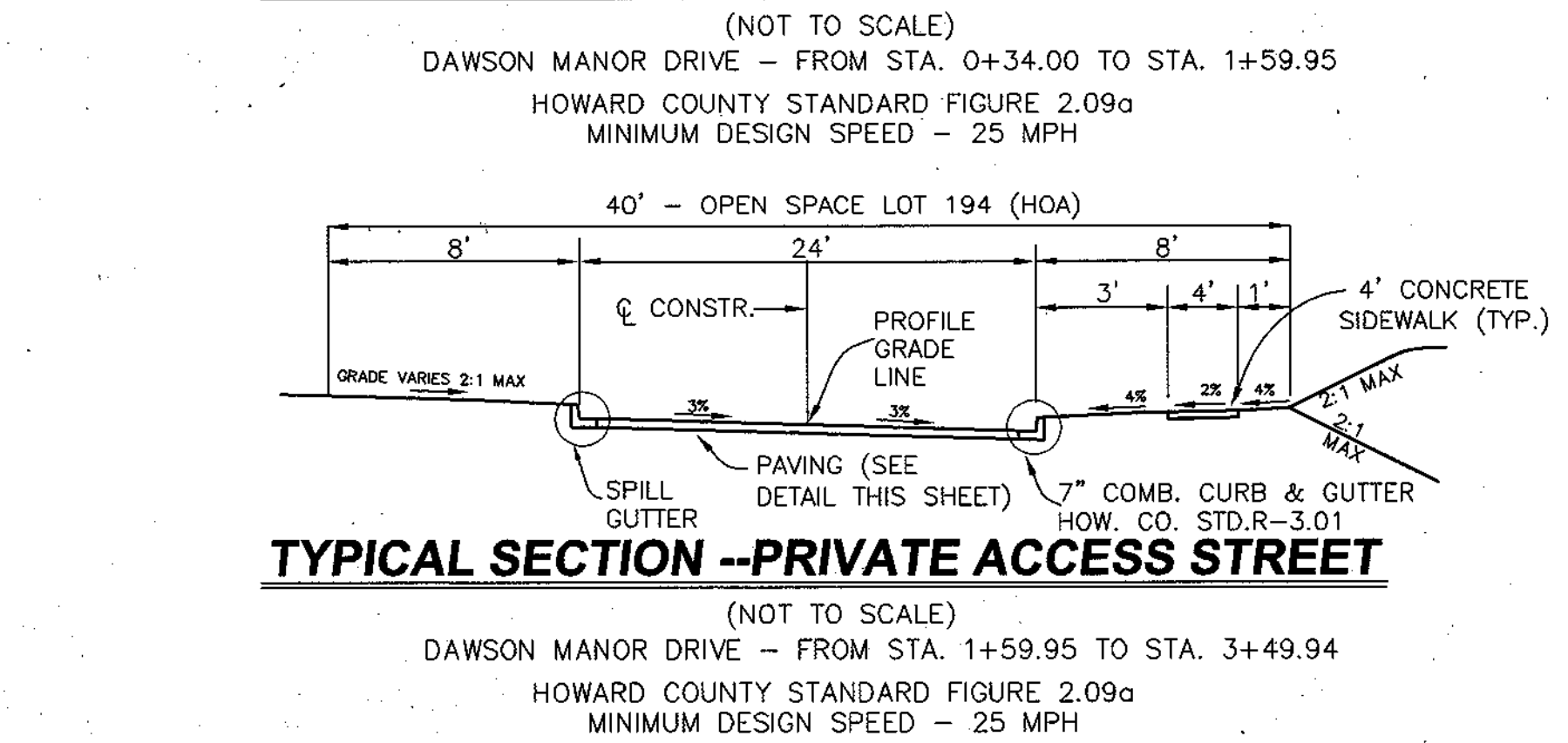
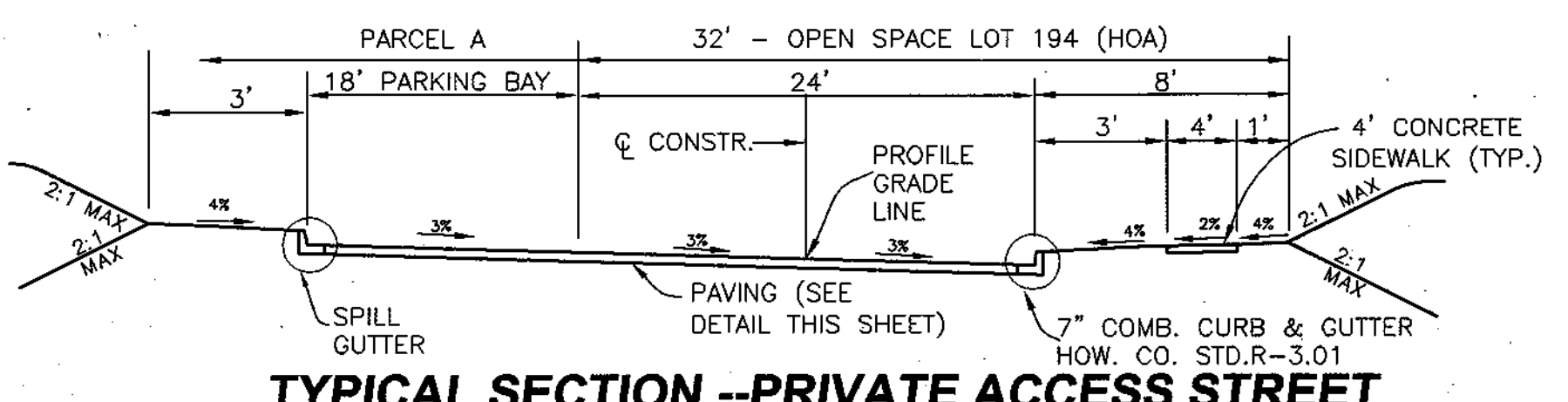
K. J. ...
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 9/16/03

William J. ...
CHIEF, BUREAU OF HIGHWAY
DATE: 8-21-03

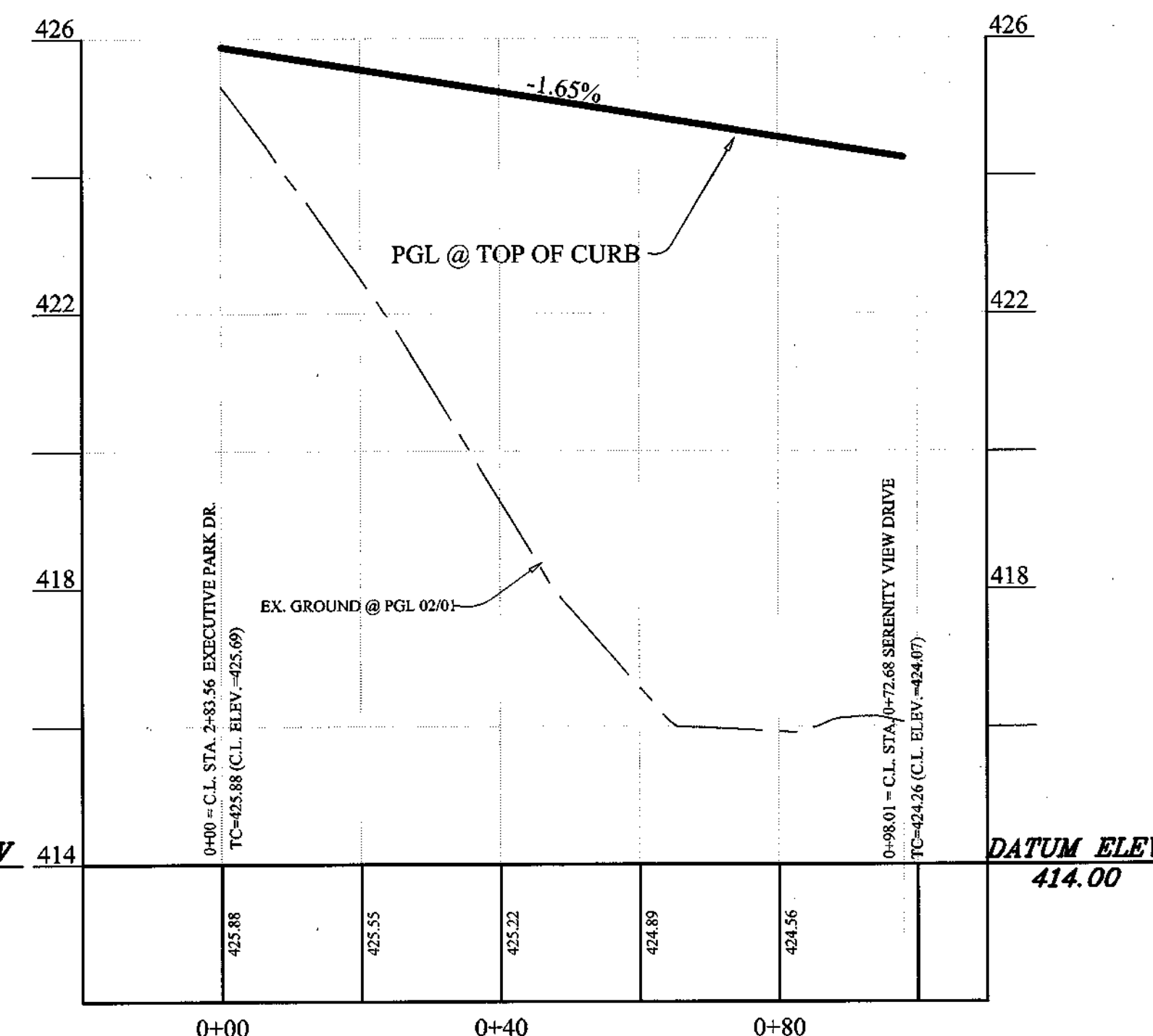


SECTION NUMBER	ROAD AND STREET CLASSIFICATION
P-2	RESIDENTIAL ZONES LOCAL, CUL-DE-SAC STS. ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL LOTS TRAVELWAYS APARTMENTS AND COMMERCIAL-INDUSTRIAL ZONES WITH NO MORE THAN 10 HEVY TRUCKS PER DAY*

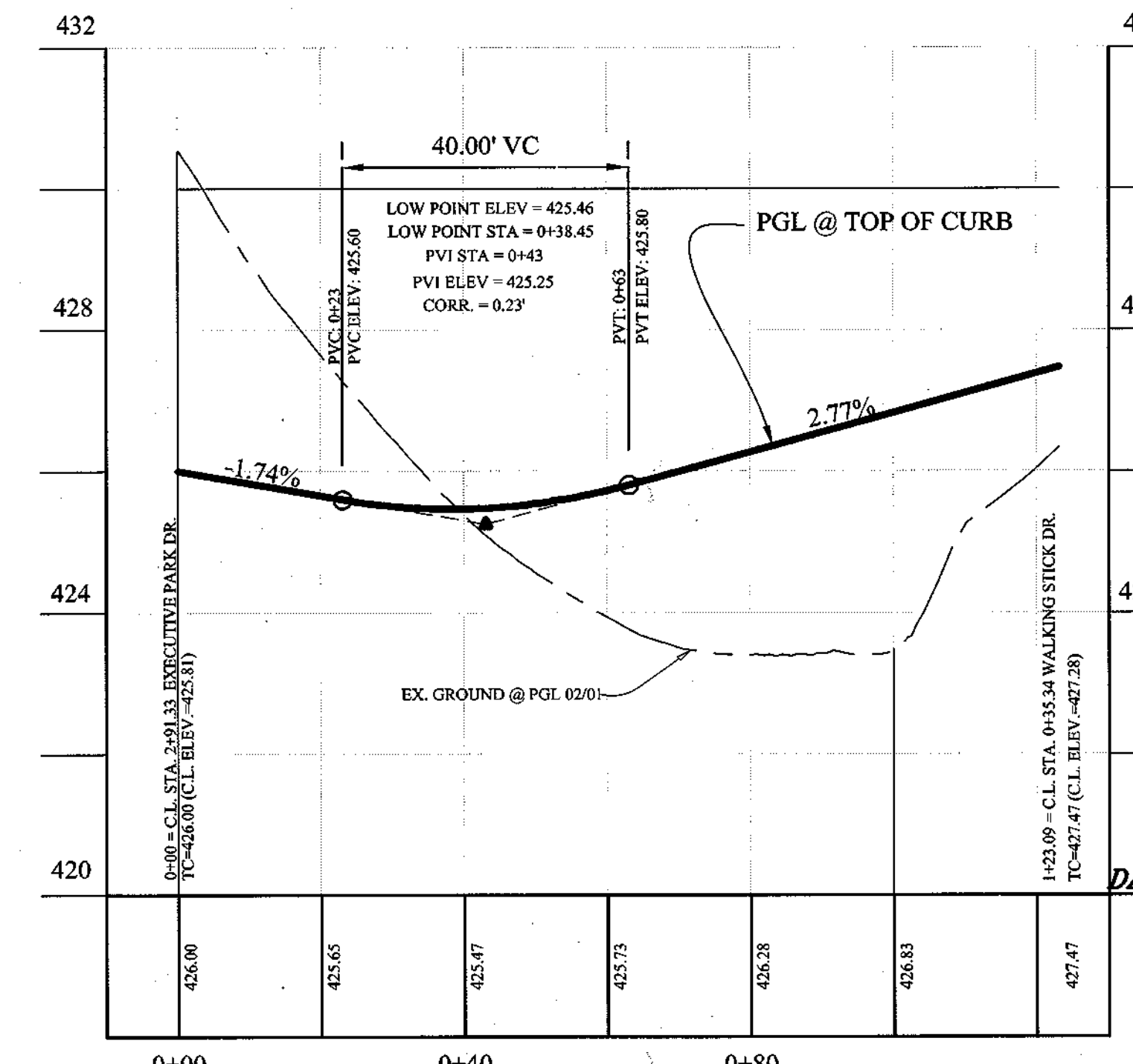
DAWSON MANOR DRIVE
PRIVATE ACCESS STREET - 40' R/W (DESIGN SPEED=25 MPH)
SCALE: V: 1"=5', H: 1"=50'



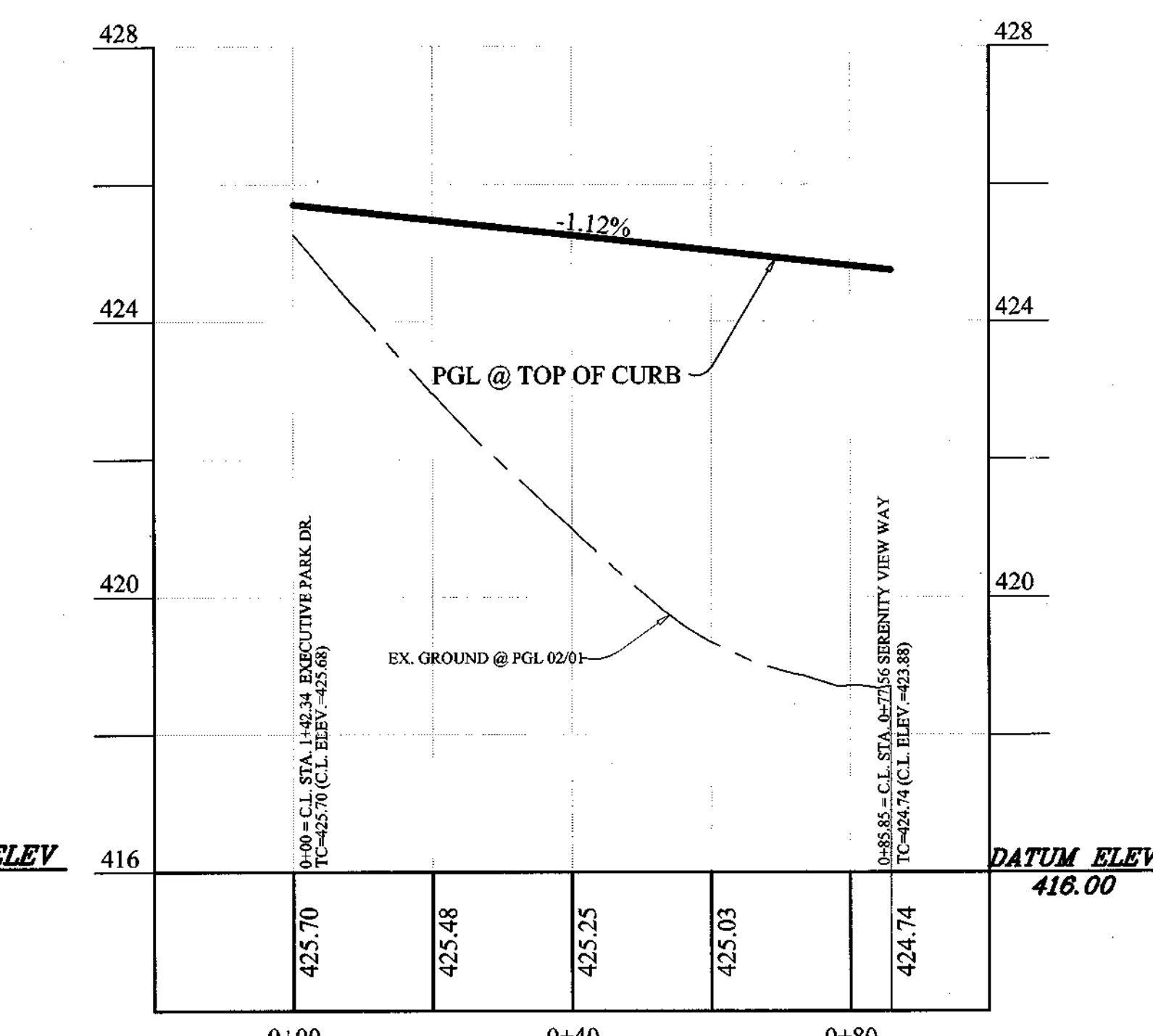
CURB RETURN PROFILE:
RIGHT OF EXECUTIVE PARK DR. & JOYFUL WAY
PROFILE
SCALE: H: 1"=20', V: 1"=2'



CURB RETURN PROFILE:
RIGHT OF EXECUTIVE PARK DR. & SERENITY VIEW WAY
PROFILE
SCALE: H: 1"=20', V: 1"=2'



CURB RETURN PROFILE:
LEFT OF EXECUTIVE PARK DR. & WALKING STICK DRIVE
PROFILE
SCALE: H: 1"=20', V: 1"=2'



CURB RETURN PROFILE:
LEFT OF EXECUTIVE PARK DR. & SERENITY VIEW WAY
PROFILE
SCALE: H: 1"=20', V: 1"=2'

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		YSL	
	DRAWN		YSL	
	REVIEWED		PF/RF	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

CURB RETURN PROFILES & (PRIVATE ACCESS STREET) DAWSON MANOR DRIVE PLAN AND PROFILE

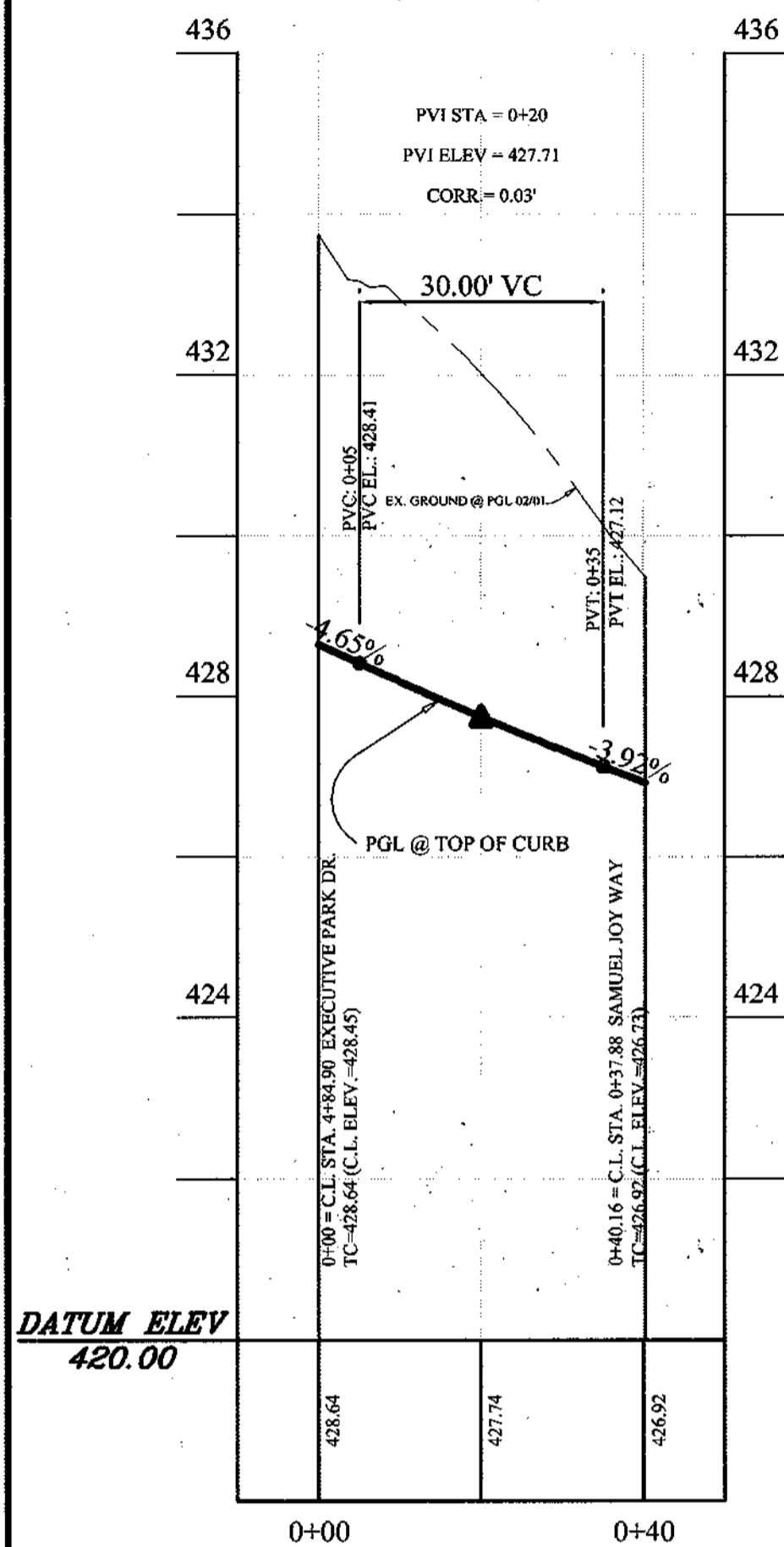


Rodgers Consulting, Inc.
9260 Gaiters Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II, & III
Montjoy
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03



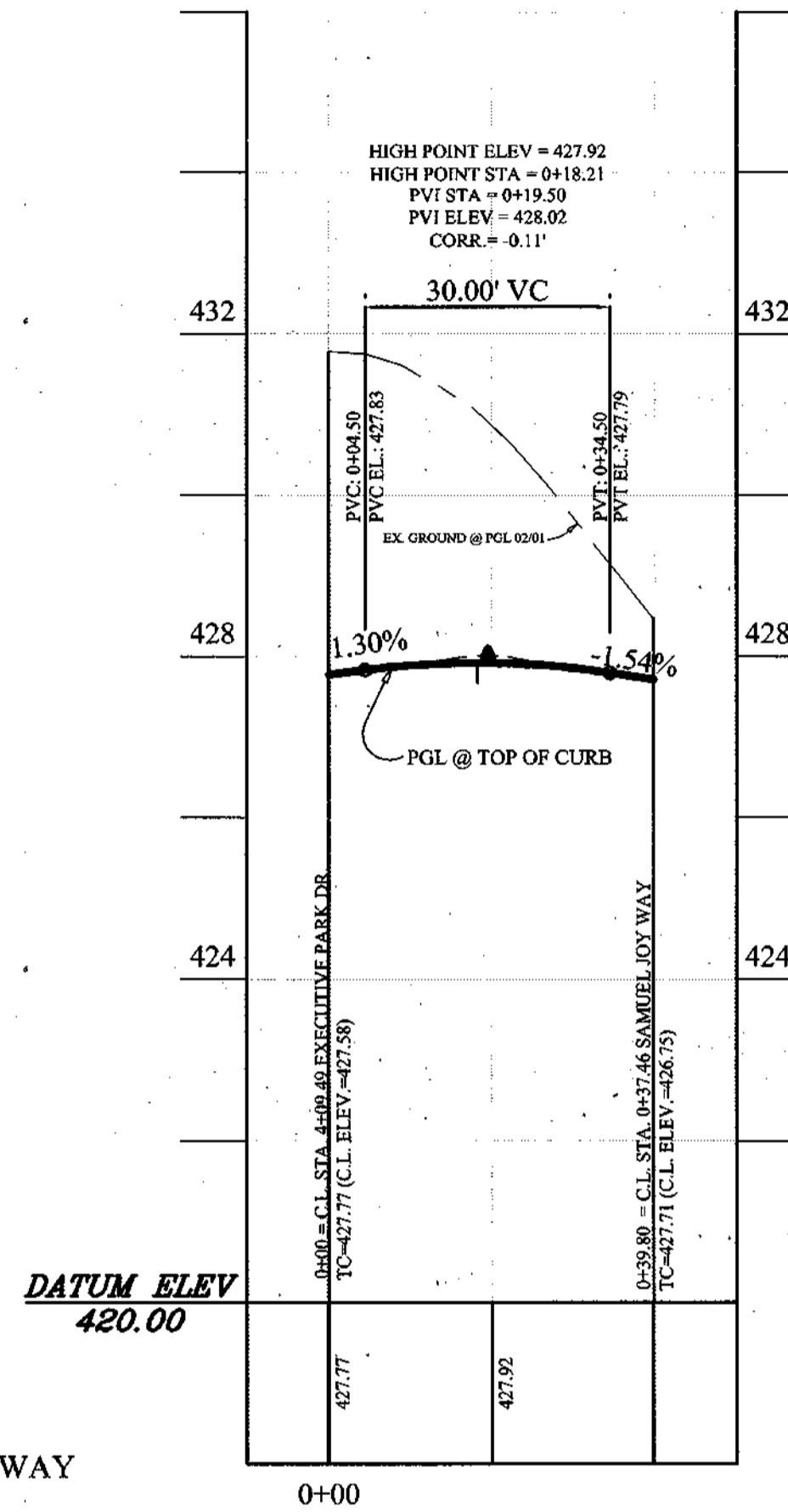
SCALE: AS SHOWN
JOB No. 506V3
DATE: 12-20-02
INDEX No. RP-6
SHEET No. 7 OF 50



CURB RETURN PROFILE:

RIGHT OF EXECUTIVE PARK DR. & SAMUEL JOY WAY

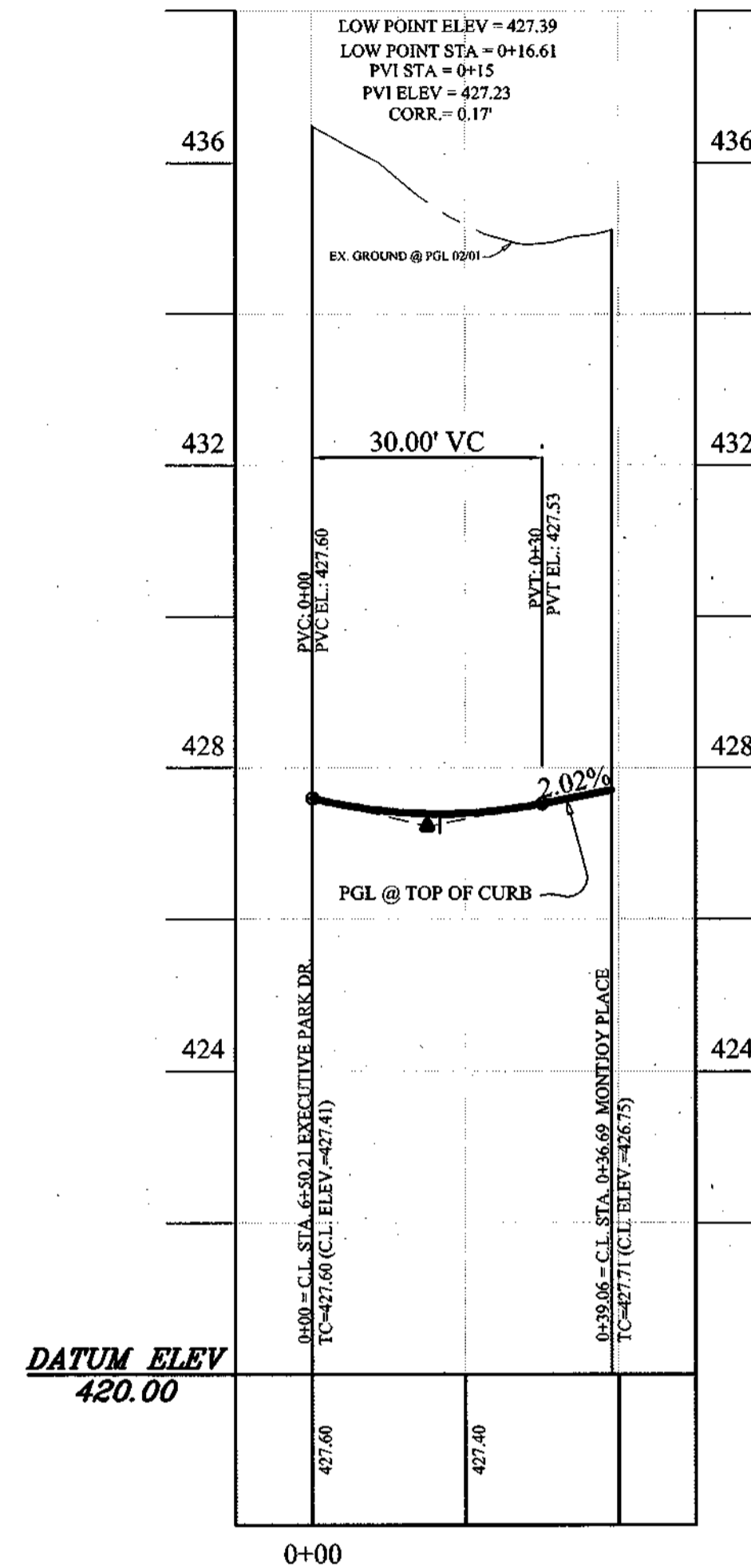
PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:

LEFT OF EXECUTIVE PARK DR. & SAMUEL JOY WAY

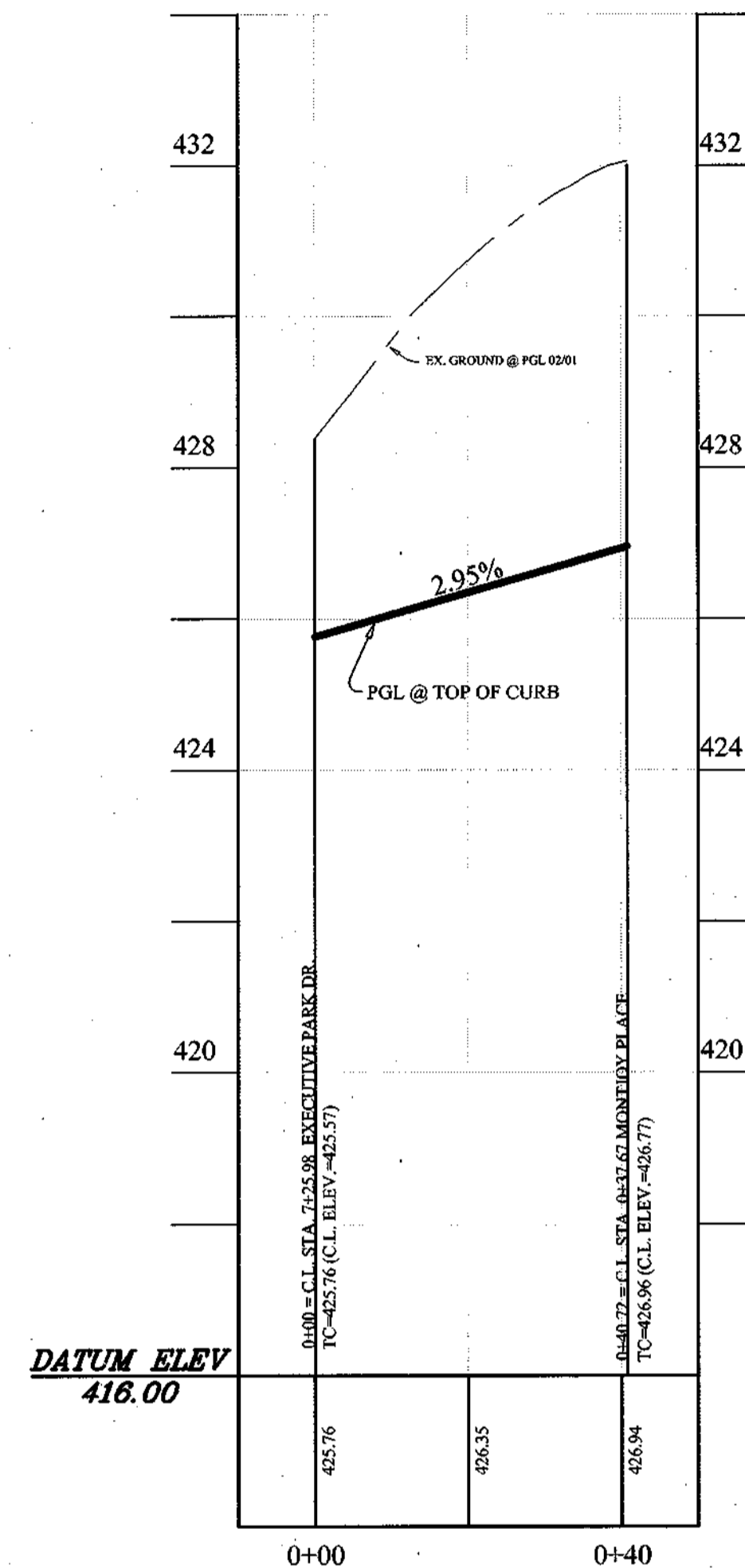
PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:

RIGHT OF EXECUTIVE PARK DR. & MONTJOY PLACE

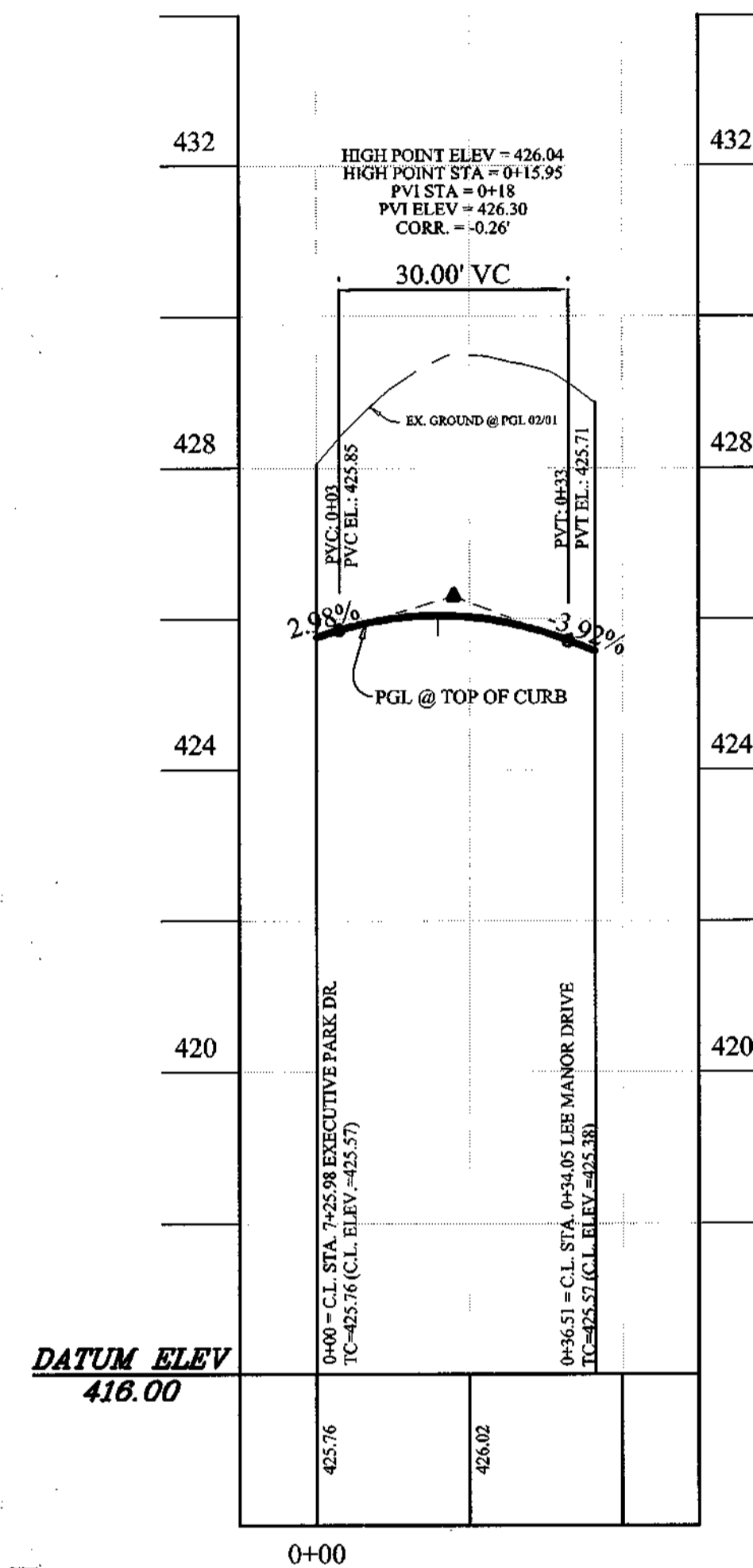
PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:

LEFT OF EXECUTIVE PARK DR. & MONTJOY PLACE

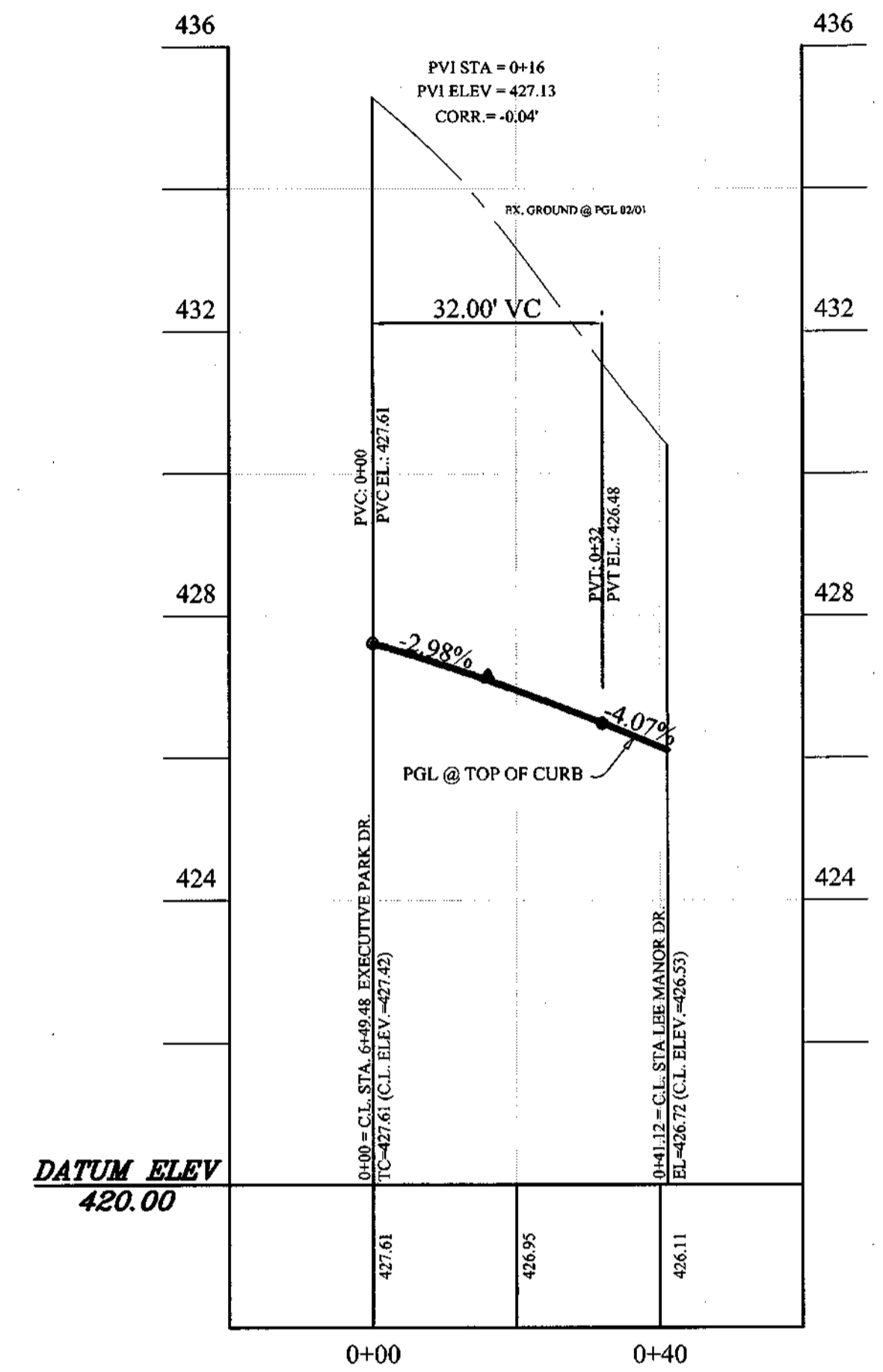
PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:

RIGHT OF EXECUTIVE PARK DR. & LEE MANOR DRIVE

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:

LEFT OF EXECUTIVE PARK DR. & LEE MANOR DRIVE

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

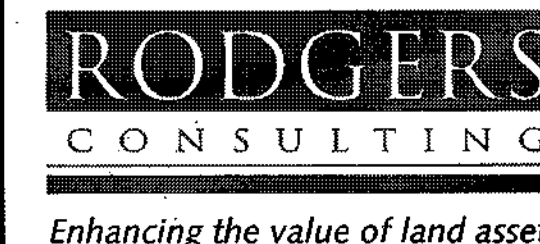
Kat Shearlock 9/10/03
CHIEF, DIVISION OF LAND DEVELOPMENT
William J. Mader Jr. 9/10/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

William J. Mader Jr. 9/21/03
CHIEF, BUREAU OF HIGHWAY

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	SUBMITTED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

CURB RETURN PROFILES



Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

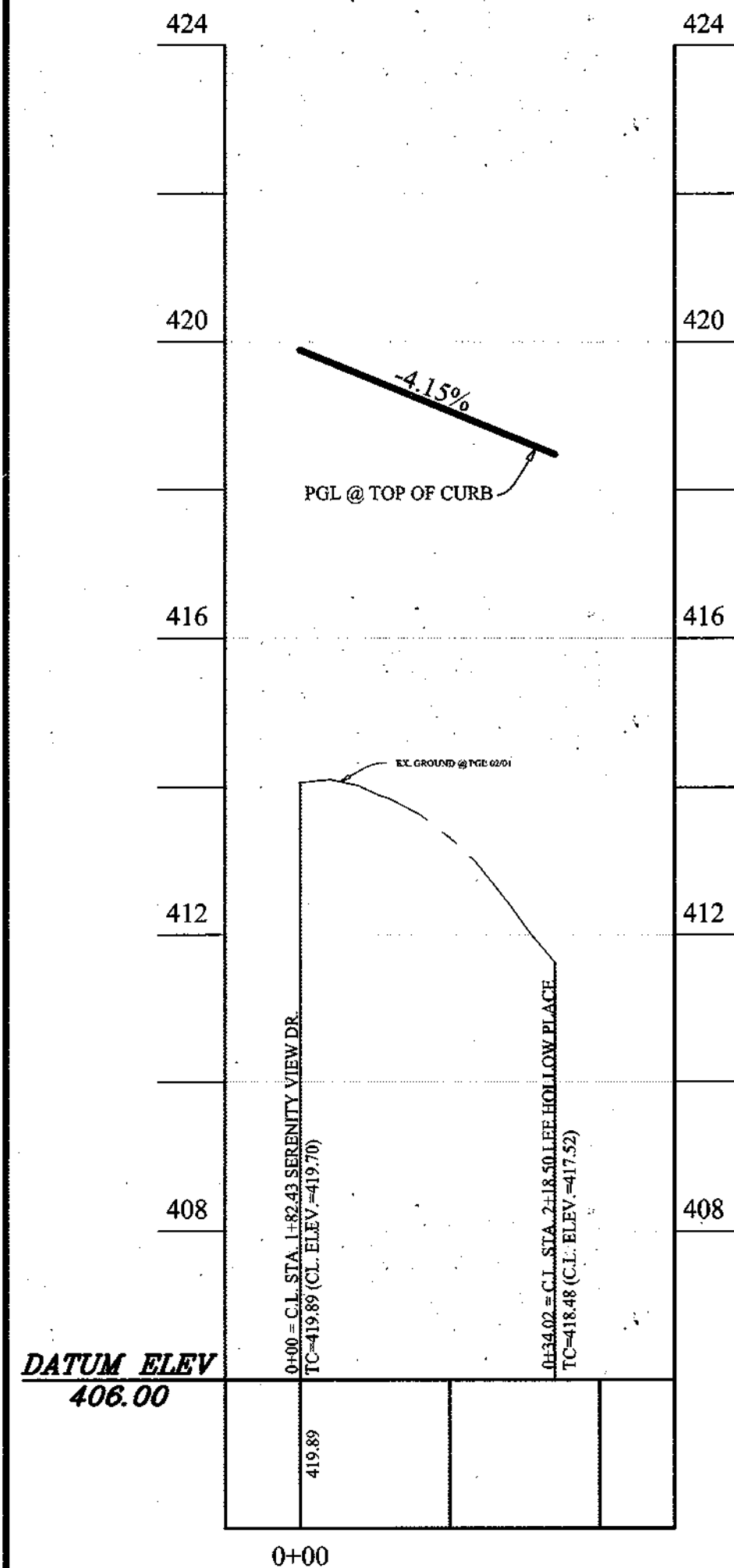
* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A",
OPEN SPACE LOTS 120 - 126, 194 AND
NON-BUILDABLE BULK PARCELS "B" AND "C"

*** PHASES I, II, & III
Montjoy**

ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

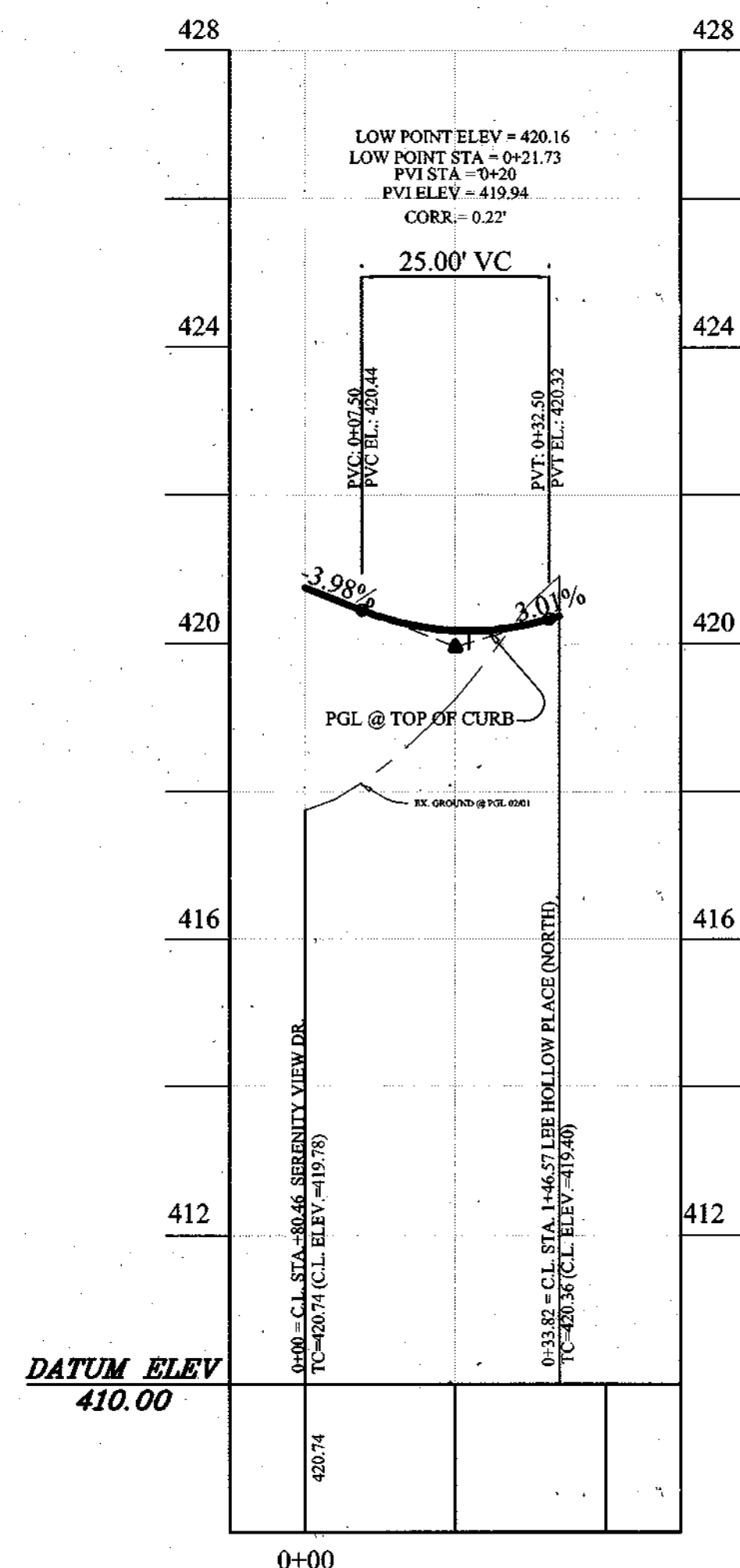


SCALE: AS SHOWN
JOB No. 506V3
DATE: 12-20-02
INDEX No. RP-7
SHEET No. 8 OF 50



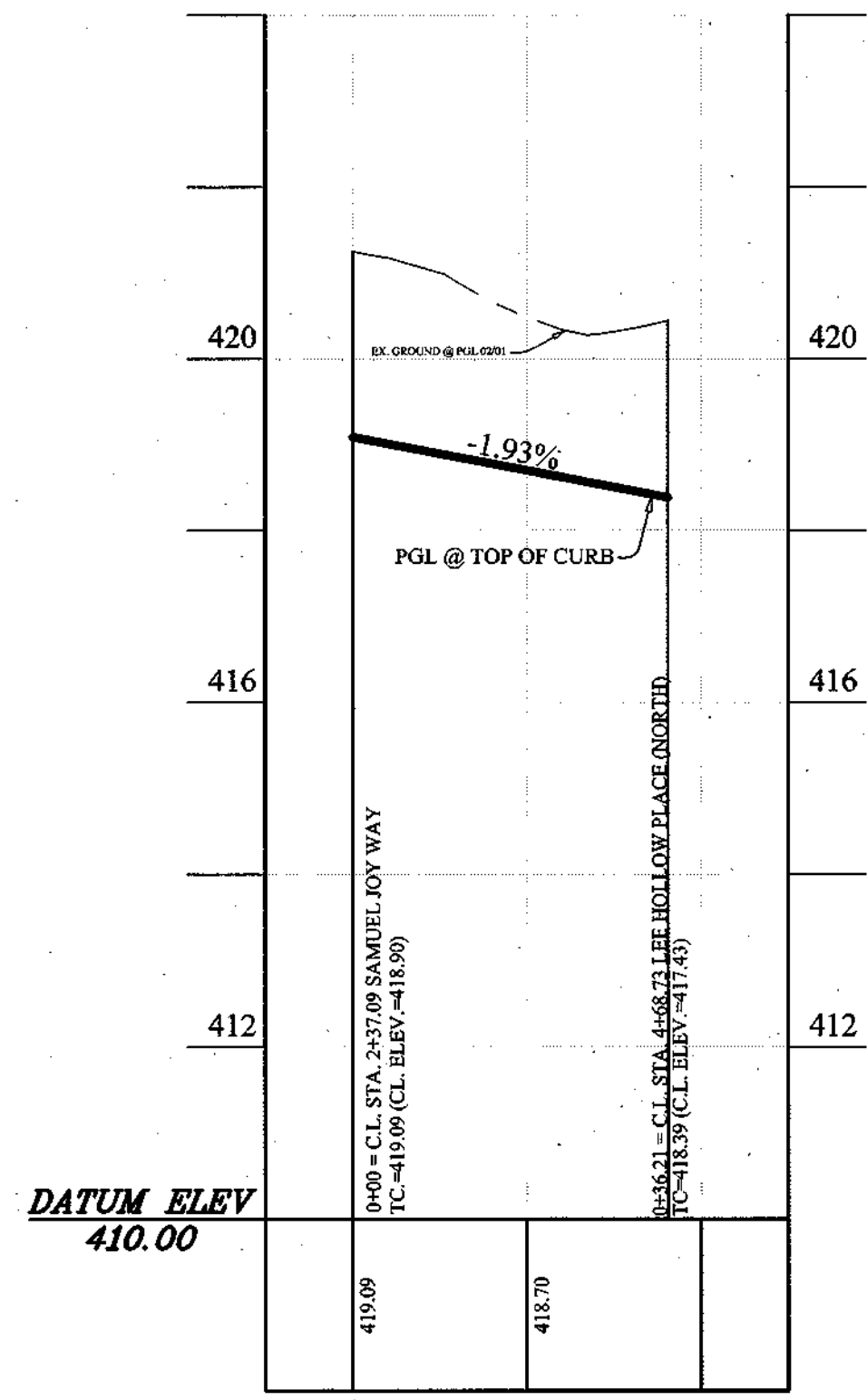
CURB RETURN PROFILE:
RIGHT OF SERENITY VIEW DR. & LEE HOLLOW PLACE

PROFILE
SCALE: H: 1"=20'
V: 1"=2'



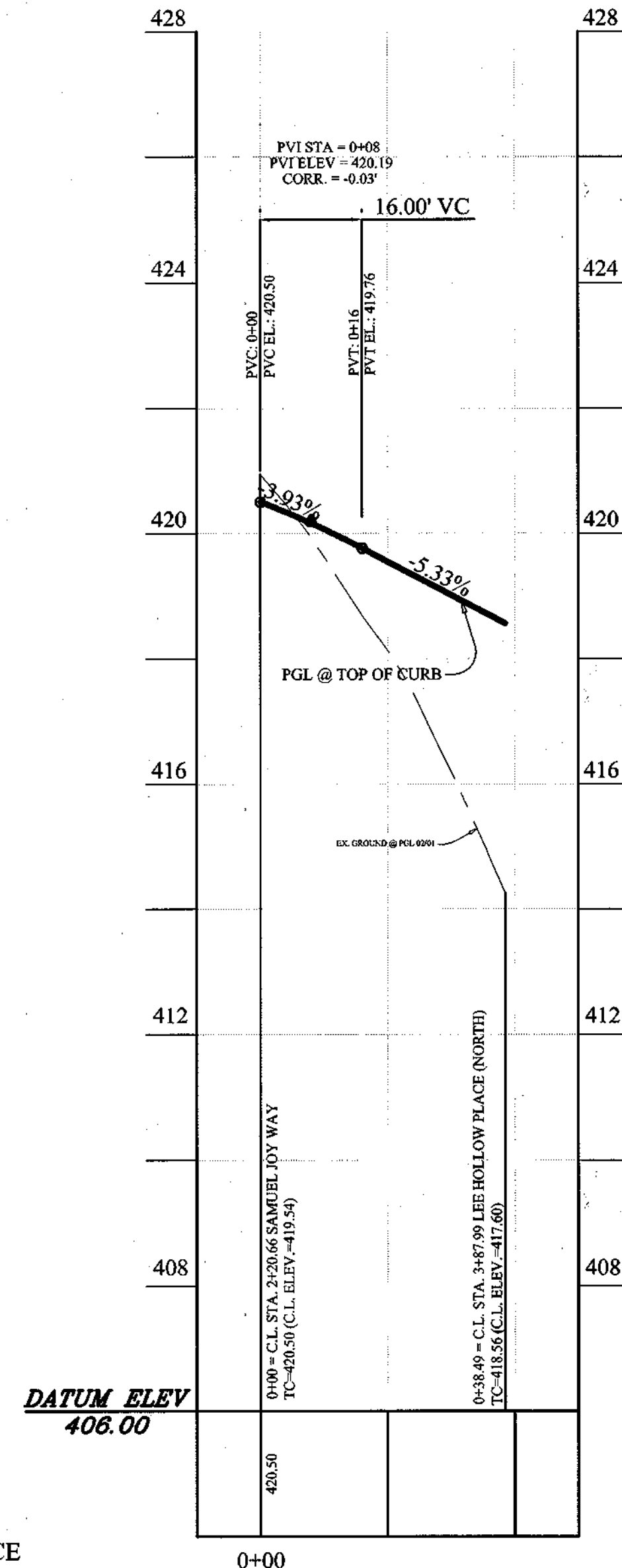
CURB RETURN PROFILE:
LEFT OF SERENITY VIEW DR. & LEE HOLLOW PLACE

PROFILE
SCALE: H: 1"=20'
V: 1"=2'



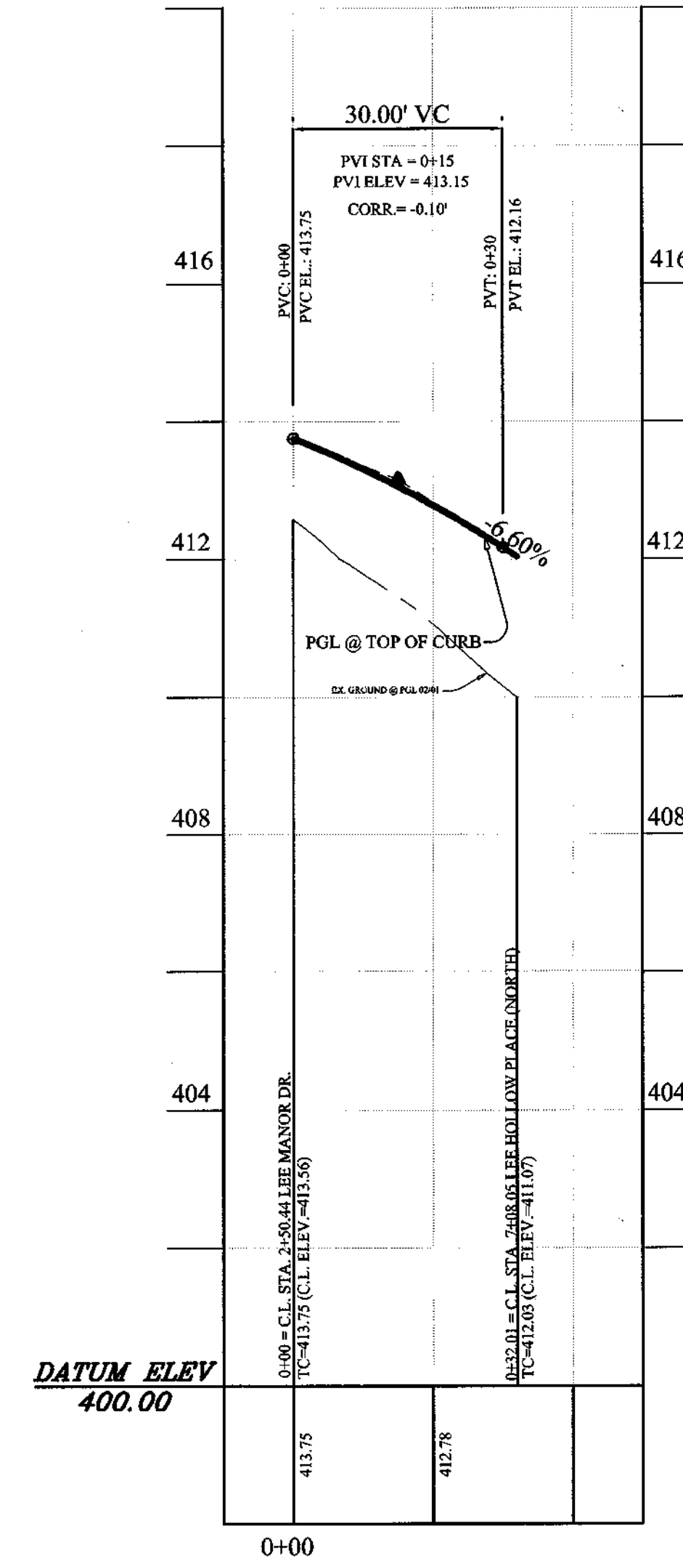
CURB RETURN PROFILE:
RIGHT OF SAMUEL JOY WAY & LEE HOLLOW PLACE

PROFILE
SCALE: H: 1"=20'
V: 1"=2'



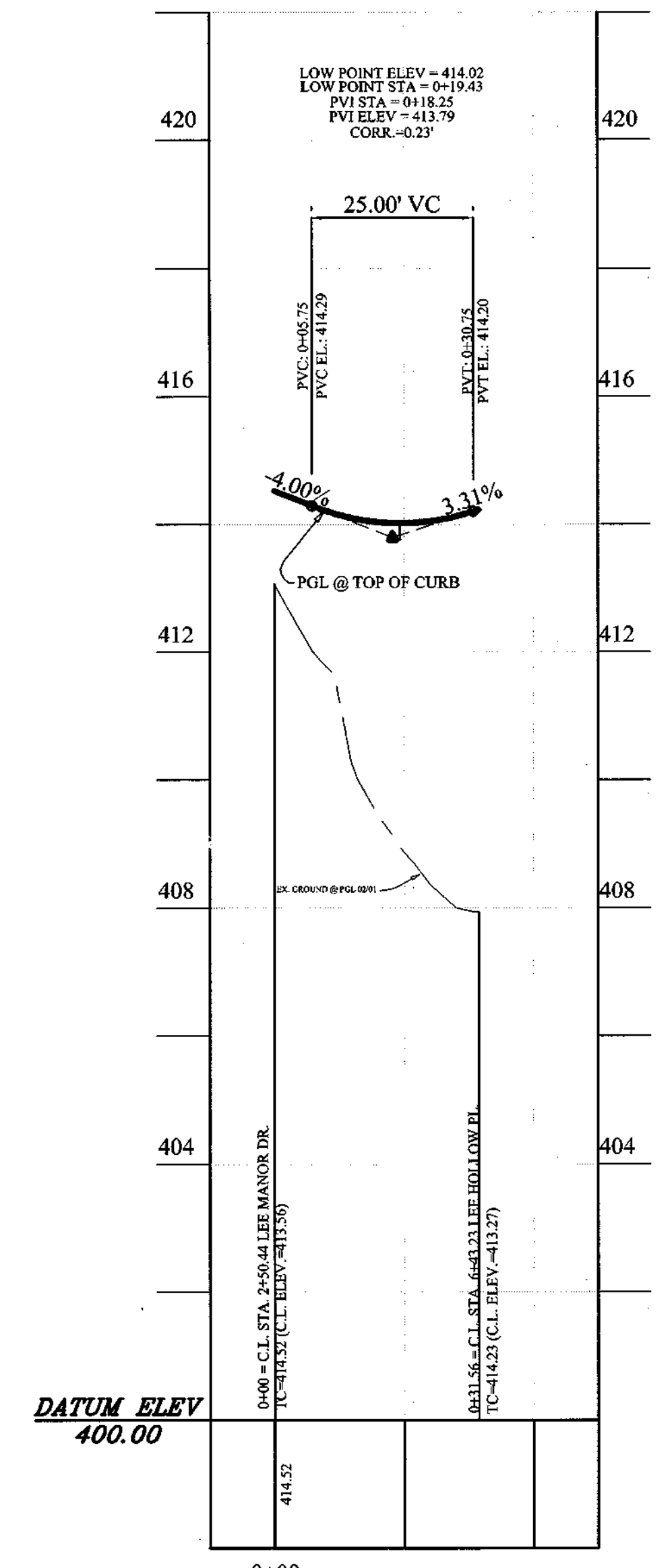
CURB RETURN PROFILE:
LEFT OF SAMUEL JOY WAY & LEE HOLLOW PLACE

PROFILE
SCALE: H: 1"=20'
V: 1"=2'



CURB RETURN PROFILE:
RIGHT OF LEE MANOR DR. & LEE HOLLOW PLACE

PROFILE
SCALE: H: 1"=20'
V: 1"=2'



CURB RETURN PROFILE:
LEFT OF LEE MANOR DR. & LEE HOLLOW PLACE

PROFILE
SCALE: H: 1"=20'
V: 1"=2'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Karl Schwick 9/11/03
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

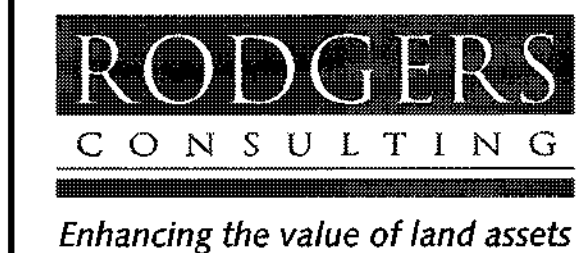
William J. Mahoney 8/21/03
CHIEF, BUREAU OF HIGHWAY
DATE

DATE	REVISION
08-05-03	FINAL W/LAR SUBMITTAL FOR SIGNATURE
05-30-03	REV. PER HOWARD CO. DPZ COMMENTS OF 05/12/03
03-28-03	REV. PER HOWARD CO. DPZ COMMENTS OF 02/12/03
12-20-02	SUBMITTED FOR REVIEW

DATE	BY	DATE
	BASE DATA	
	DESIGNED	
	DRAWN	
	REVIEWED	
	RELEASE FOR	

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

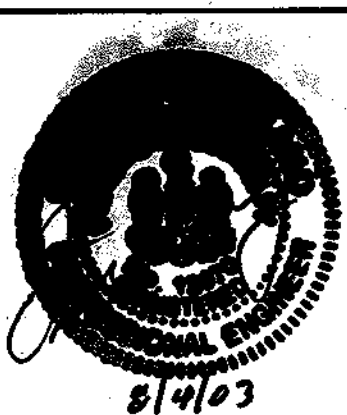
CURB RETURN PROFILES



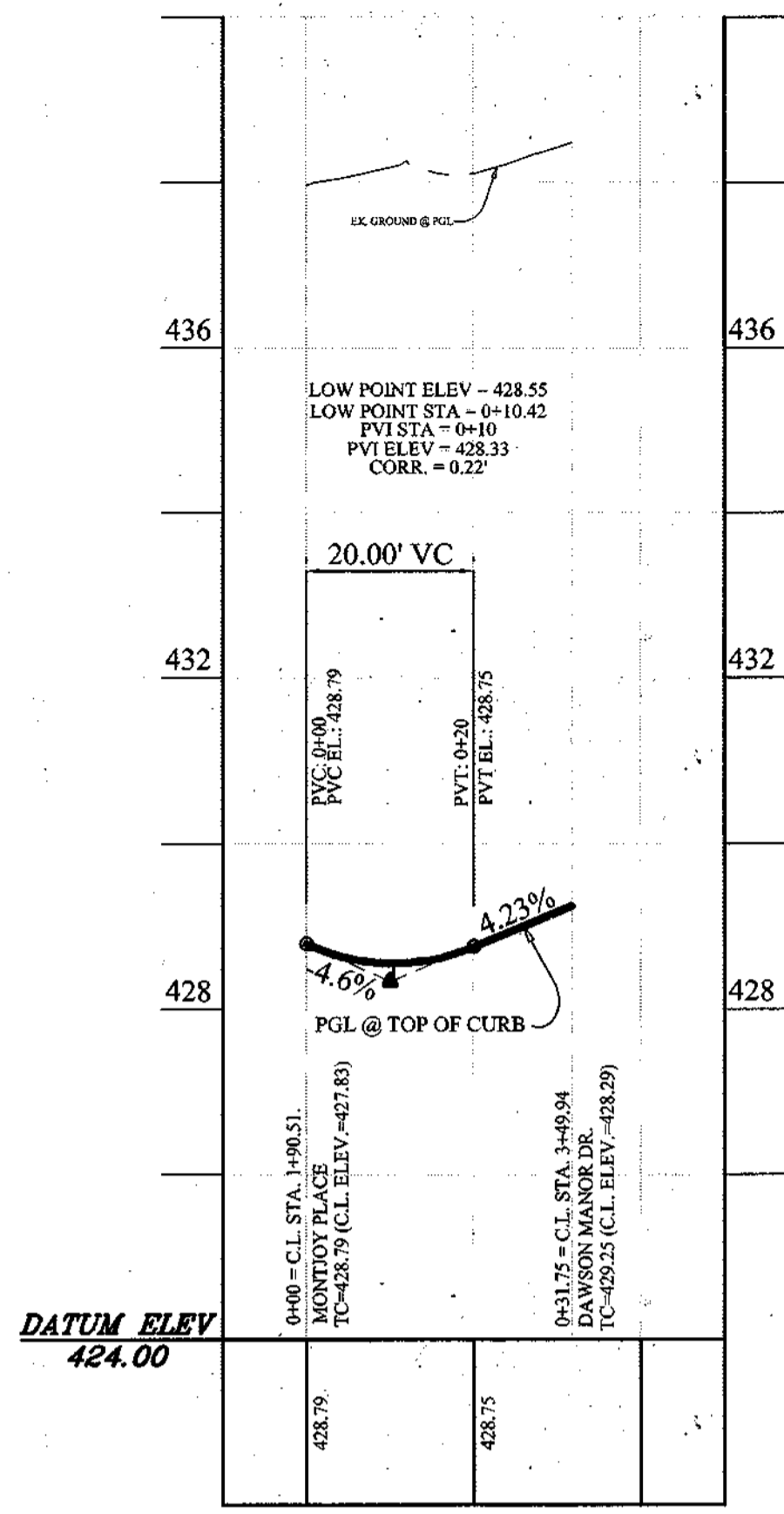
Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A",
OPEN SPACE LOTS 120 - 126, 194 AND
NON-BUILDABLE BULK PARCELS "B" AND "C"

* PHASES I, II, & III
Montjoy
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

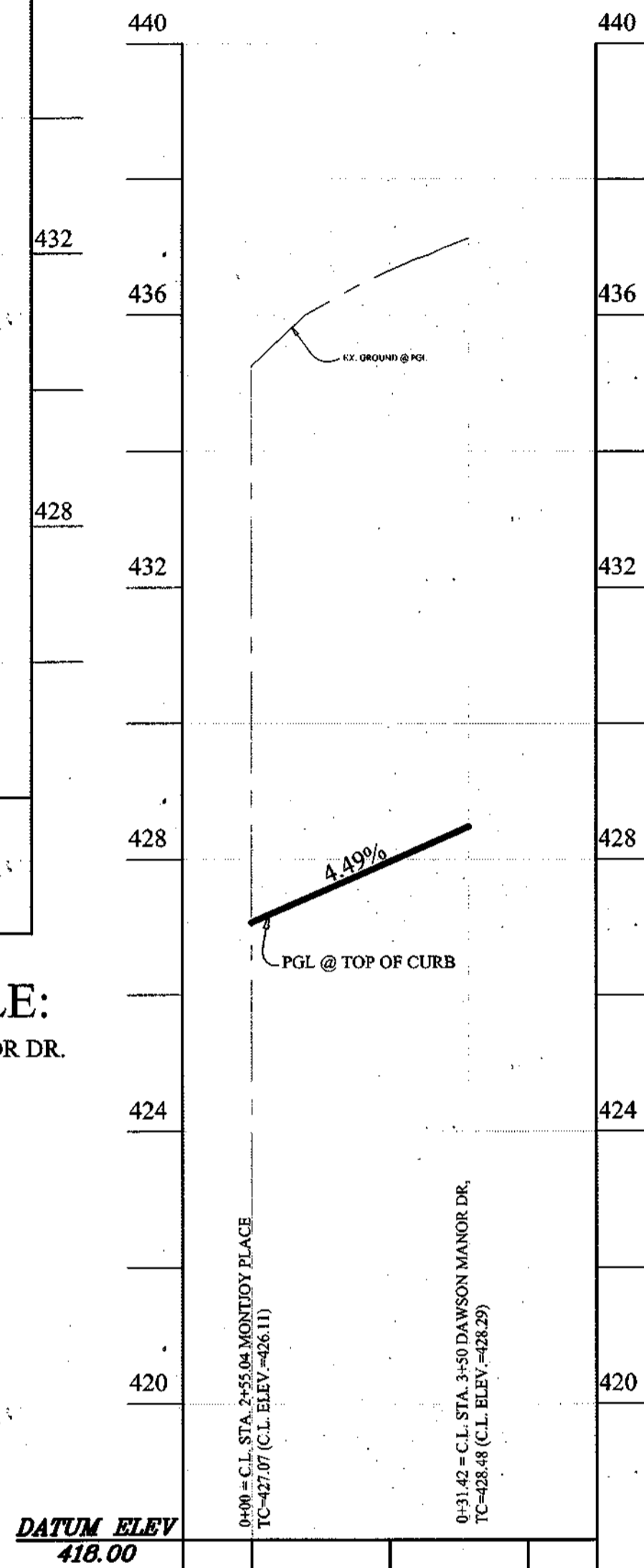


SCALE:	AS SHOWN
JOB No.	506V3
DATE:	12-20-02
INDEX No.	RP-8
SHEET No.	9 OF 50



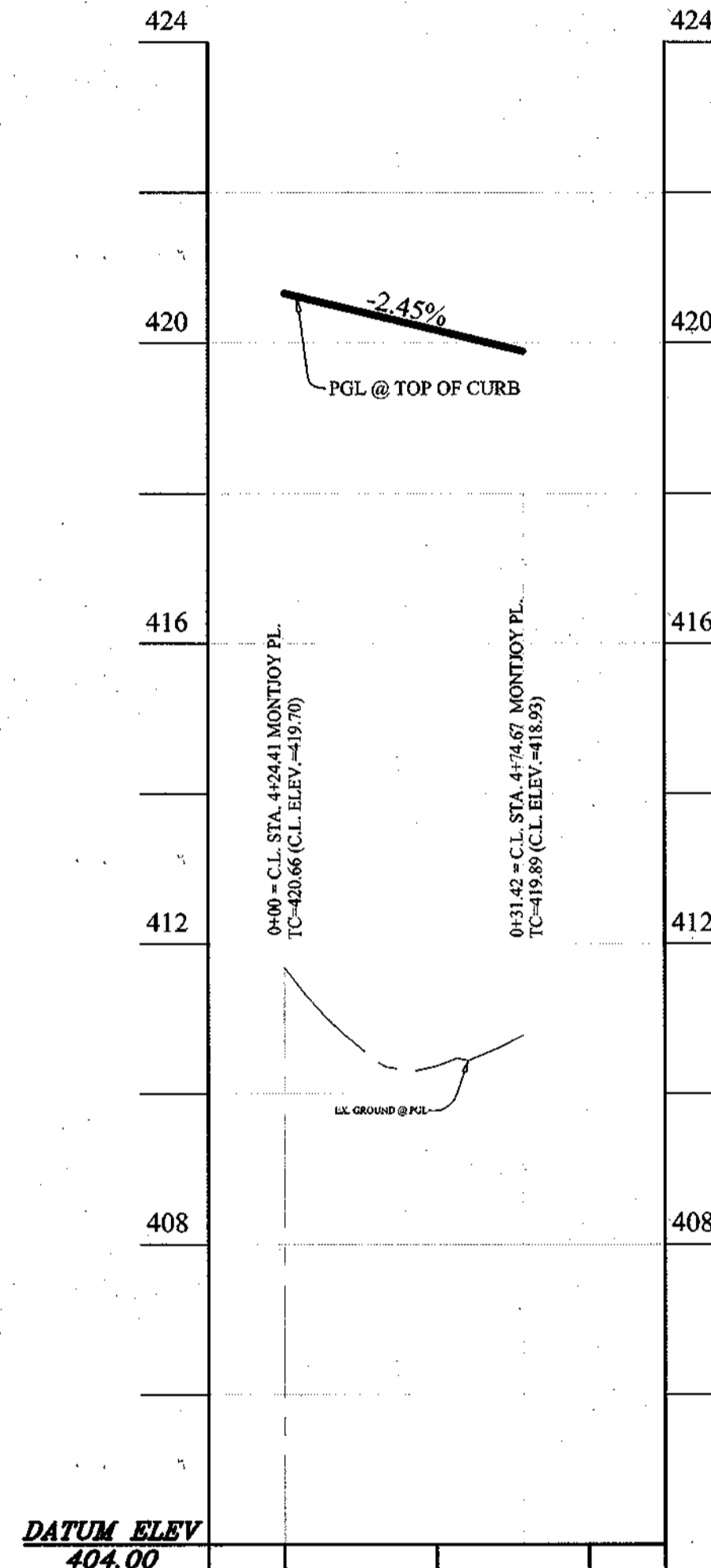
CURB RETURN PROFILE:
RIGHT OF MONTJOY PLACE & DAWSON MANOR DR.

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



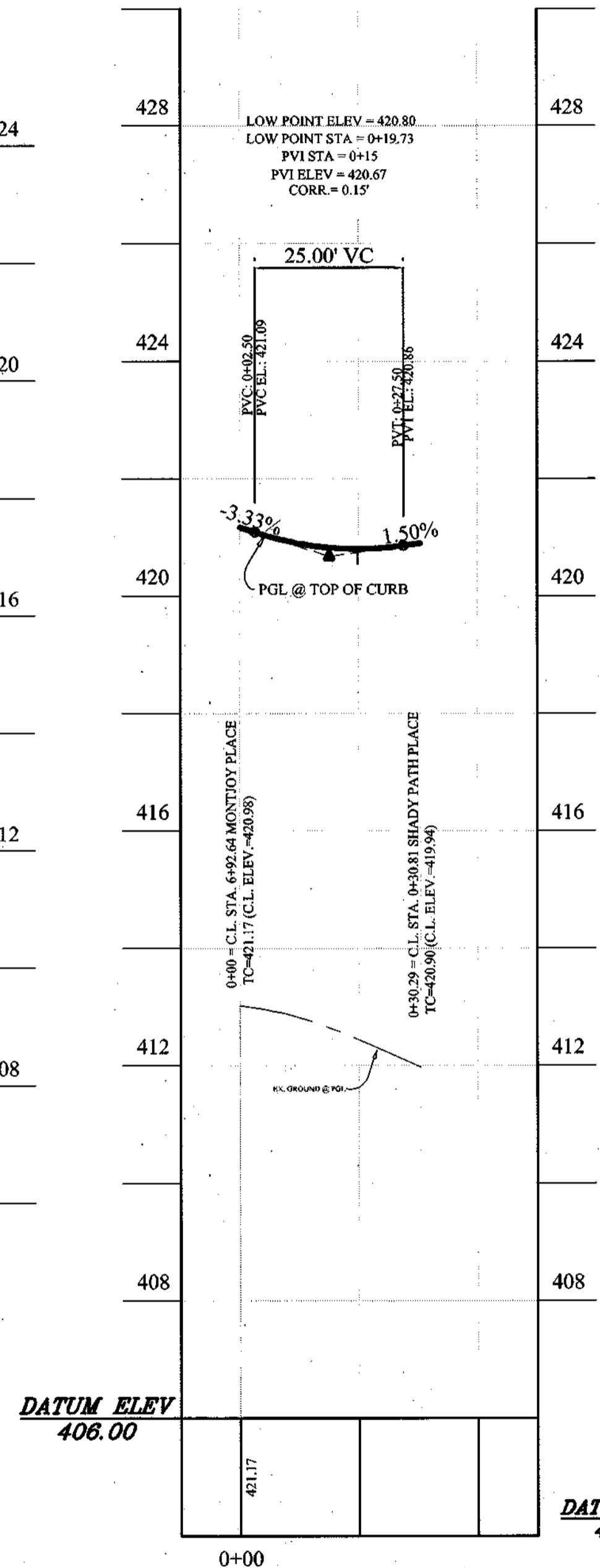
CURB RETURN PROFILE:
LEFT OF MONTJOY PLACE & DAWSON MANOR DR.

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



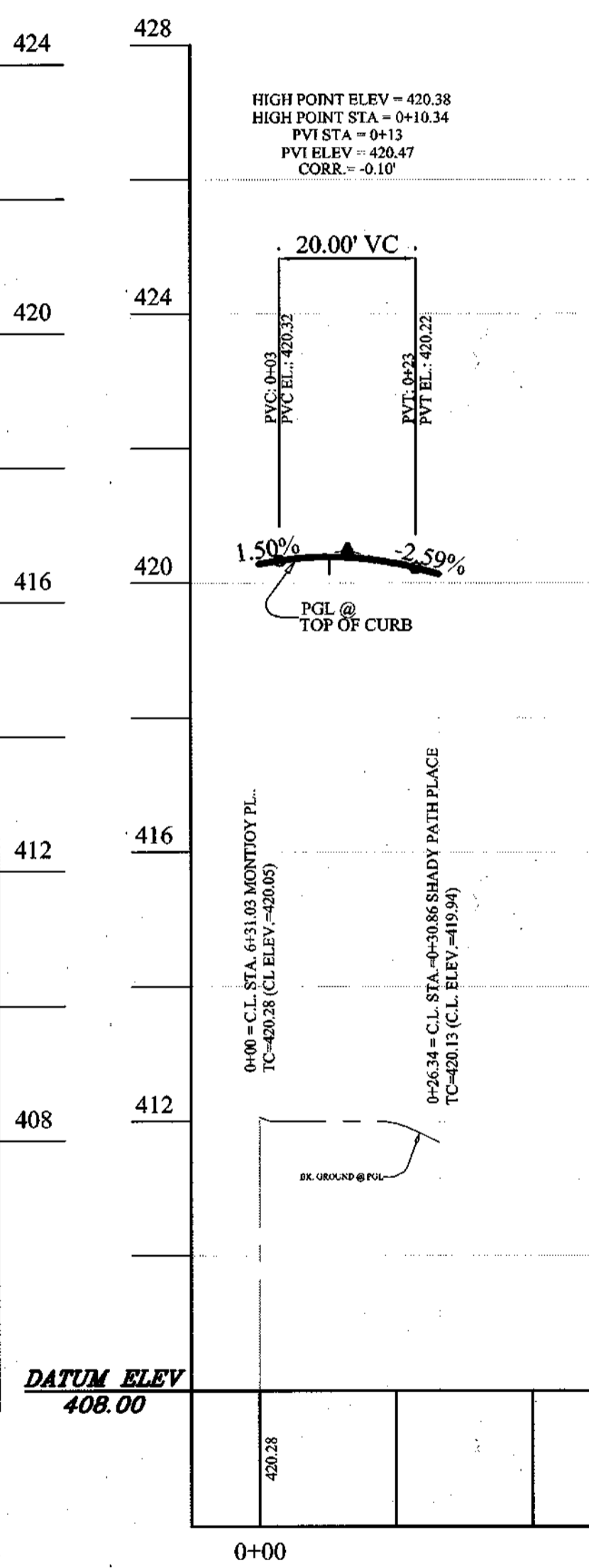
CURB RETURN PROFILE:
RIGHT OF MONTJOY PLACE

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



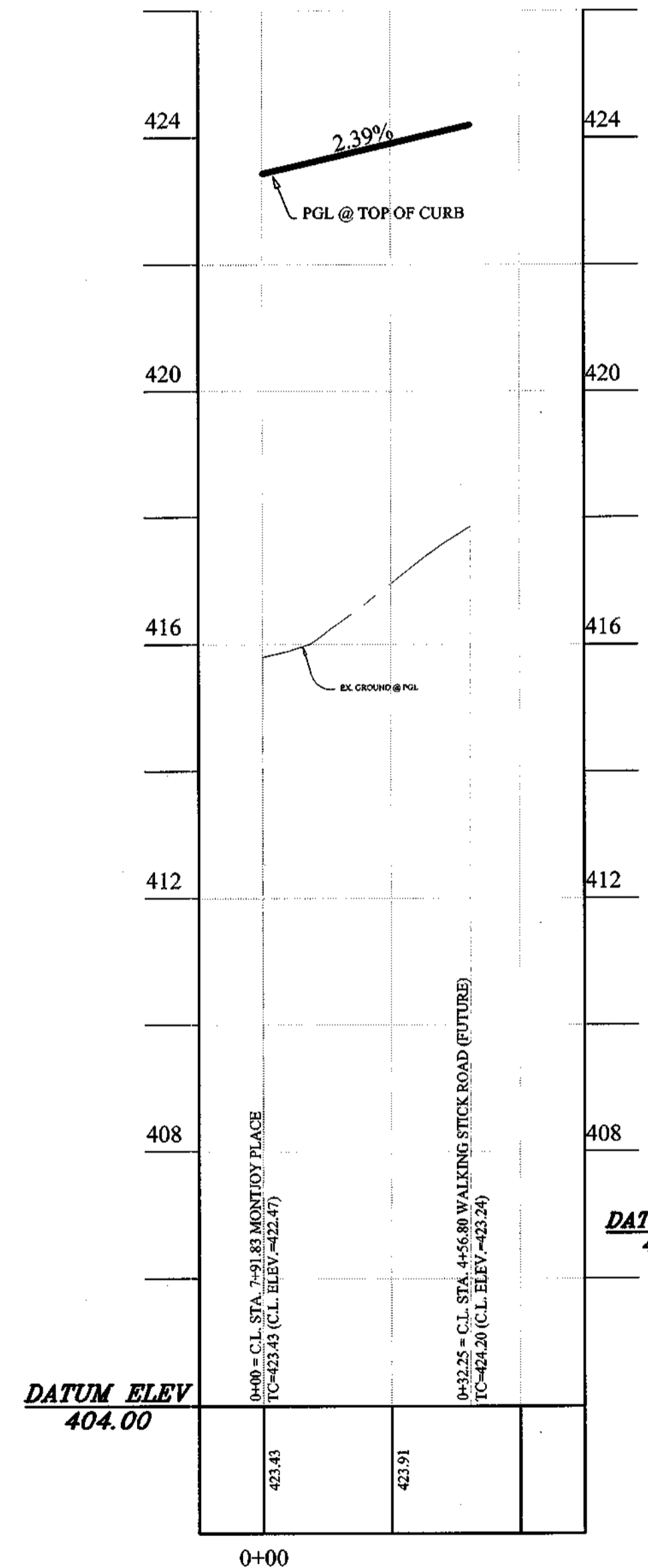
CURB RETURN PROFILE:
RIGHT OF MONTJOY PLACE & SHADY PATH PLACE

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



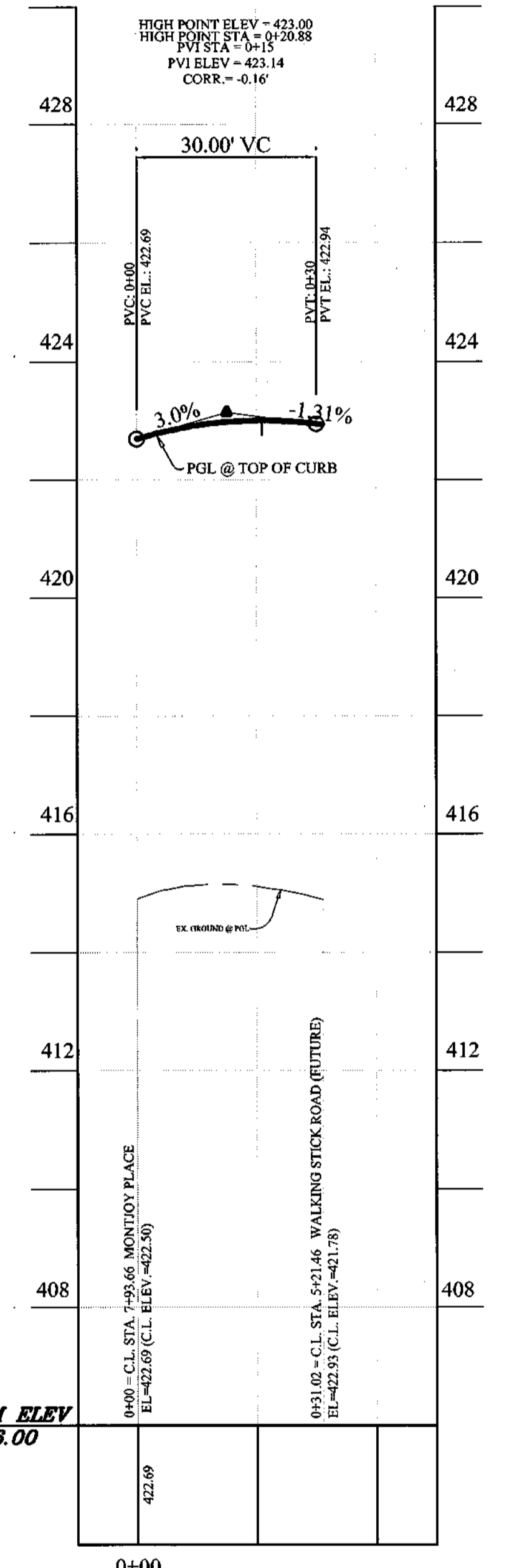
CURB RETURN PROFILE:
LEFT OF MONTJOY PLACE & SHADY PATH PLACE

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:
RIGHT OF MONTJOY PLACE & WALKING STICK RD.

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'



CURB RETURN PROFILE:
LEFT OF MONTJOY PLACE & WALKING STICK RD.

PROFILE
SCALE: H: 1" = 20'
V: 1" = 2'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Karl Shalovich 9/11/03
CHIEF, DIVISION OF LAND DEVELOPMENT
William J. Nardella 9/11/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

William J. Nardella 8/21/03
CHIEF, BUREAU OF HIGHWAY

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	SUBMITTED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

CURB RETURN PROFILES



Rodgers Consulting, Inc.
5260 Calther Road
Catharsburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. 2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID: 12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03



SCALE: AS SHOWN
JOB No. 506V3
DATE: 12-20-02
INDEX No. RP-9
SHEET No. 10 of 50



TRAFFIC SIGN LEGEND

SIGN (24x30) SPEED LIMIT 25 R2-1	SYMBOL A	SIGN (30x30) STOP R1-1	SYMBOL C	SIGN (36x36) W2-6 STREET NAME (24x6)	SYMBOL E	SIGN (36x36x36) R1-2 TO TRAFFIC IN CIRCLE (24x18)	SYMBOL G	SIGN (36x36) W3-2a 15 MPH (18x18)	SYMBOL F
SIGN (12x15) R4-7 (MOUNTED ON YELLOW FLEX POST)	SYMBOL B	SIGN (36x12) R6-1 ONE-WAY (36x18)	SYMBOL D	SIGN (36x36x36) R1-2	SYMBOL J	SIGN (ON BACK OF R1-2) CONTACT THE COUNTY	SYMBOL H	SIGN (30x30) W1-2a	SYMBOL K

STREET LIGHT LOCATION DATA

STREET NAME	STATION	OFF-SET	FIXTURE/POLE TYPE	COMMENTS
Executive Park Dr.	0+11	24' o/s L	150 watt HPS vapor pendant fixture (sag) mounted at 30' on a bronze fiberglass pole using a 12' arm.	☼ = Pole location
Executive Park Dr.	1+54	26' o/s R	150 watt HPS vapor pendant fixture (sag) mounted at 30' on a bronze fiberglass pole using a 12' arm.	☼ = Pole location
Executive Park Dr.	2+63	19' o/s L	150 watt HPS vapor premier post top fixture mounted on 14' black fiberglass pole.	☼ = Pole location
Executive Park Dr.	3+62	14' o/s R	"	"
Executive Park Dr.	4+69	20' o/s L	"	"
Executive Park Dr.	5+78	15' o/s R	"	"
Executive Park Dr.	6+64	19' o/s R	"	"
Executive Park Dr.	7+05	23' o/s L	"	☼ = Pole location
Lee Hollow Place	-0+03	0' o/s L	100 watt HPS vapor premier post top fixture mounted on 14' black fiberglass pole.	☼ = Pole location
Lee Hollow Place	1+61	23' o/s R	"	"
Lee Hollow Place	3+99	22' o/s R	"	"
Lee Hollow Place	6+47	15' o/s R	"	"
Lee Hollow Place	7+95	0' o/s R	"	"
Montjoy Place	1+91	14' o/s R	"	"
Montjoy Place	4+39	14' o/s R	"	"
Montjoy Place	6+32	15' o/s L	"	"
Montjoy Place	7+99	18' o/s L	"	☼ = Pole location
Serenity view Dr.	0+54	18' o/s L	150 watt HPS vapor premier post top fixture mounted on 14' black fiberglass pole.	☼ = Pole location
Joyful Way.	0+50	22' o/s L	"	☼ = Pole location

NOTE: Contact Howard County Traffic Division at 410-313-5752 prior to ordering and installing any signs.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kitt LaRocca 9/1/03
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William Z. Whelan 8/21/03
 CHIEF, BUREAU OF HIGHWAY
 DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803 - 4800

STREET LIGHT DATA & SIGNAGE PLAN

RODGERS CONSULTING
 Enhancing the value of land assets

Rodgers Consulting, Inc.
 9260 Gathers Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I, II & III

Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260

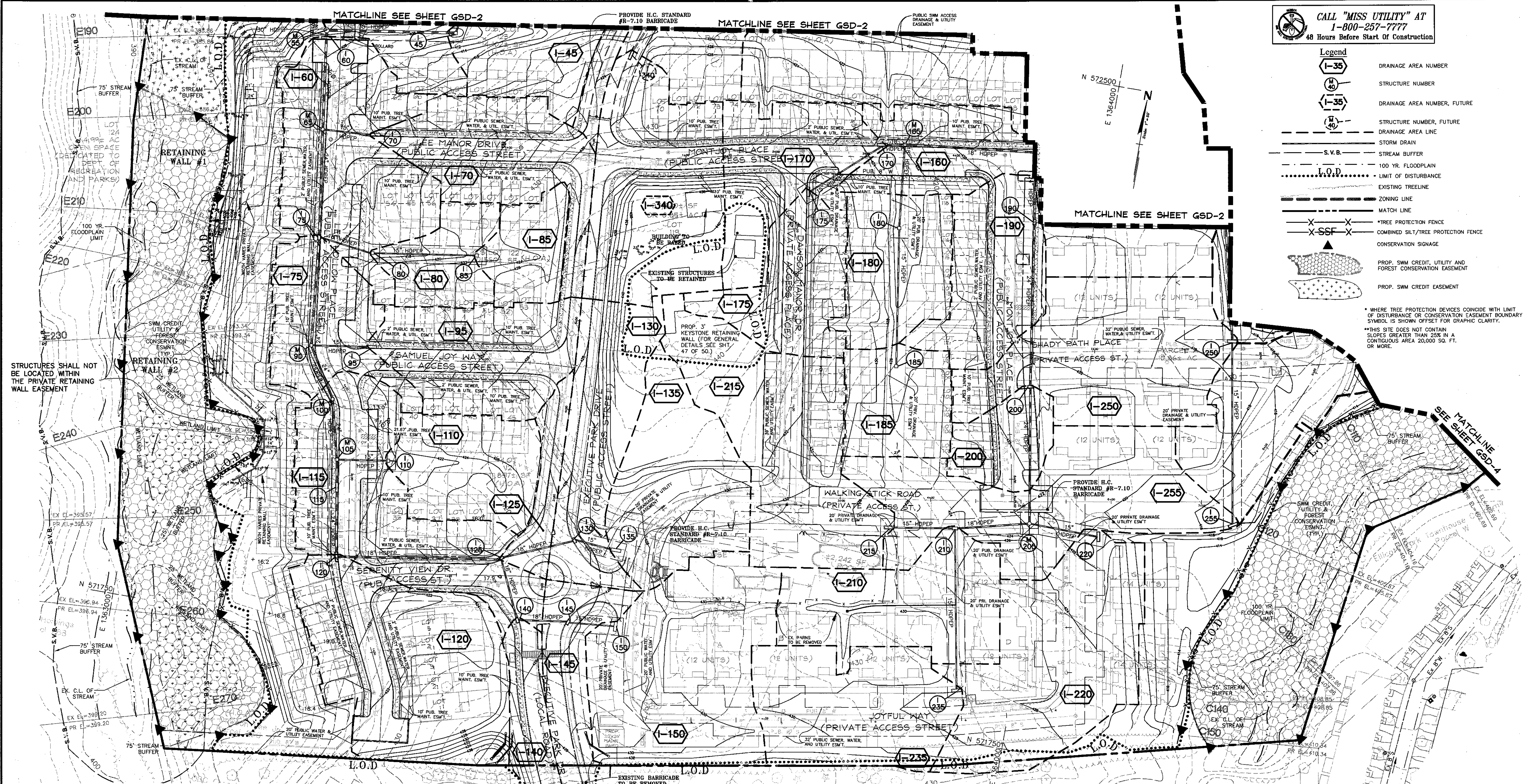
SCALE: 1" = 50'
 JOB No. 506V3
 DATE: 12/20/02
 INDEX No. RP-10
 SHEET No. 11 OF 50

DP2 FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

- Legend**
- (I-35) DRAINAGE AREA NUMBER
 - (M 40) STRUCTURE NUMBER
 - (I-35) DRAINAGE AREA NUMBER, FUTURE
 - (M 40) STRUCTURE NUMBER, FUTURE
 - DRAINAGE AREA LINE
 - STREAM DRAIN
 - S.V.B. --- STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - L.O.D. --- LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - X X TREE PROTECTION FENCE
 - X X S S F X COMBINED SILT/TREE PROTECTION FENCE
 - CONSERVATION SIGNAGE
 - PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
 - PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Walker 8/21/03
CHIEF, BUREAU OF HIGHWAY DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Ken Hendrick 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Chris Dammann 9/16/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED:
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 8/18/03
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
[Signature] 8/18/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 8/1/2003
SIGNATURE OF DEVELOPER DATE
(PRINT NAME BELOW SIGNATURE)

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
[Signature] 8/1/03
SIGNATURE OF ENGINEER DATE
(PRINT NAME BELOW SIGNATURE)



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

TITLE BLOCK REVISION PENDING 11/1/03
FINAL W/AR SUBMITTAL FOR SIGNATURE 08-05-03
REV. PER HOWARD CO. DPZ COMMENTS OF 05/12/03 05-30-03
REV. PER HOWARD CO. DPZ COMMENTS OF 02/12/03 03-28-03
1. SUBMITTED FOR APPROVAL 12/02

Developer/Owner:
Winchester Homes, Inc. &
Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

**GRADING & STORM DRAIN/
DRAINAGE AREA MAP**

RODGERS CONSULTING
Enhancing the value of land assets
Rodgers Consulting, Inc.
9260 Gaiters Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6606
www.roddgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: 8-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=50'
JOB No. 506v3
DATE: 11/02/02
INDEX No. GSD-1
SHEET No. 12 OF 50

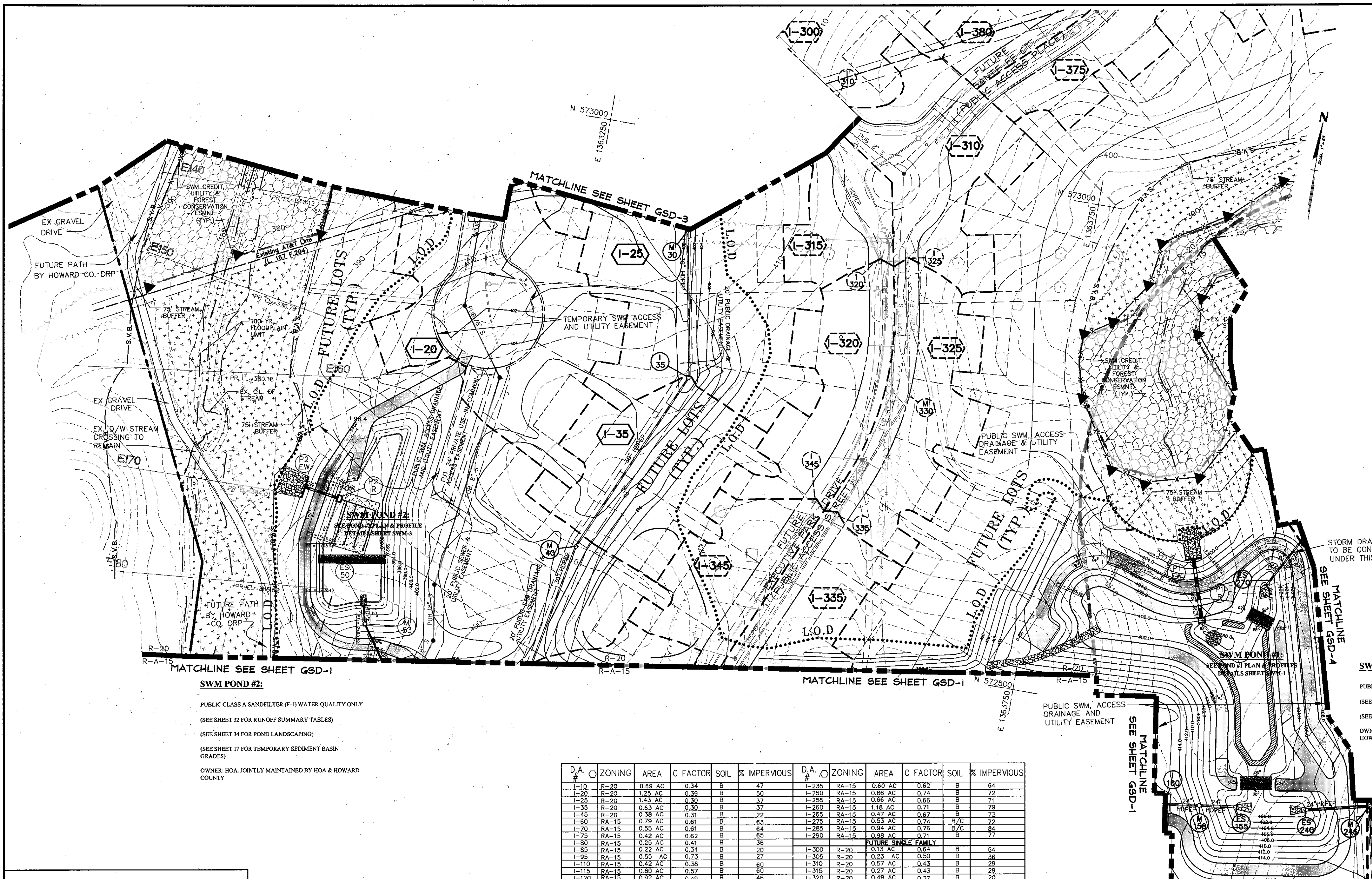
CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

Legend

- DRAINAGE AREA NUMBER
- STRUCTURE NUMBER
- DRAINAGE AREA NUMBER, FUTURE
- STRUCTURE NUMBER, FUTURE
- DRAINAGE AREA LINE
- STORM DRAIN
- S.V.B. STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- *TREE PROTECTION FENCE
- COMBINED SILT/TREE PROTECTION FENCE
- CONSERVATION SIGNAGE
- PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
- PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 23% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

NOTE: CONTRACTOR TO FIELD LOCATE THE EXISTING AT&T FIBER OPTIC LINES THROUGHOUT THIS SITE



SWM POND #2:
PUBLIC CLASS A SANDFILTER (F-1) WATER QUALITY ONLY.
(SEE SHEET 32 FOR RUNOFF SUMMARY TABLES)
(SEE SHEET 34 FOR POND LANDSCAPING)
(SEE SHEET 17 FOR TEMPORARY SEDIMENT BASIN GRADES)
OWNER: HOA, JOINTLY MAINTAINED BY HOA & HOWARD COUNTY

SWM POND #1:
PUBLIC CLASS A MICROPOOD (P-1)
(SEE SHEET 32 FOR RUNOFF SUMMARY TABLES)
(SEE SHEET 34 FOR POND LANDSCAPING)
OWNER: HOA, JOINTLY MAINTAINED BY HOA & HOWARD COUNTY

D.A. #	ZONING	AREA	C FACTOR	SOIL	% IMPERVIOUS	D.A. #	ZONING	AREA	C FACTOR	SOIL	% IMPERVIOUS
I-10	R-20	0.69 AC	0.34	B	47	I-235	RA-15	0.60 AC	0.62	B	64
I-20	R-20	1.24 AC	0.38	B	50	I-250	RA-15	0.86 AC	0.74	B	73
I-25	R-20	1.43 AC	0.30	B	37	I-255	RA-15	0.66 AC	0.66	B	71
I-35	R-20	0.63 AC	0.30	B	37	I-260	RA-15	1.18 AC	0.71	B	79
I-45	R-20	0.38 AC	0.31	B	22	I-265	RA-15	0.47 AC	0.67	B	73
I-60	RA-15	0.79 AC	0.61	B	63	I-275	RA-15	0.53 AC	0.74	B/C	72
I-70	RA-15	0.55 AC	0.61	B	64	I-285	RA-15	0.94 AC	0.76	B/C	84
I-75	RA-15	0.42 AC	0.62	B	65	I-290	RA-15	0.98 AC	0.71	B	77
I-80	RA-15	0.25 AC	0.41	B	36	FUTURE SINGLE FAMILY					
I-85	RA-15	0.22 AC	0.34	B	20	I-300	R-20	0.13 AC	0.64	B	64
I-95	RA-15	0.55 AC	0.73	B	27	I-305	R-20	0.23 AC	0.50	B	36
I-110	RA-15	0.42 AC	0.38	B	60	I-310	R-20	0.57 AC	0.43	B	29
I-115	RA-15	0.60 AC	0.57	B	60	I-315	R-20	0.27 AC	0.43	B	29
I-120	RA-15	0.92 AC	0.49	B	46	I-320	R-20	0.49 AC	0.37	B	20
I-125	RA-15	0.15 AC	0.62	B	67	I-325	R-20	0.57 AC	0.36	B	18
I-130	RA-15	0.57 AC	0.42	B	34	I-335	R-20	0.53 AC	0.37	B	49
I-135	RA-15	0.63 AC	0.50	B	43	I-340	R-20	0.81 AC	0.46	B	43
I-140	RA-15	0.29 AC	0.56	B	57	I-345	R-20	0.46 AC	0.42	B	27
I-145	RA-15	0.36 AC	0.56	B	57	I-355	R-20	1.55 AC	0.30	B	37
I-150	RA-15	0.35 AC	0.62	B	66	I-375	R-20	0.39 AC	0.46	B	23
I-160	RA-15	0.38 AC	0.61	B	66	I-380	R-20	0.46 AC	0.37	B	19
I-170	RA-15	0.49 AC	0.57	B	59	I-385	R-20	1.10 AC	0.37	B	18
I-175	RA-15	0.41 AC	0.56	B	58	I-400	R-20	1.09 AC	0.30	B	37
I-180	RA-15	0.44 AC	0.41	B	36	I-415	R-20	1.12 AC	0.30	B	37
I-185	RA-15	0.33 AC	0.40	B	35	I-420	R-20	0.42 AC	0.30	B	37
I-190	RA-15	0.48 AC	0.67	B	74	I-440	R-20	1.33 AC	0.47	B/C	15
I-200	RA-15	0.23 AC	0.56	B	59	I-455	R-20	1.93 AC	0.36	B	13
I-210	RA-15	0.58 AC	0.64	B	65	I-460	R-20	0.69 AC	0.30	B	37
I-215	RA-15	0.90 AC	0.58	B	60	I-465	R-20	0.52 AC	0.30	B	37
I-220	RA-15	0.88 AC	0.73	B	72	I-470	R-20	0.49 AC	0.30	B	37

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William R. M... 8/21/03
CHIEF, BUREAU OF HIGHWAY
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kat... 9/10/03
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

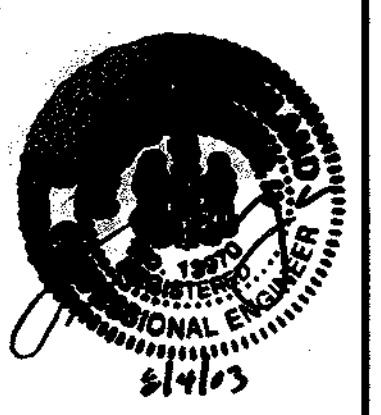
APPROVED: DEVELOPMENT ENGINEERING DIVISION
... 9/16/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
... 8/18/03
HOWARD SOIL CONSERVATION DISTRICT
DATE

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
... 8/18/03
USDA-NATURAL RESOURCE CONSERVATION SERVICE
DATE

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."
... 8/1, 2002
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

ENGINEER'S CERTIFICATE
"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
... 8/16/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

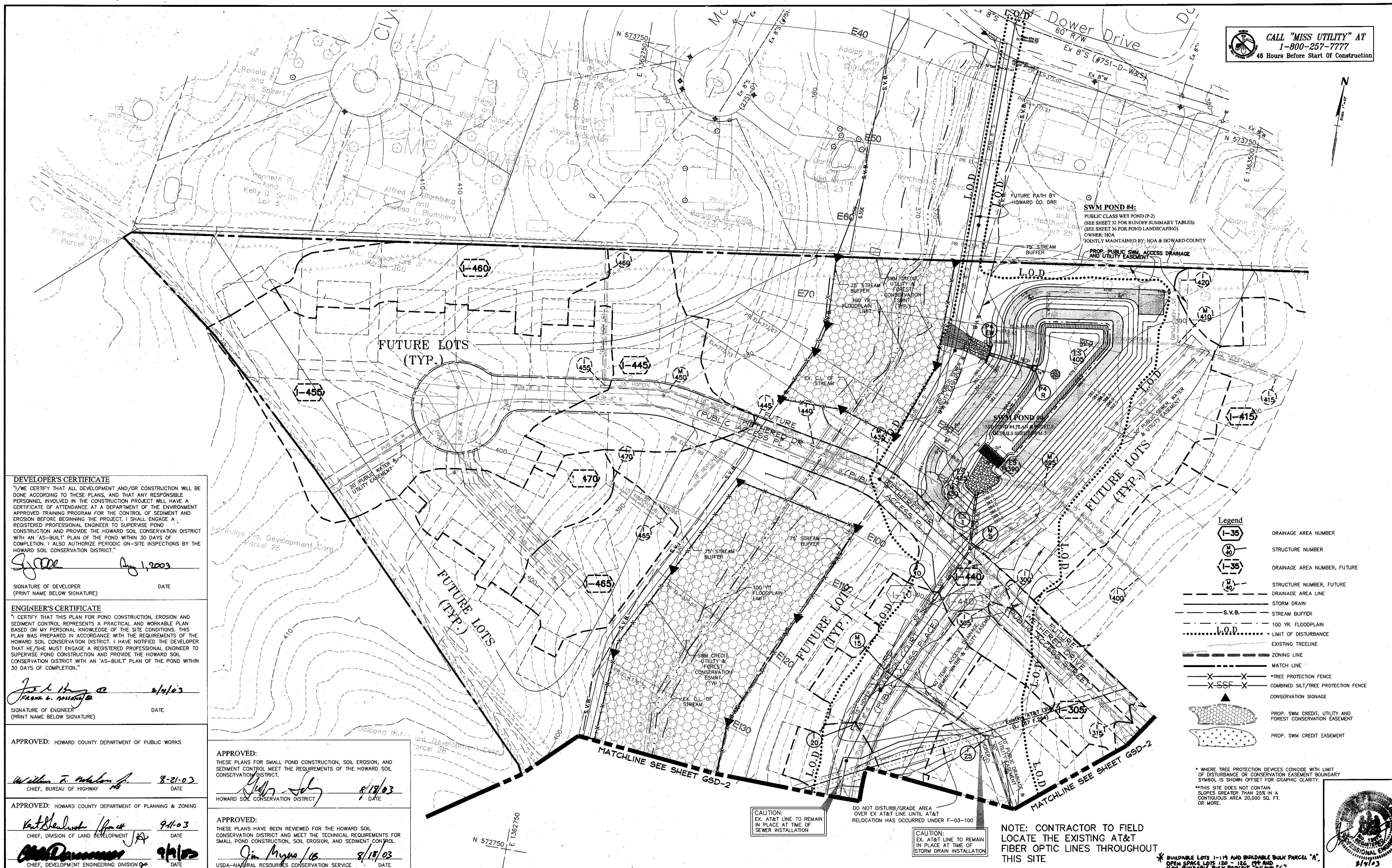
**GRADING & STORM DRAIN/
DRAINAGE AREA MAP**

RODGERS CONSULTING
Enhancing the value of land assets
Rodgers Consulting, Inc.
5260 Galter Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

*PHASES I, II & III
Montjoy
ELECTION DISTRICT No. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1" = 50'
JOB No. 506v3
DATE: 11/02/02
INDEX No. GSD-2
SHEET No. 13 of 50

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction



DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

S. J. Cole *Aug 1, 2003*
SIGNATURE OF DEVELOPER DATE
(PRINT NAME BELOW SIGNATURE)

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Frank G. Rosiano *8/14/03*
SIGNATURE OF ENGINEER DATE
(PRINT NAME BELOW SIGNATURE)

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Mahoney *8-21-03*
CHIEF, BUREAU OF HIGHWAY DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Karl Heisterkamp *9-11-03*
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Jim Mynors *9/18/03*
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED:
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
John J. Kelly *8/18/03*
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
Jim Mynors *8/18/03*
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

- Legend**
- DRAINAGE AREA NUMBER
 - STRUCTURE NUMBER
 - DRAINAGE AREA NUMBER, FUTURE
 - STRUCTURE NUMBER, FUTURE
 - DRAINAGE AREA LINE
 - STORM DRAIN
 - STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - *TREE PROTECTION FENCE
 - COMBINED SILT/TREE PROTECTION FENCE
 - CONSERVATION SIGNAGE
 - PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
 - PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

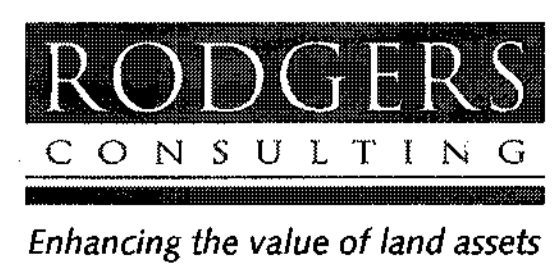
CAUTION:
EX. AT&T LINE TO REMAIN IN PLACE AT TIME OF SEWER INSTALLATION
DO NOT DISTURB/GRADE AREA OVER EX. AT&T LINE UNTIL AT&T RELOCATION HAS OCCURRED UNDER F-03-100
CAUTION:
EX. AT&T LINE TO REMAIN IN PLACE AT TIME OF STORM DRAIN INSTALLATION

NOTE: CONTRACTOR TO FIELD LOCATE THE EXISTING AT&T FIBER OPTIC LINES THROUGHOUT THIS SITE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PF, YSL	
	DRAWN		YSL	
	REVIEWED		PF	
	RELEASE FOR			
	BY			

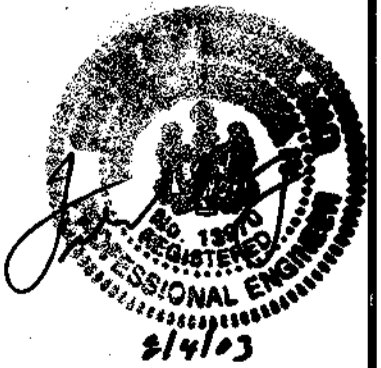
Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

**GRADING & STORM DRAIN/
DRAINAGE AREA MAP**



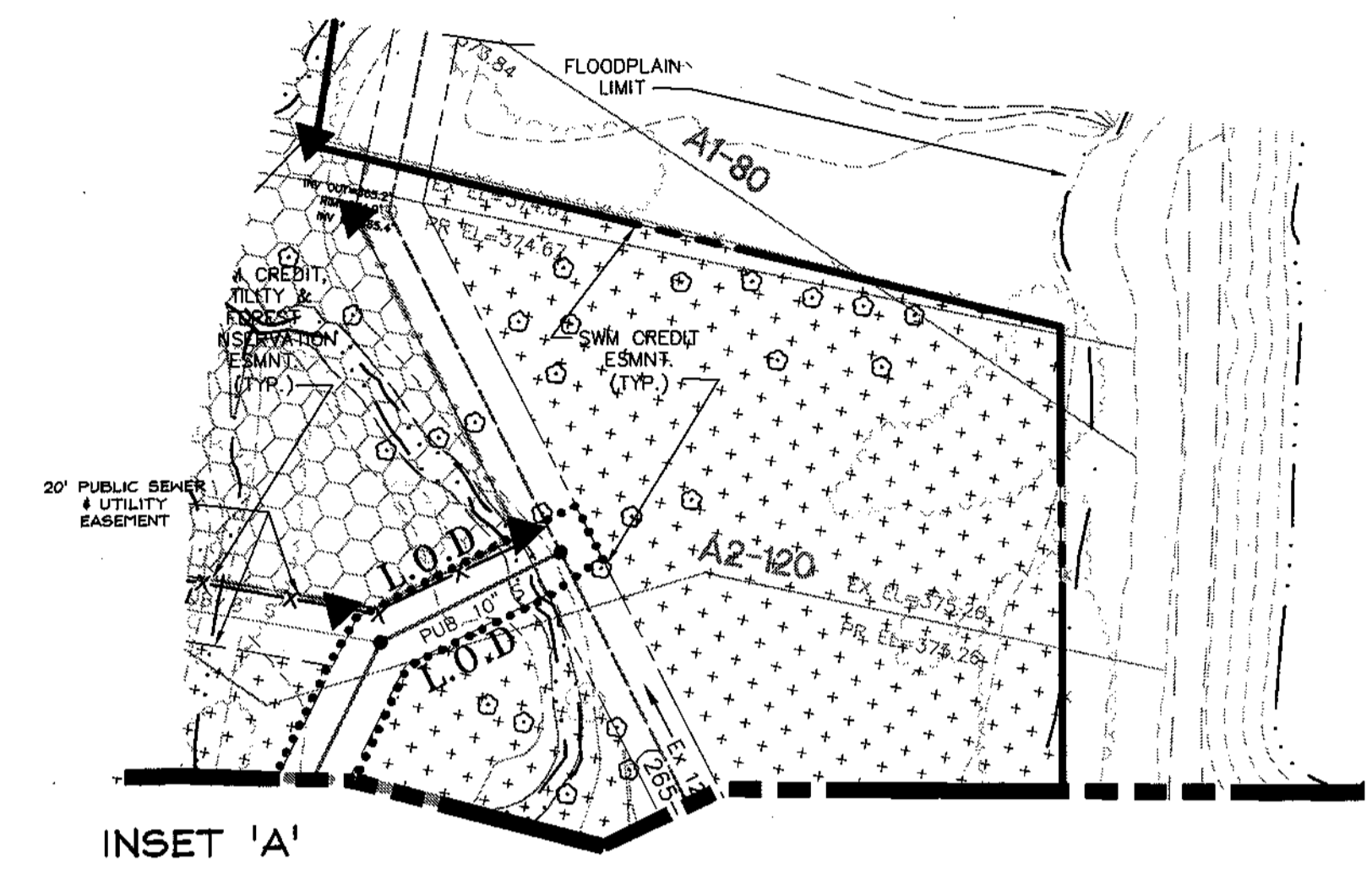
Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260



SCALE: " = 50'
JOB No. 506v3
DATE: 11/02/02
INDEX No. GSD-3
SHEET No. 14 of 50

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction



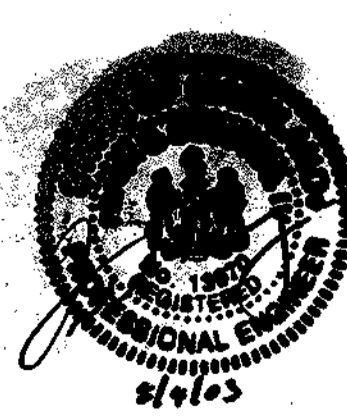
INSET 'A'

- Legend**
- DRAINAGE AREA NUMBER
 - STRUCTURE NUMBER
 - DRAINAGE AREA NUMBER, FUTURE
 - STRUCTURE NUMBER, FUTURE
 - DRAINAGE AREA LINE
 - STORM DRAIN
 - S.V.B. - STREAM BUFFER
 - 100 YR. FLOODPLAIN LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - *TREE PROTECTION FENCE
 - COMBINED SILT/TREE PROTECTION FENCE
 - CONSERVATION SIGNAGE
 - PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
 - PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
**THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

NOTE: CONTRACTOR TO FIELD LOCATE THE EXISTING AT&T FIBER OPTIC LINES THROUGHOUT THIS SITE

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL 'A', OPEN SPACE LOTS 120 - 126, 194 AND NON-BUILDABLE BULK PARCELS 'B' AND 'C'



DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Nardella 8/1/03
SIGNATURE OF DEVELOPER DATE
(PRINT NAME BELOW SIGNATURE)

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Frank A. Salsgale 8/4/03
SIGNATURE OF ENGINEER DATE
(PRINT NAME BELOW SIGNATURE)

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William T. Whalen 8-21-03
CHIEF, BUREAU OF HIGHWAY DATE

APPROVED:
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Shirley Selig 8/18/03
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kat Slaback 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Jim Mague 9/16/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED:
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
Jim Mague 8/18/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	TITLE BLOCK REVISION PER DED	9/4/03		
	FINAL M/LR SUBMITTAL FOR SIGNATURE	08-05-03		
	REV. PER HOWARD CO. DPZ COMMENTS OF 05/12/03	05-30-03		
	REV. PER HOWARD CO. DPZ COMMENTS OF 02/12/03	03-28-03		
	SUBMITTED FOR APPROVAL	12/02		

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

**GRADING & STORM DRAIN/
DRAINAGE AREA MAP**



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

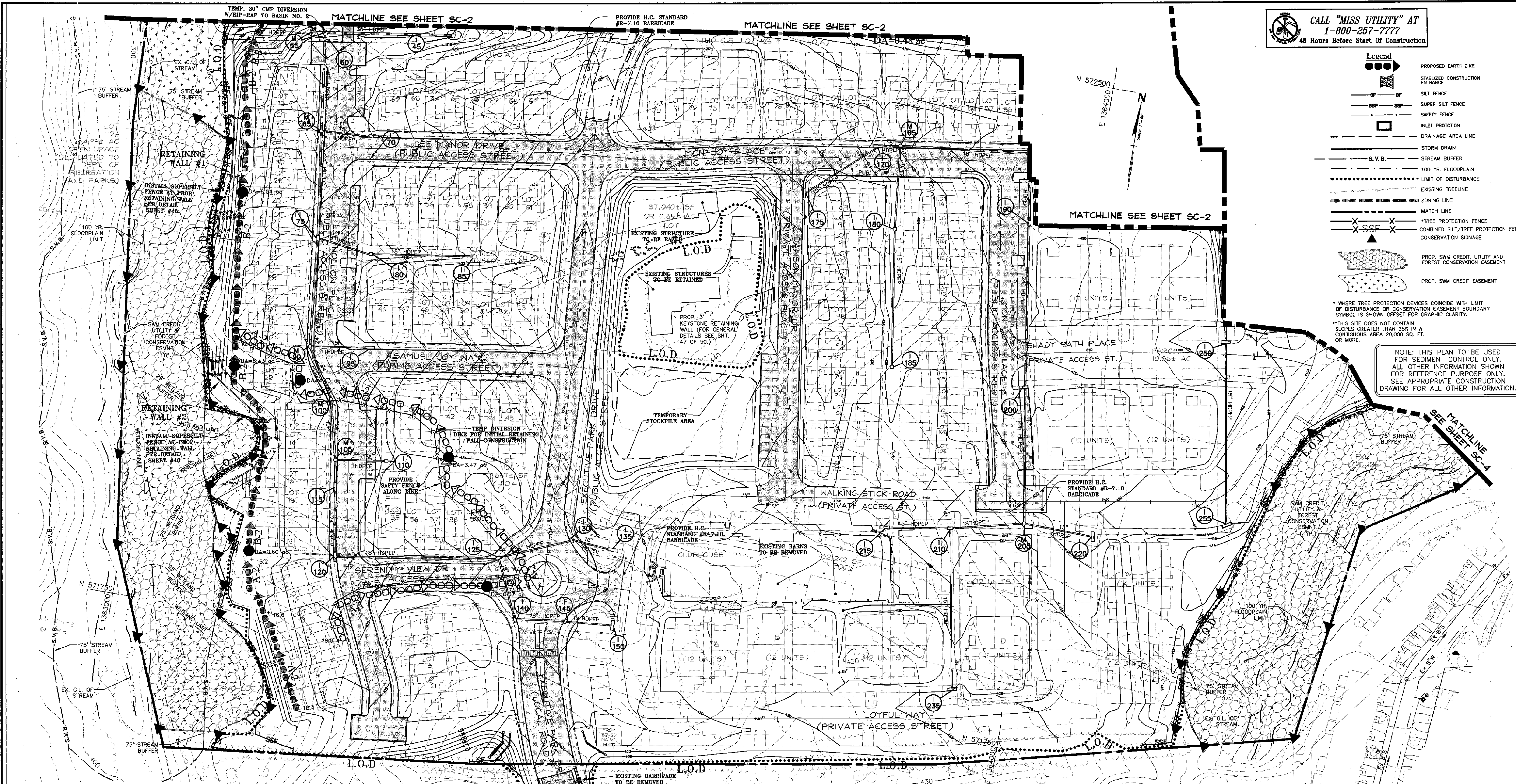
SCALE: 1"=50'
JOB No. 506v3
DATE: 11/02/02
INDEX No. GSD-4
SHEET No. 15 of 50

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

- Legend**
- PROPOSED EARTH DIKE
 - STABILIZED CONSTRUCTION ENTRANCE
 - SILT FENCE
 - SUPER SILT FENCE
 - SAFETY FENCE
 - INLET PROTECTION
 - DRAINAGE AREA LINE
 - STORM DRAIN
 - STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - TREE PROTECTION FENCE
 - COMBINED SILT/TREE PROTECTION FENCE
 - CONSERVATION SIGNAGE
 - PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
 - PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

NOTE: THIS PLAN TO BE USED FOR SEDIMENT CONTROL ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William T. Mahan 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kent Shenk 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
John P. ... 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Nella ... 8/19/03
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
Jim ... 8/19/03
USDA-NATURAL RESOURCE CONSERVATION SERVICE

NOTE: CONTRACTOR TO LIMIT TOTAL AREA OF NON-STABILIZED AREAS TO 20 AC. OR LESS AT ALL TIMES.

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Sy ... Aug 1, 2003
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

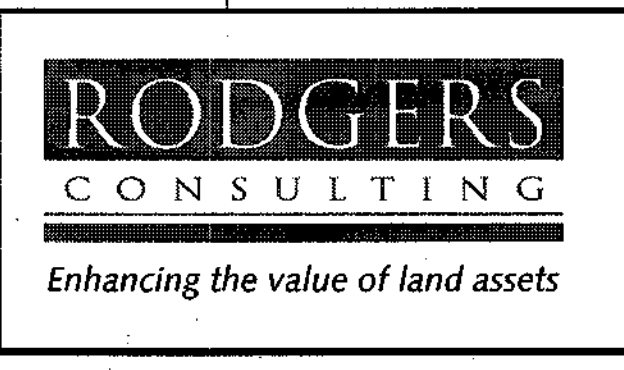
ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Frank G. ... 8/14/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFY, YSL	
	DRAWN		YSL	
	REVIEWED		PFY	
	RELEASE FOR			
	BY			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

SEDIMENT & EROSION CONTROL PLAN



Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.roddgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 267
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-11, P-03-08

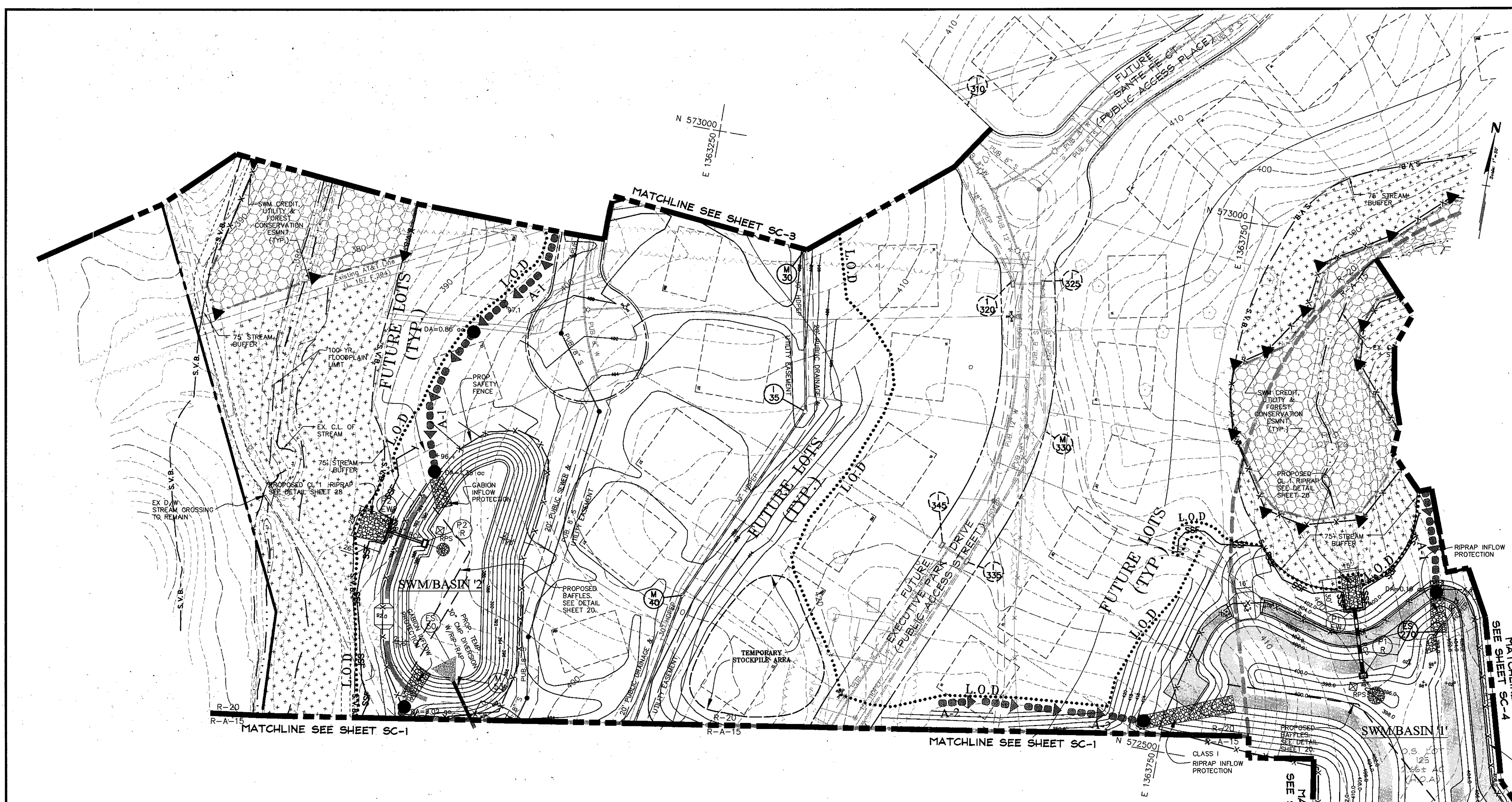
SCALE: 1" = 50'
JOB No. 506V3
DATE: 12/20/02
INDEX No. SC-1
SHEET No. 16 OF 50

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start of Construction

- Legend**
- PROPOSED EARTH DIKE
 - STABILIZED CONSTRUCTION ENTRANCE
 - SF— SF— SILT FENCE
 - SSF— SSF— SUPER SILT FENCE
 - X— X— SAFETY FENCE
 - INLET PROTECTION
 - DRAINAGE AREA LINE
 - S.V.B. --- STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - X--- X--- *TREE PROTECTION FENCE
 - X--- SSF--- COMBINED SILT/TREE PROTECTION FENCE
 - ▲ CONSERVATION SIGNAGE
 - PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
 - PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.

** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.



SEDIMENT BASIN/TRAP SCHEDULE

BASIN/TRAP NUMBER	TYPE	EXISTING DA (AC) (3)	PROPOSED DA (AC) (4)	SEDIMENT STORAGE VOLUME (CF) (5)	SEDIMENT STORAGE ELEVATION (6)	DEWATERING STORAGE VOLUME (CF) (7)	DEWATERING STORAGE ELEVATION (8)	SEDIMENT CLEANOUT VOLUME (CF) (9)	SEDIMENT CLEANOUT ELEVATION (10)	BASIN/TRAP BOTTOM ELEVATION (11)	TOP EMBANKMENT ELEVATION (12)
BASIN 1	BASIN	0.44	14.89	53,604	402.00	26,802	400.50	13,401	399.20	396.00	406.50
BASIN 2	BASIN	3.68	9.84	49,248	388.90	24,624	387.10	12,312	386.07	385.00	394.00

SEDIMENT BASIN/TRAP TEMPORARY SWM COMPUTED WSELEV AND DISCHARGE SCHEDULE

BASIN/TRAP NUMBER	1-YEAR TEMP SWM ALLOWABLE (CFS) (13)	1-YEAR COMPUTED WSELEV (14)	1-YEAR COMPUTED INFLOW (CFS) (15)	1-YEAR COMPUTED OUTFLOW (CF) (16)	10-YEAR COMPUTED WSELEV (17)	10-YEAR COMPUTED INFLOW (CFS) (18)	10-YEAR COMPUTED OUTFLOW (CFS) (19)
BASIN 1	0.68	403.41	36.39	0.64	404.44	82.50	41.39
BASIN 2	0.89	390.89	33.44	0.81	392.61	75.80	56.60

SCHEDULE NOTES: (BY COLUMN NUMBER)

(2), (3) MAXIMUM DA USED FOR TEMPORARY SWM AND SEDIMENT VOLUME COMPUTATIONS.

(6) DEWATERING STORAGE ELEVATION = START OF PERFORATIONS FOR DEWATERING DEVICE. SEE SHEET 27 AND 29 FOR CONTROL STRUCTURE DETAILS.

SCHEDULE NOTES: (BY COLUMN NUMBER)

(14) (15) (16) EXISTING AND PROPOSED CONDITIONS FOR TEMPORARY SWM BASED ON APPLYING EXISTING AND PROPOSED CN AND TC VALUES TO MAXIMUM DA FOR BOTH CONDITIONS.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 194 AND "C", NON-BUILDABLE BULK PARCELS "B" AND "C"

NOTE: THIS PLAN TO BE USED FOR SEDIMENT CONTROL ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William R. ... 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John ... 8/18/03
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Vest ... 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

John ... 8/10/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE

NOTE: CONTRACTOR TO LIMIT TOTAL AREA OF NON-STABILIZED AREAS TO 20AC. OR LESS AT ALL TIMES

NOTE: CONTRACTOR TO FIELD LOCATE THE EXISTING AT&T FIBER OPTIC LINES THROUGHOUT THE SITE

DEVELOPER'S CERTIFICATE

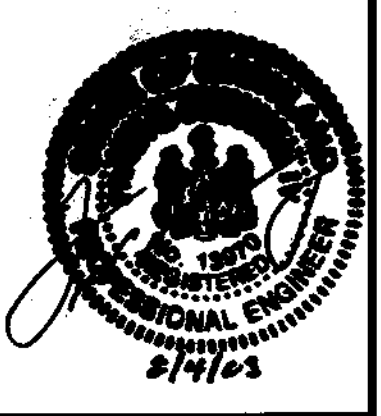
"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Sly ... Aug 1, 2003
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

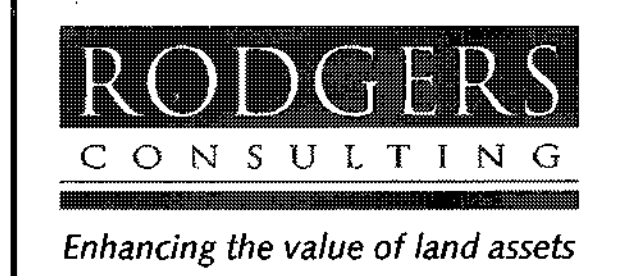
Frank G. ... 8/14/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

SEDIMENT & EROSION CONTROL PLAN



Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-08-78, P-02-10, P-02-17, P-09-03

SCALE: 1"=50'
JOB No: 506V3
DATE: 12/20/02
INDEX No: SC-2
SHEET No: 17 OF 50

SEDIMENT BASIN/TRAP SCHEDULE											
BASIN/TRAP NUMBER	TYPE	EXISTING DA (AC)	PROPOSED DA (AC)	SEDIMENT STORAGE VOLUME (CF)	SEDIMENT STORAGE ELEVATION (6)	DEWATERING STORAGE VOLUME (CF)	DEWATERING STORAGE ELEVATION (8)	SEDIMENT CLEANOUT VOLUME (CF)	SEDIMENT CLEANOUT ELEVATION (10)	BASIN/TRAP BOTTOM ELEVATION (11)	TOP EMBANKMENT ELEVATION (12)
BASIN 4	BASIN	8.05	27.40	90,640	380.50	49,320	378.40	24,660	377.23	376.00	385.00

SEDIMENT BASIN/TRAP TEMPORARY SWM COMPUTED WSELEV AND DISCHARGE SCHEDULE							
BASIN/TRAP NUMBER	1-YEAR TEMP SWM ALLOWABLE (cfs)	1-YEAR COMPUTED WSELEV (14)	1-YEAR COMPUTED INFLOW (CFS)(15)	1-YEAR COMPUTED OUTFLOW (CF) (16)	10-YEAR COMPUTED WSELEV (17)	10-YEAR COMPUTED INFLOW (CFS) (18)	10-YEAR COMPUTED OUTFLOW (CFS) (19)
BASIN 4 (REGIONAL)	1.8	382.00	53.90	1.80	383.42	138.20	94.10

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction

SCHEDULE NOTES: (BY COLUMN NUMBER)
 (2), (3) MAXIMUM DA USED FOR TEMPORARY SWM AND SEDIMENT VOLUME COMPUTATIONS.
 (8) DEWATERING VOLUME ELEVATION = START OF PERFORATIONS FOR DEWATERING DEVICE. SEE SHEET 31 FOR CONTROL STRUCTURE DETAILS.

SCHEDULE NOTES: (BY COLUMN NUMBER)
 (14) (15) (16) EXISTING AND PROPOSED CONDITIONS FOR TEMPORARY SWM BASED ON APPLYING EXISTING AND PROPOSED CN AND TC VALUES TO MAXIMUM DA FOR BOTH CONDITIONS.



DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."
 Signature: Stephen J. Mandella
 DATE: Aug 1, 2003

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 Signature: Frank G. Boring
 DATE: 8/4/03

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: William T. Walker
 DATE: 8-21-03

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Signature: Kurt Shulman
 DATE: 9/10/03

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
 Signature: [Signature]
 DATE: 8/18/03

APPROVED: USDA-NATURAL RESOURCES CONSERVATION SERVICE
 Signature: Jim M...
 DATE: 8/18/03

NOTE: CONTRACTOR TO LIMIT TOTAL AREA OF NON-STABILIZED AREAS TO 20AC OR LESS AT ALL TIMES
 NOTE: CONTRACTOR TO FIELD LOCATE THE EXISTING AT&T FIBER OPTIC LINES THROUGHOUT THIS SITE

CAUTION: EX. AT&T LINE TO REMAIN IN PLACE AT TIME OF SEWER INSTALLATION
 CAUTION: EX. AT&T LINE TO REMAIN IN PLACE AT TIME OF STORM DRAIN INSTALLATION

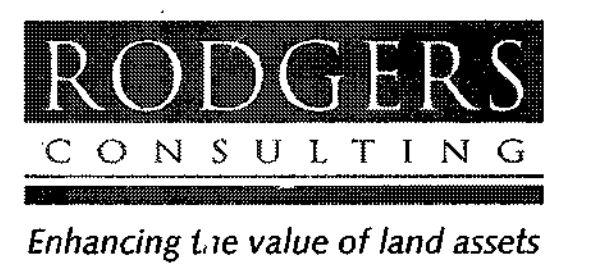
NOTE: THIS PLAN TO BE USED FOR SEDIMENT CONTROL ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"
 * WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
 ** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Developer/Owner:
 Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President (301) 803-4800

SEDIMENT & EROSION CONTROL PLAN



Rodgers Consulting, Inc.
 9260 Galter Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I, II & III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 280
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-08

SCALE: 1"=50'
 JOB No. 506V3
 DATE: 12/20/02
 INDEX No. SC-3
 SHEET No. 18 of 50

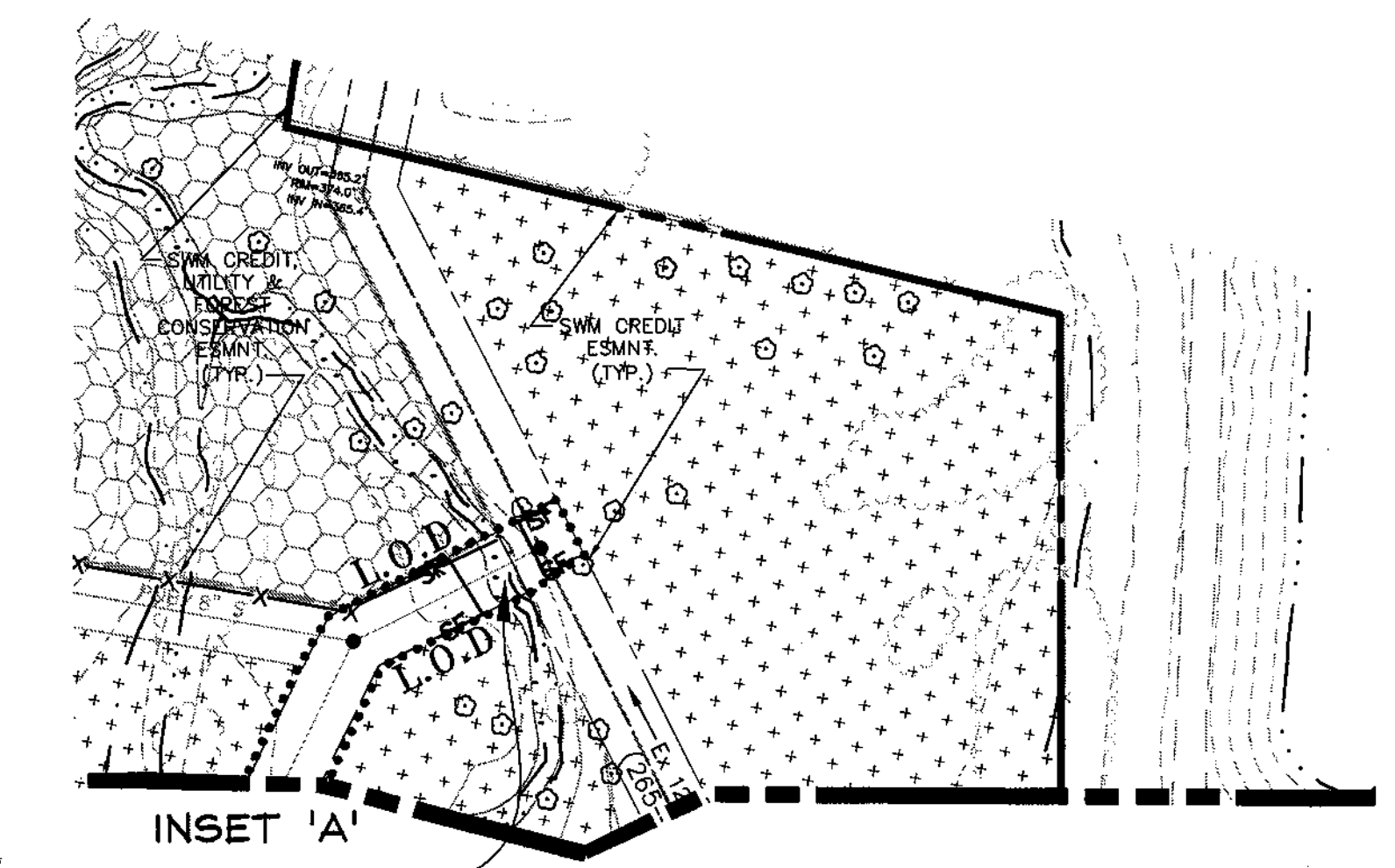


BASIN/TRAP NUMBER	TYPE	EXISTING DA (AC)	PROPOSED DA (AC)	SEDIMENT STORAGE VOLUME (CF)	SEDIMENT STORAGE ELEVATION	DEWATERING STORAGE VOLUME (CF)	DEWATERING STORAGE ELEVATION	SEDIMENT CLEANOUT VOLUME (CF)	SEDIMENT CLEANOUT ELEVATION	BASIN/TRAP BOTTOM ELEVATION	TOP EMBANKMENT ELEVATION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
TRAP B	ST-1	3.50	3.64	13,104	388.50	6,552	387.50	3,276	386.60	386.00	392.00

SCHEDULE NOTES: (BY COLUMN NUMBER)
 (2), (3) MAXIMUM DA USED FOR TEMPORARY SWM AND SEDIMENT VOLUME COMPUTATIONS.
 (8) DEWATERING VOLUME ELEVATION = START OF PERFORATIONS FOR DEWATERING DEVICE.
 SEE SHEET 21 FOR DEWATERING DEVICE DETAILS.

BASIN/TRAP NUMBER	1-YEAR TEMP SWM ALLOWABLE (cfs)	1-YEAR COMPUTED WSELEV (14)	1-YEAR COMPUTED INFLOW (CFS)(15)	1-YEAR COMPUTED OUTFLOW (CF) (16)	10-YEAR COMPUTED WSELEV (17)	10-YEAR COMPUTED INFLOW (CFS) (18)	10-YEAR COMPUTED OUTFLOW (CFS) (19)
TRAP B	0.46	389.52	8.90	0.40	390.70	20.17	12.51

SCHEDULE NOTES: (BY COLUMN NUMBER)
 (14) (15) (16) EXISTING AND PROPOSED CONDITIONS FOR TEMPORARY SWM BASED ON APPLYING EXISTING AND PROPOSED CN AND TC VALUES TO MAXIMUM DA FOR BOTH CONDITIONS.



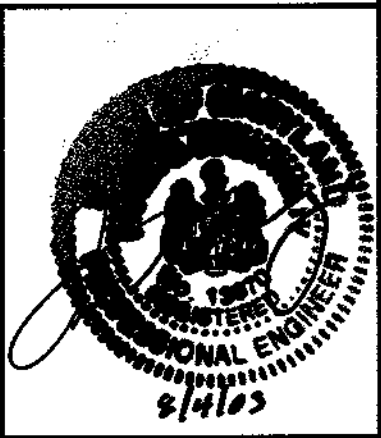
SEE DETAILS ON SHEET 21 FOR TEMP. PUMP AROUND AT SEWER CROSSING OF STREAM.

- Legend**
- PROPOSED EARTH DIKE
 - STABILIZED CONSTRUCTION ENTRANCE
 - SILT FENCE
 - SUPER SILT FENCE
 - SAFETY FENCE
 - INLET PROTECTION
 - DRAINAGE AREA LINE
 - STORM DRAIN
 - STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - *TREE PROTECTION FENCE
 - COMBINED SILT/TREE PROTECTION FENCE
 - CONSERVATION SIGNAGE
 - PROP. SWM CREDIT, UTILITY AND FOREST CONSERVATION EASEMENT
 - PROP. SWM CREDIT EASEMENT

* WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.
 ** THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 199 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction



DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Nardella 1/2003
 SIGNATURE OF DEVELOPER DATE
 (PRINT NAME BELOW SIGNATURE)

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Frank C. Rosowicz 2/4/03
 SIGNATURE OF ENGINEER DATE
 (PRINT NAME BELOW SIGNATURE)

APPROVED:
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 8/18/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:
 THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

[Signature] 8/18/03
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 8-21-03
 CHIEF, BUREAU OF HIGHWAY DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

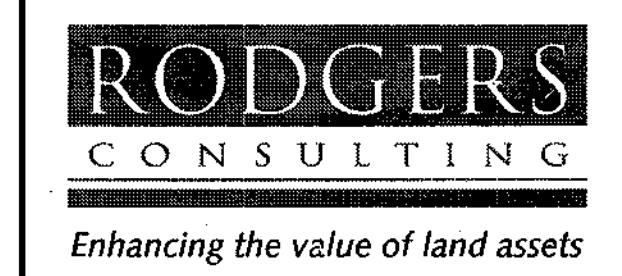
[Signature] 9-11-03
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 9/2/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

SEDIMENT & EROSION CONTROL PLAN



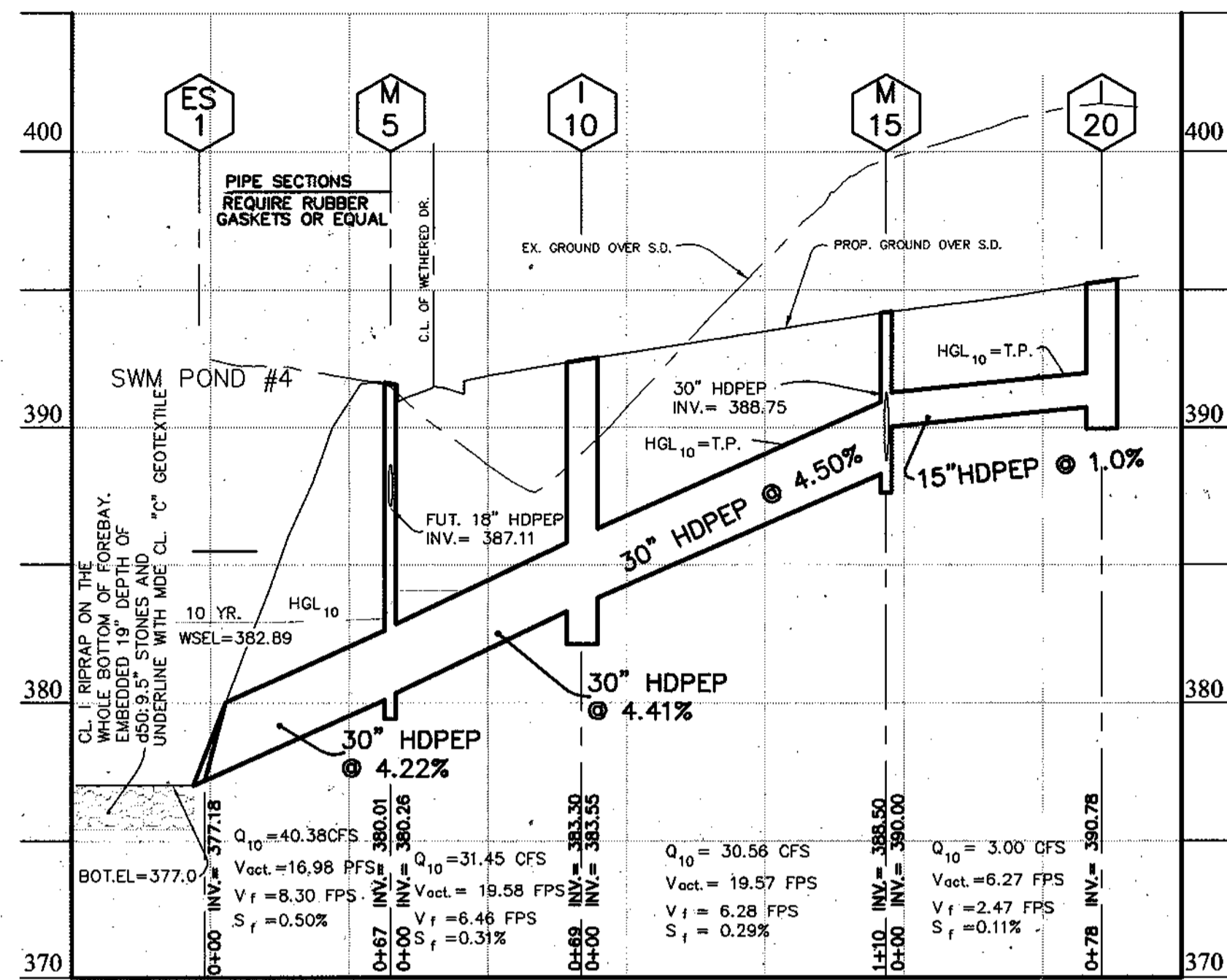
Rodgers Consulting, Inc.
 9260 Galther Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I & II, III

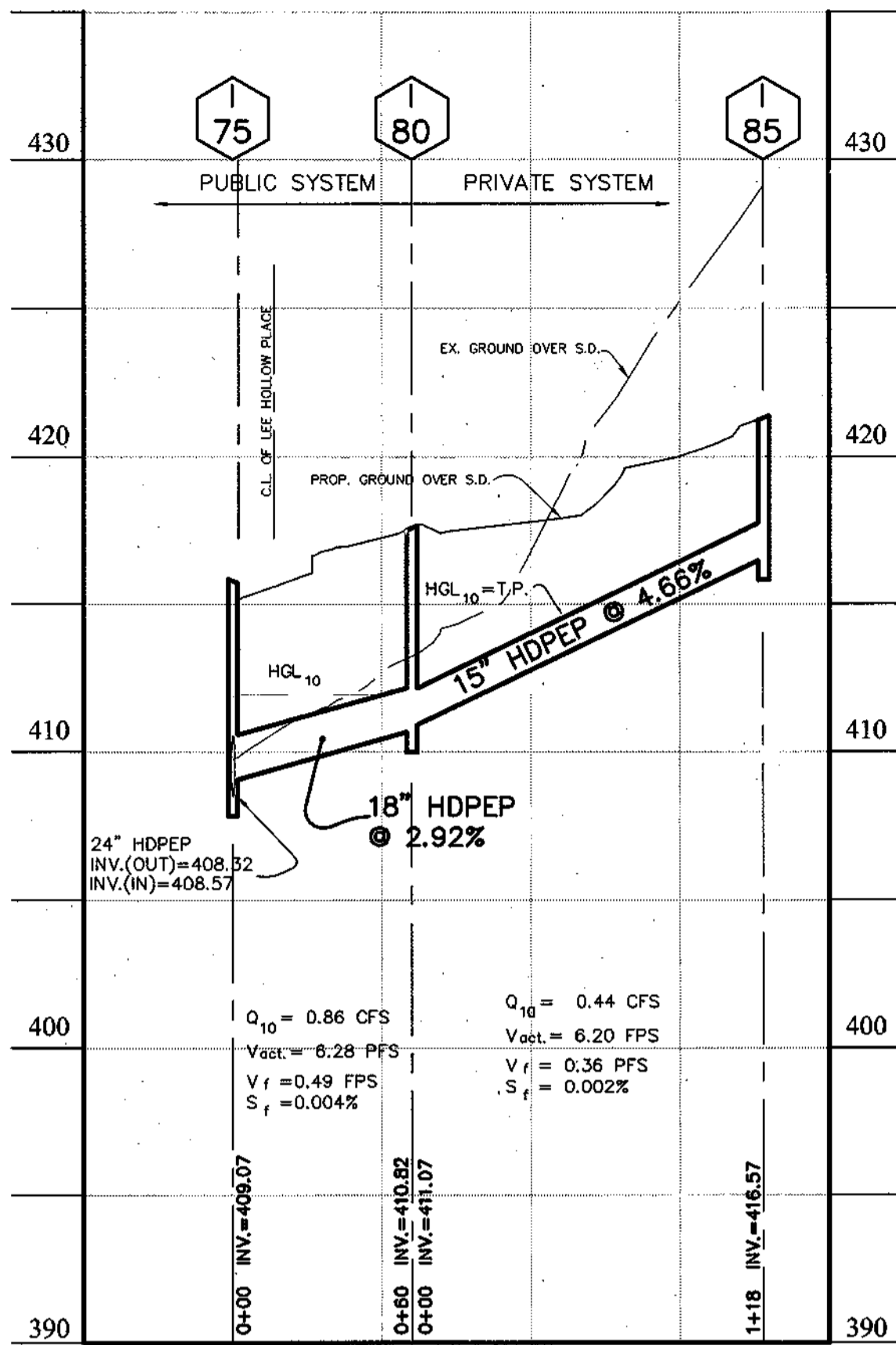
Montjoy

ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 280
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

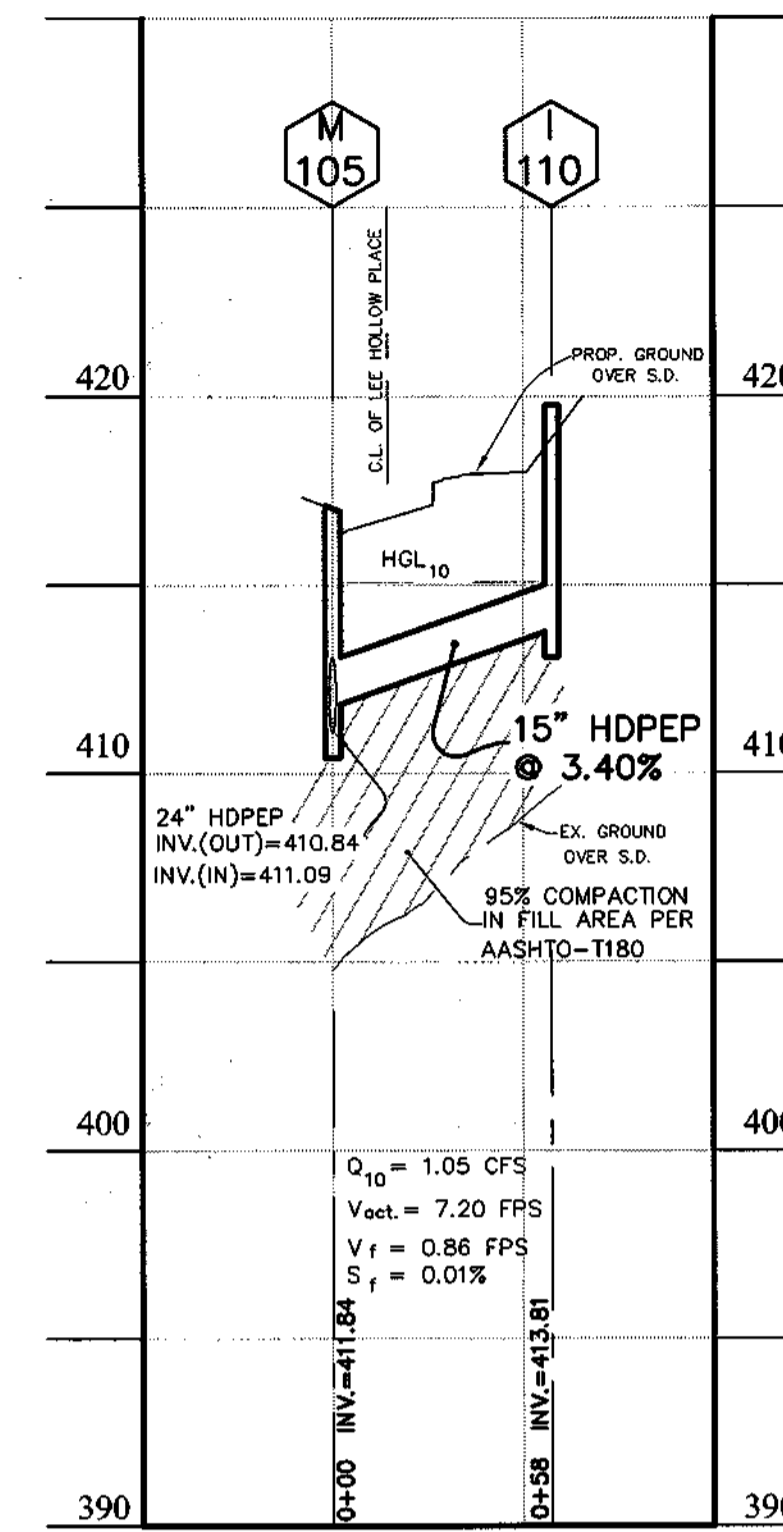
SCALE: " = 50'
 JOB No: 506v3
 DATE: 11/02/02
 INDEX No: SC-4
 SHEET No: 19 OF 50



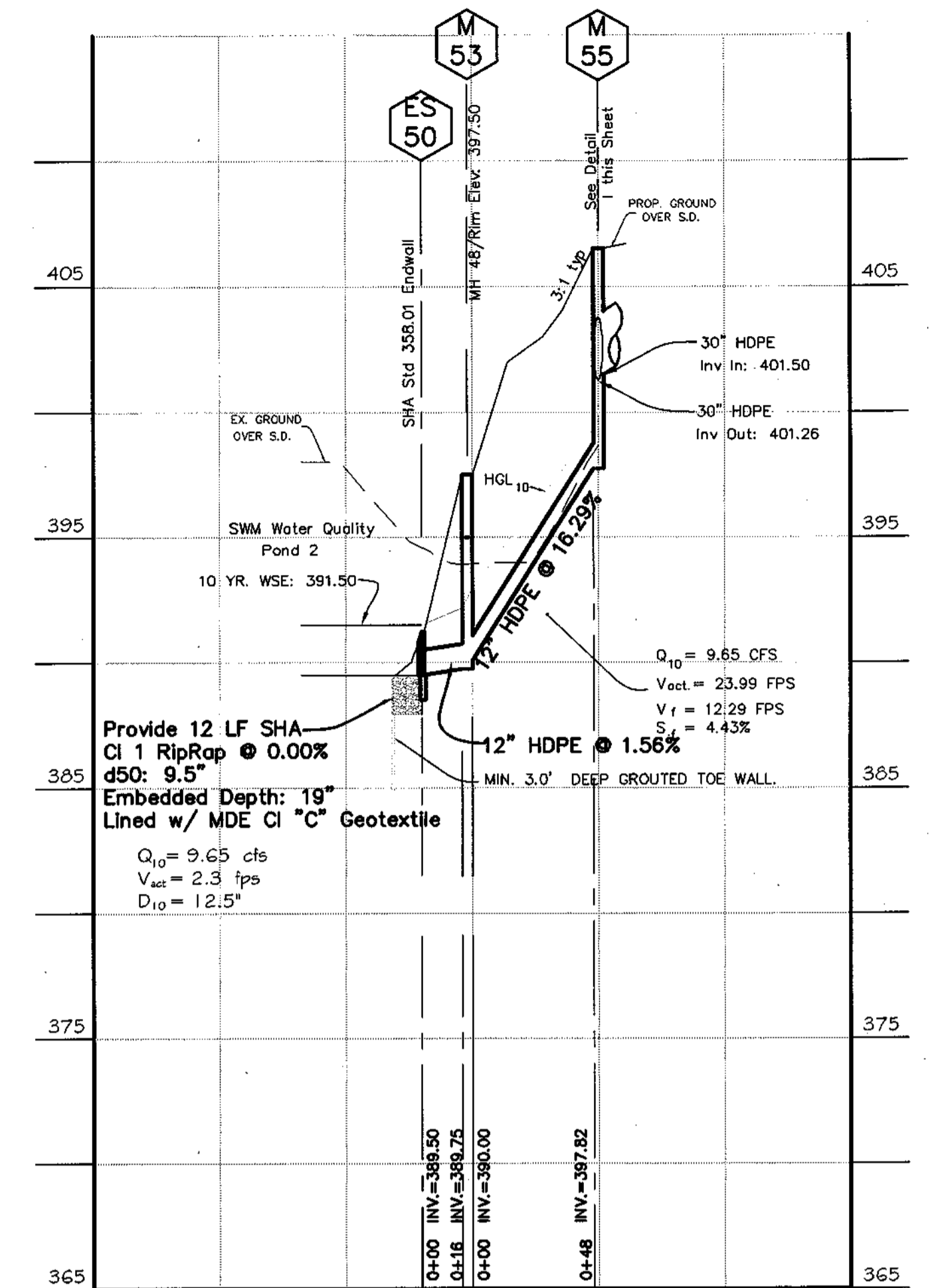
STORM DRAIN PROFILE: FROM ES-1 TO I-20
(PUBLIC SYSTEM)



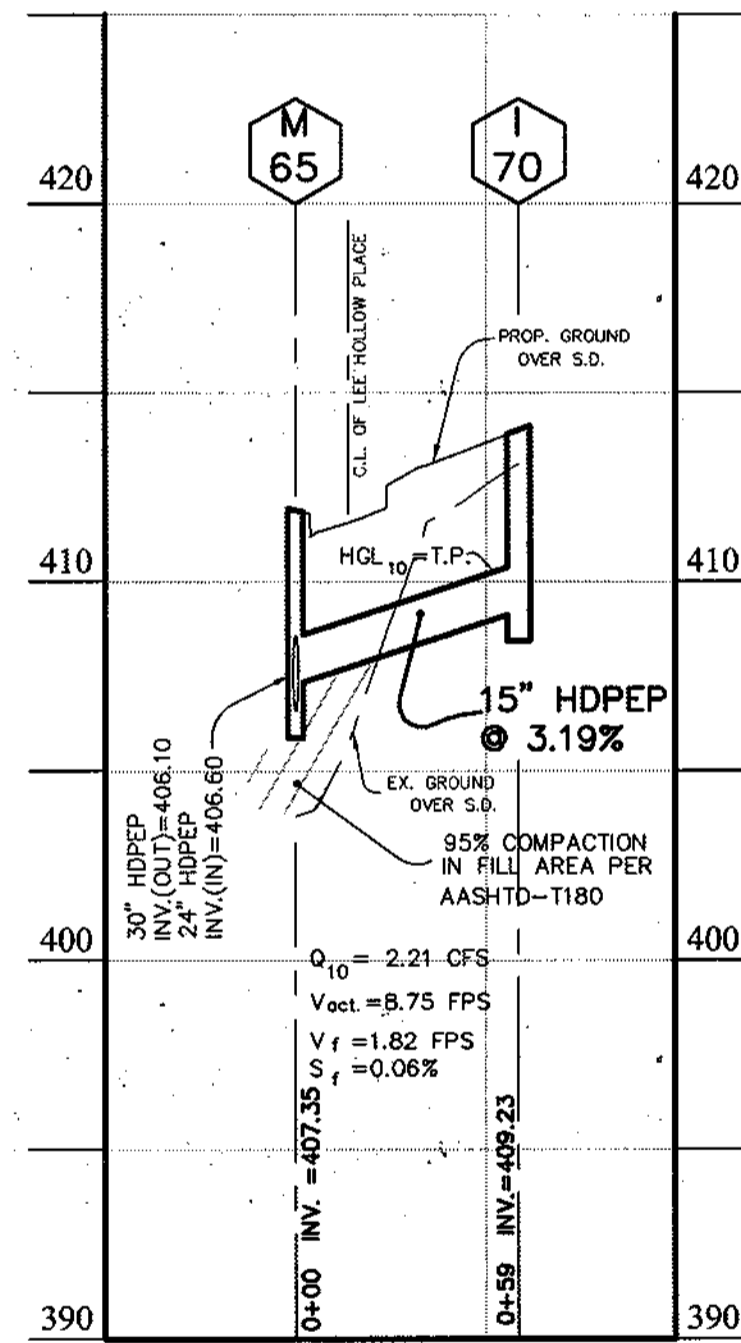
STORM DRAIN PROFILE: FROM I-75 TO I-85
(PUBLIC SYSTEM)



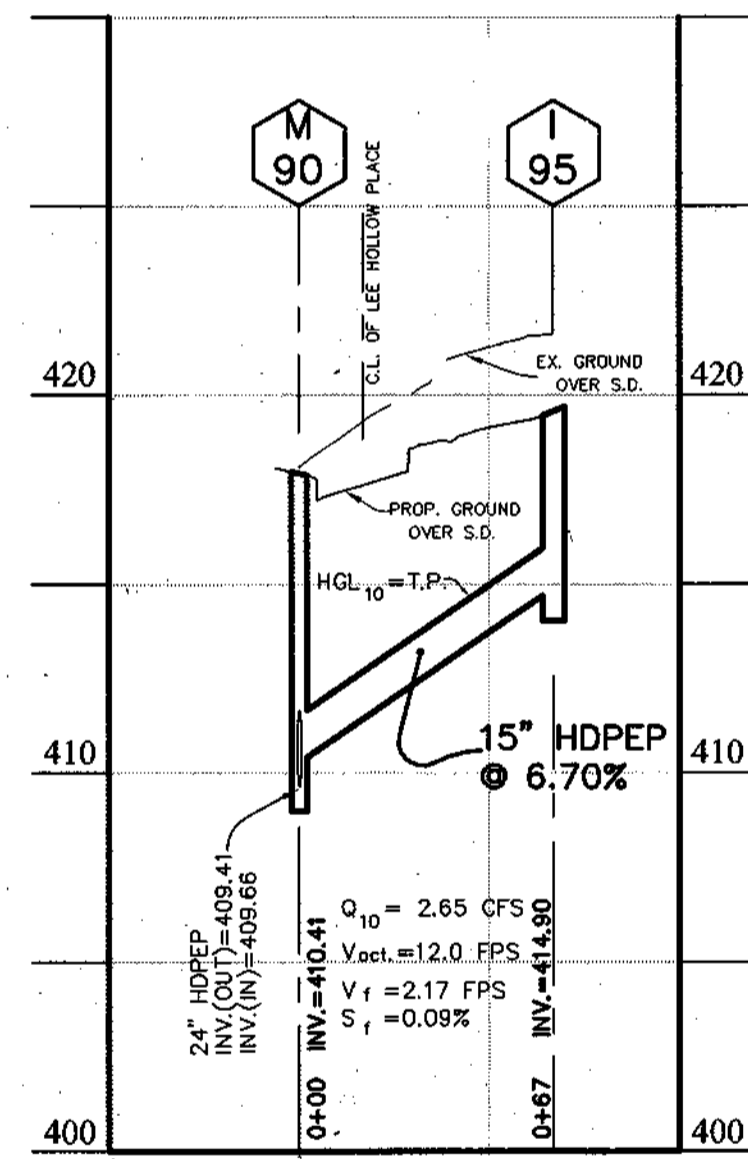
STORM DRAIN PROFILE: FROM M-105 TO I-110
(PUBLIC SYSTEM)



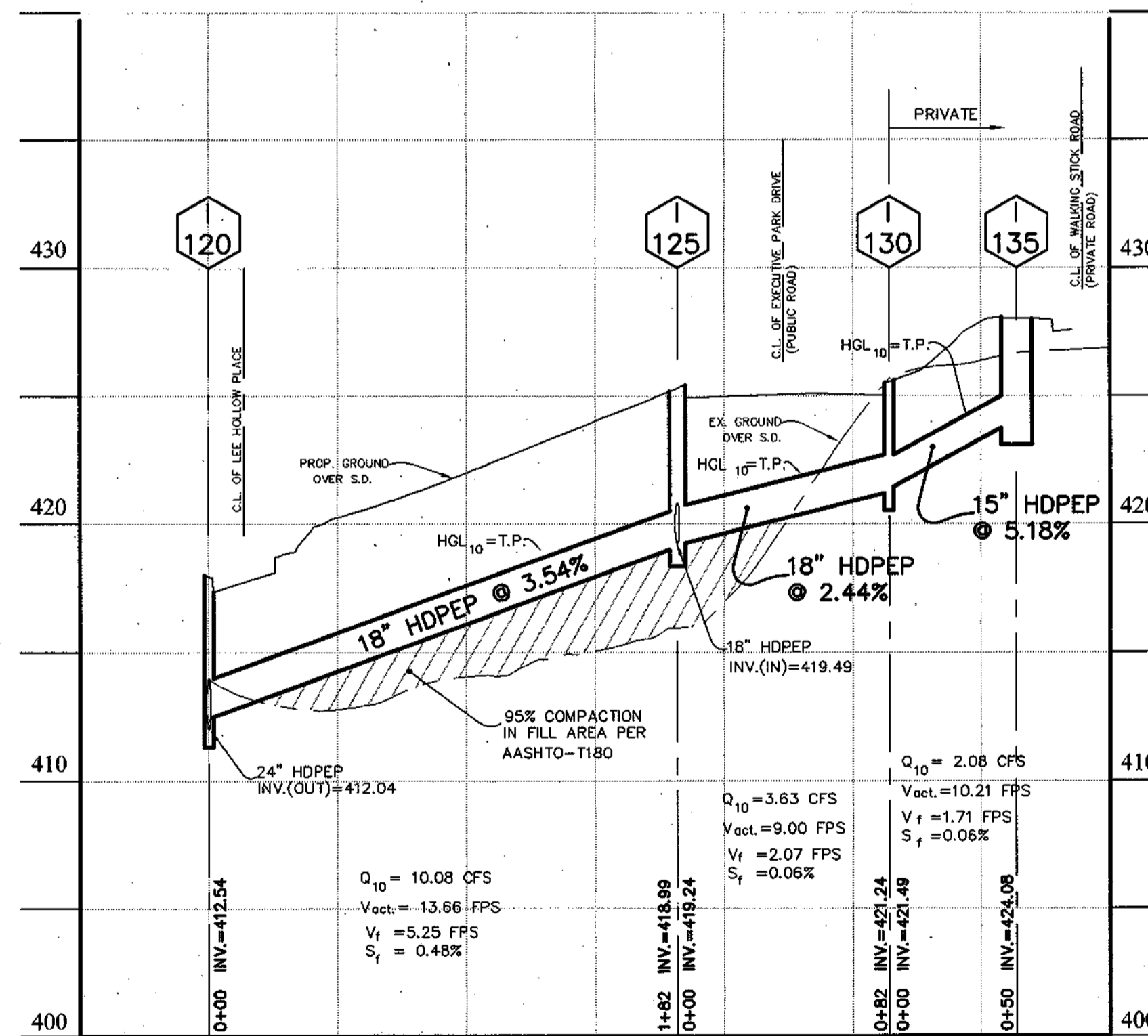
STORM DRAIN PROFILE: FROM ES-50 TO M-55



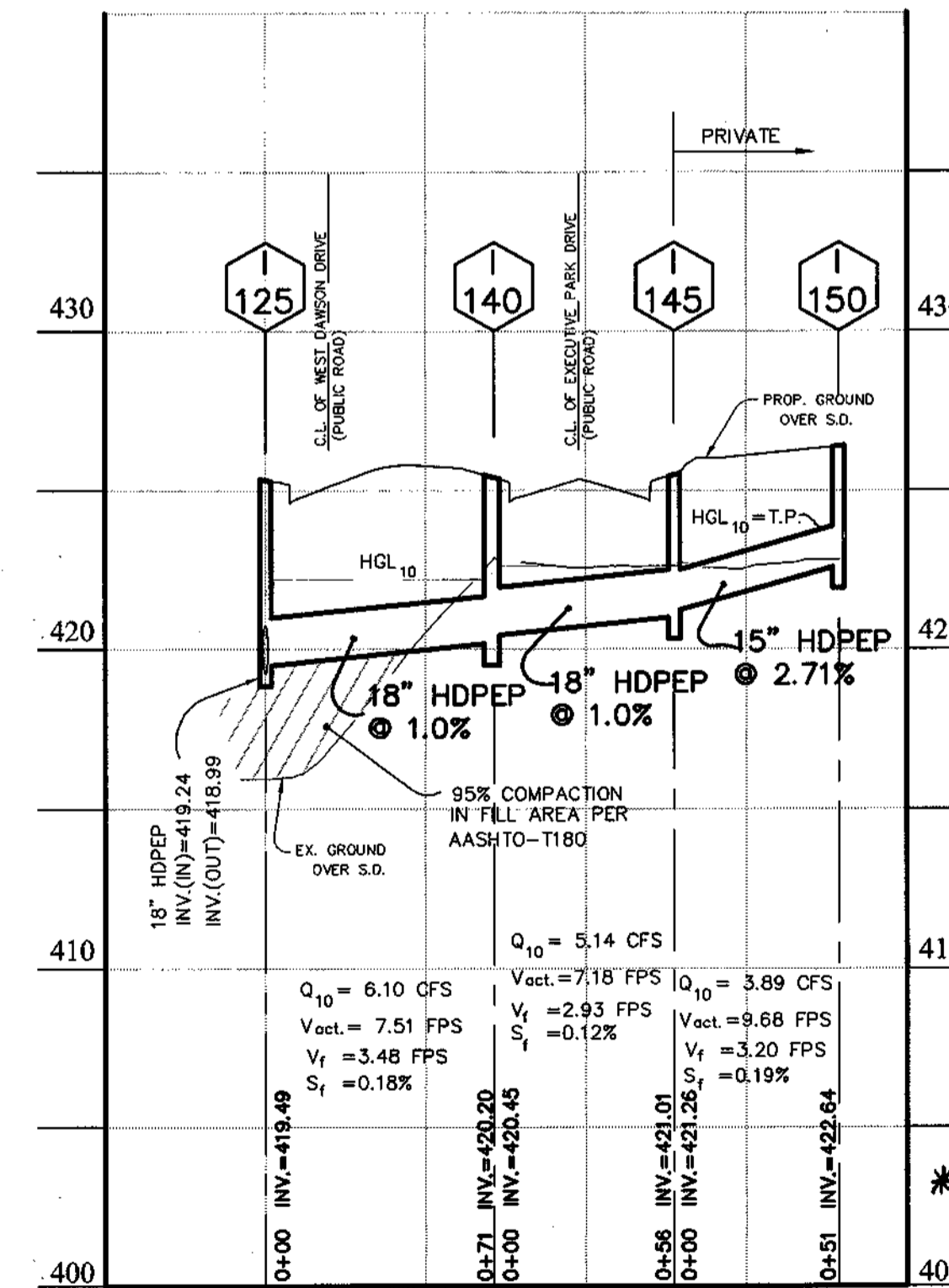
STORM DRAIN PROFILE: FROM M-65 TO I-70
(PUBLIC SYSTEM)



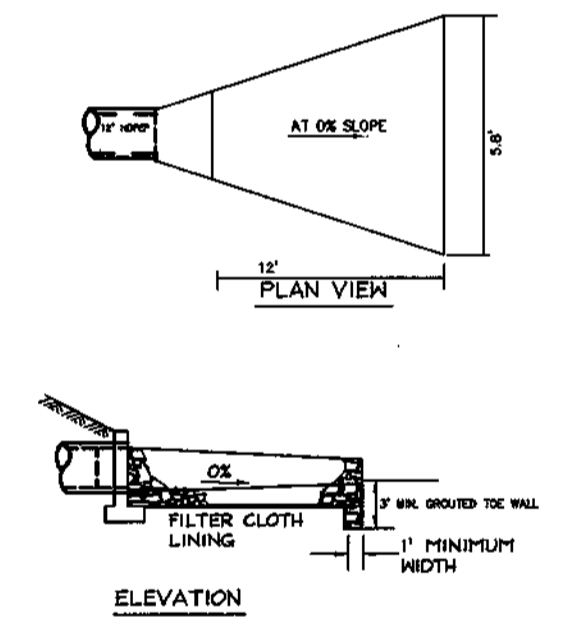
STORM DRAIN PROFILE: FROM M-90 TO I-95
(PUBLIC SYSTEM)



STORM DRAIN PROFILE: FROM I-120 TO I-135
(PUBLIC SYSTEM)



STORM DRAIN PROFILE: FROM I-125 TO I-150
(PUBLIC SYSTEM)



NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

RIP RAP PROTECTION DETAIL FOR ES-50

PIPE SCHEDULE

SIZE	TYPE	LENGTH
12"	HDPEP	64 L.F.
15"	HDPEP	1422 L.F.
18"	HDPEP	1332 L.F.
24"	HDPEP	1024 L.F.
30"	HDPEP	1234 L.F.

- NOTES:
- PIPE LENGTH SHOWN ON SCHEDULE ARE BASED ON PROFILE LENGTHS FROM CENTERLINE TO CENTERLINE OF THE STRUCTURES FOR PRECAST TYPE STRUCTURES.
 - PIPES SHOWN HEREON ARE HI-Q PIPES MANUFACTURED BY HANCOR OR EQUAL.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

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



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Kristle L. L... 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William T. ... 8-21-03
CHIEF, BUREAU OF HIGHWAY
DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PPB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

CONSTRUCTION PLANS
STORM DRAIN PROFILES



Rodgers Consulting, Inc.
9250 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

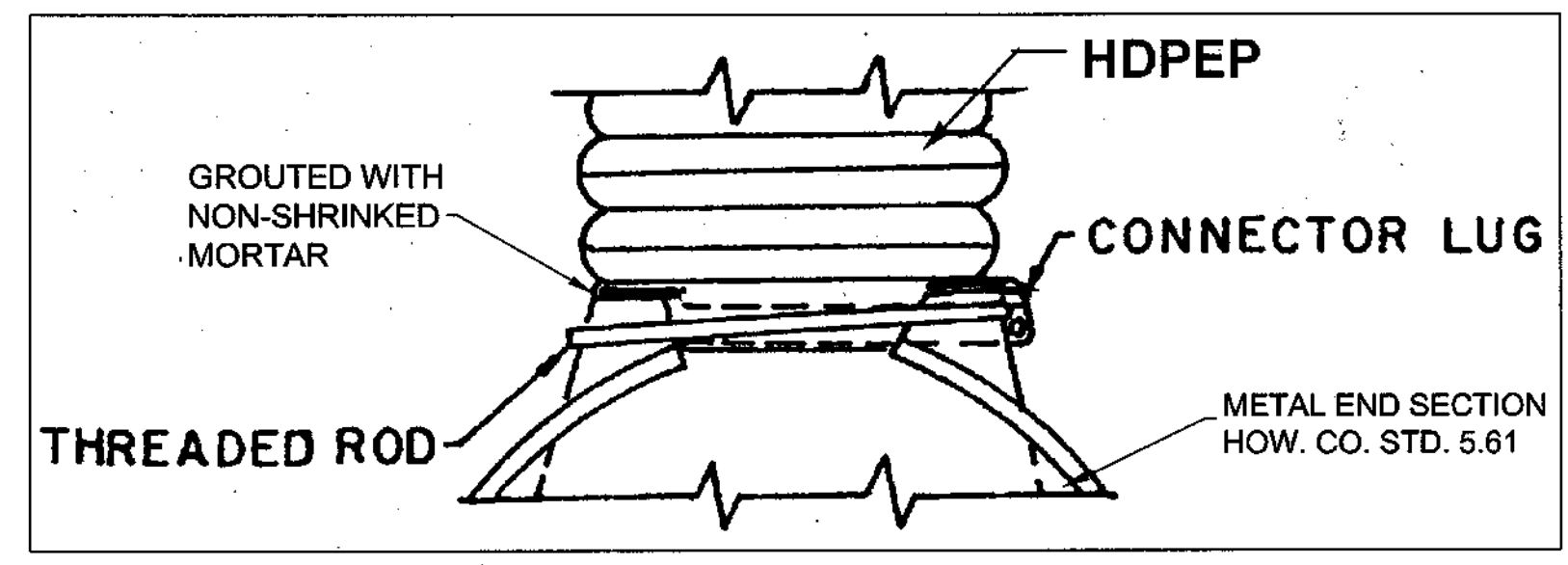
* PHASES I, II & III

Montjoy

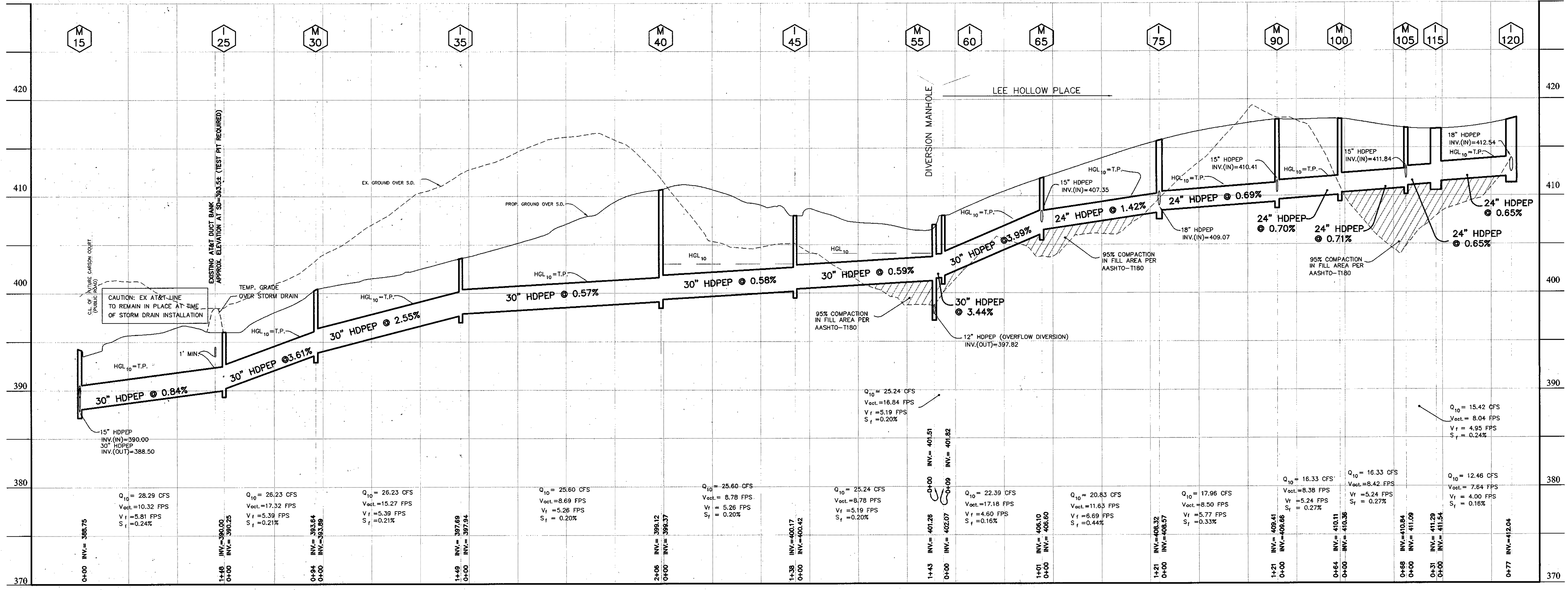
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND

TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-17, WP-03-78, P-02-10, P-02-11, P-03-03

SCALE	AS SHOWN
JOB No.	506v3
DATE:	12/20/02
INDEX No.	SD-1
SHEET No.	22 OF 50



MODIFIED METAL END SECTION / HDPEP CONNECTION DETAIL
NOT TO SCALE

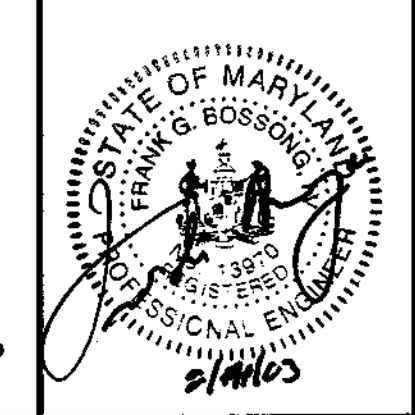


STORM DRAIN PROFILE: FROM M-15 TO I-120

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Katherine [Signature] 9-11-03
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. [Signature] 8-21-03
 CHIEF, BUREAU OF HIGHWAY

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



* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A",
 OPEN SPACE LOTS 120 - 126, 194 AND
 NON-BUILDABLE BULK PARCELS "B" AND "C"

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803 - 4800

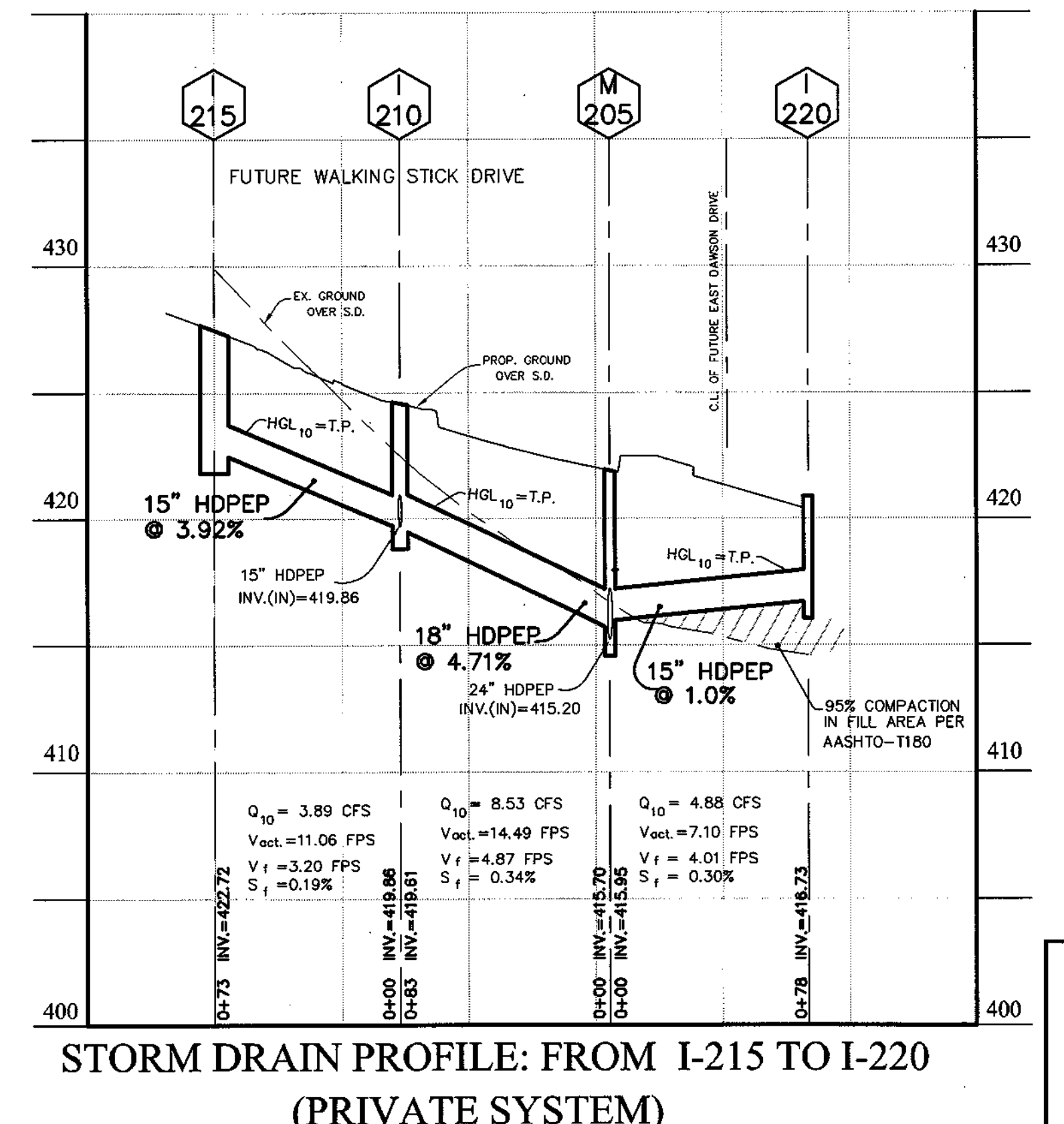
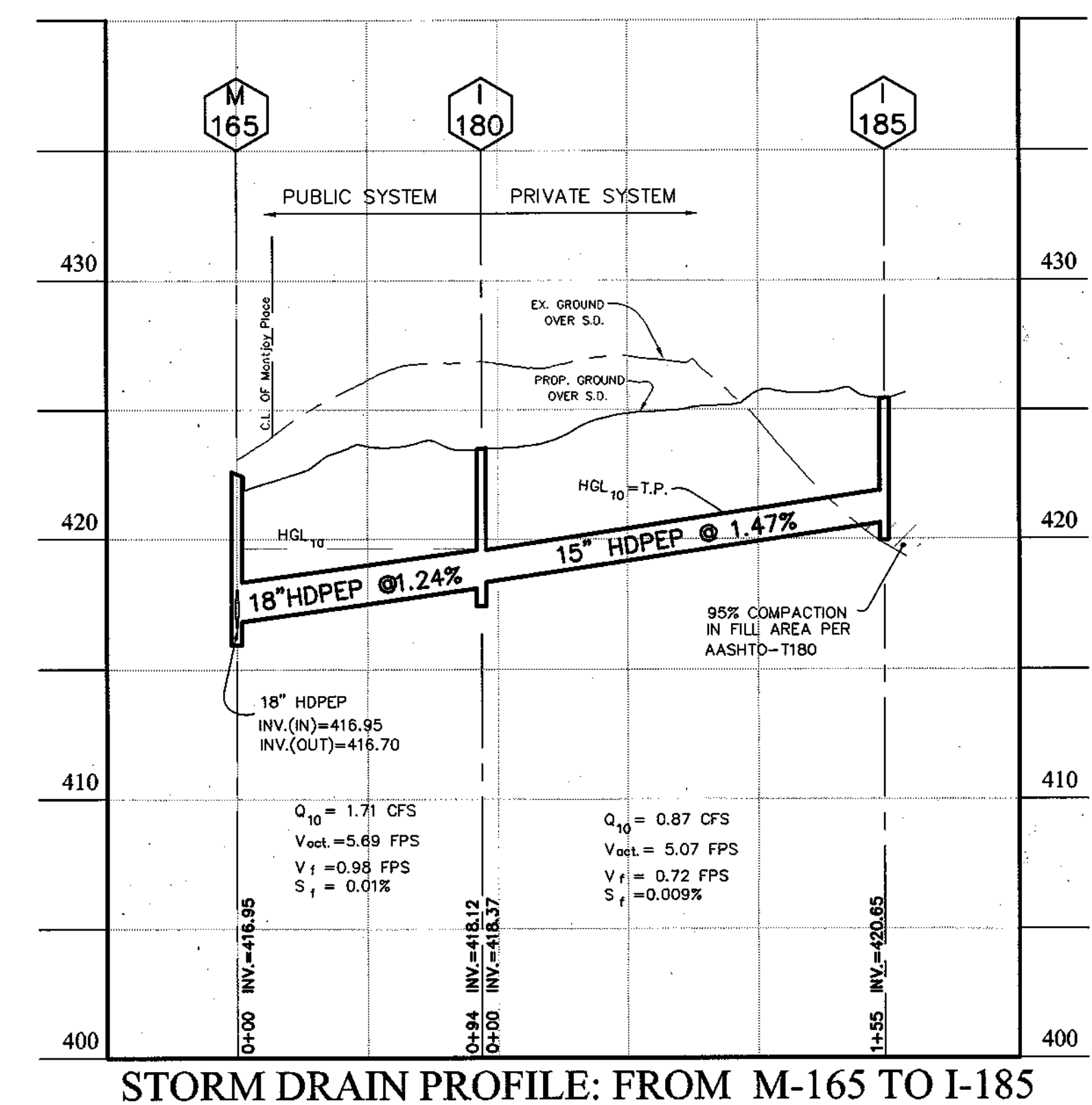
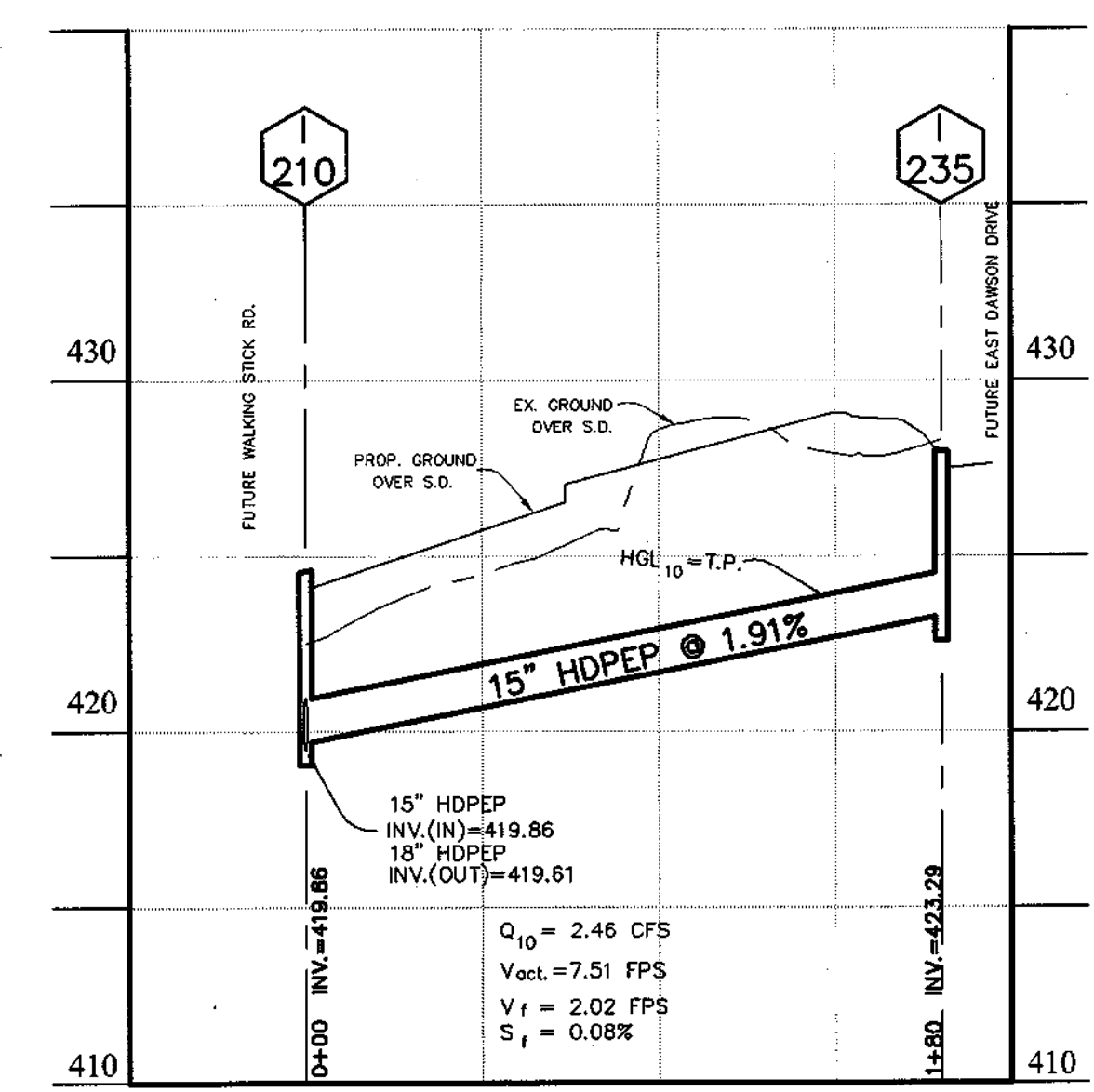
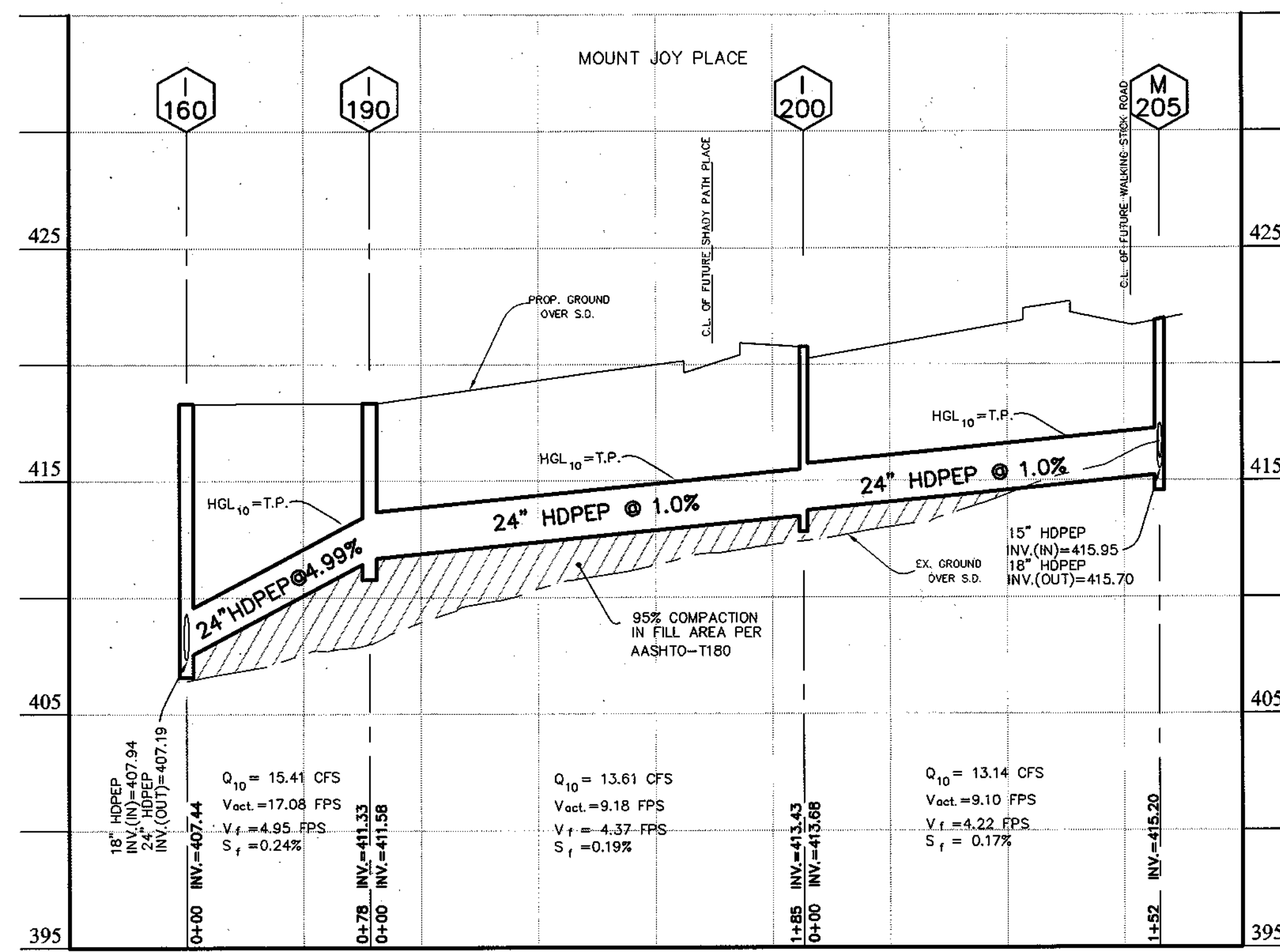
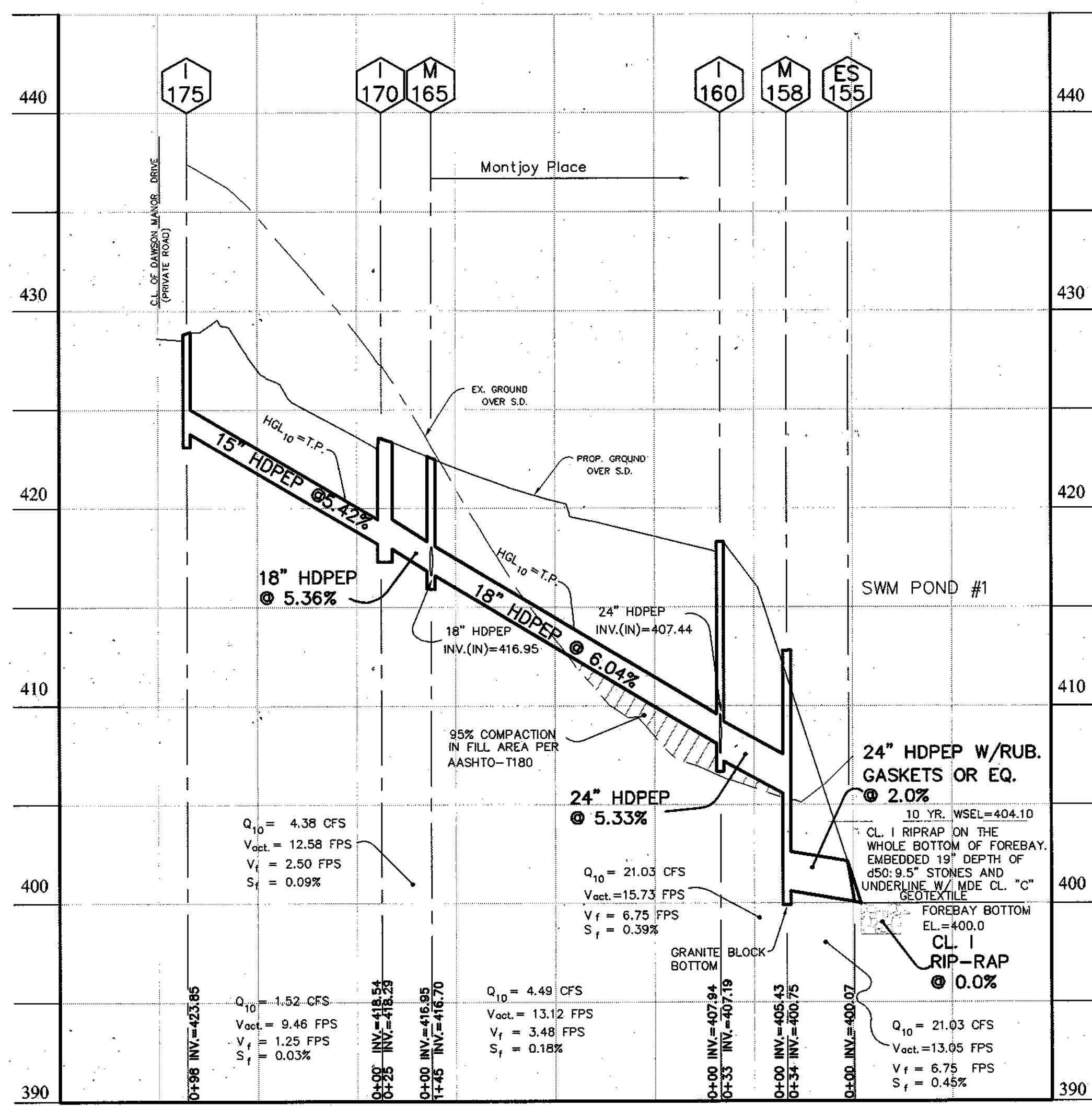
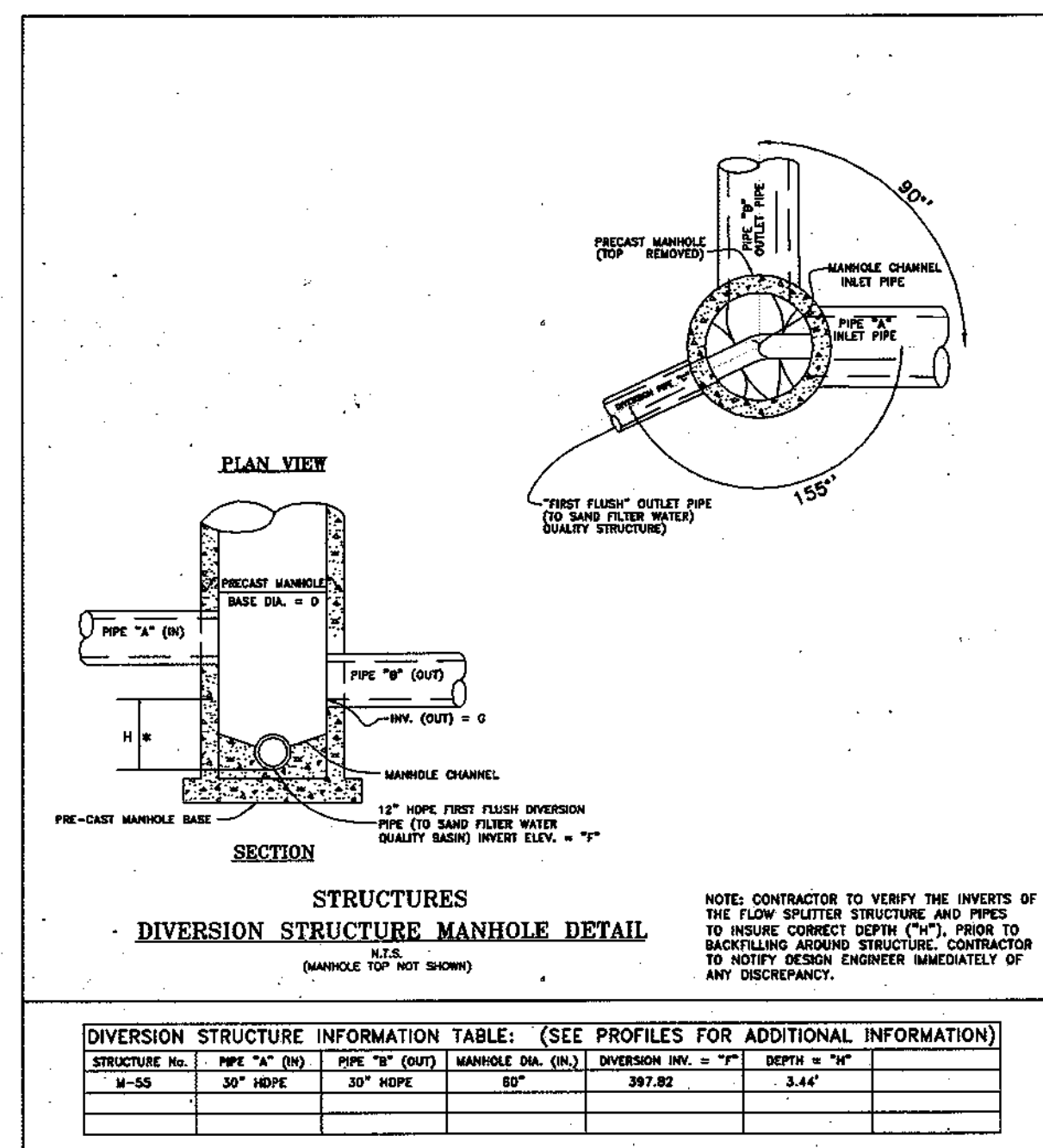
CONSTRUCTION PLANS
STORM DRAIN PROFILES



Rodgers Consulting, Inc.
 9260 Galther Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I, II & III
Montjoy
 ELECTION DISTRICT No. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: AS SHOWN
JOB No. 506v3
DATE: 12/20/02
INDEX No. SD-2
SHEET No. 23 OF 50



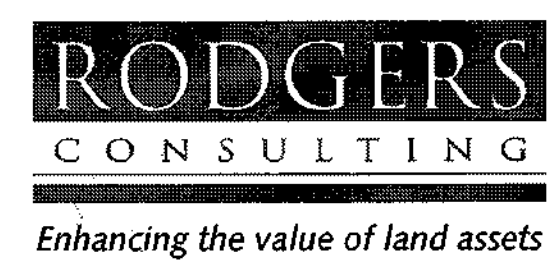
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Paul Sheehan 9-11-03
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Walker 8-21-03
 CHIEF, BUREAU OF HIGHWAY

DATE	REVISION	DATE	BY	DATE

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

CONSTRUCTION PLANS
STORM DRAIN PROFILES

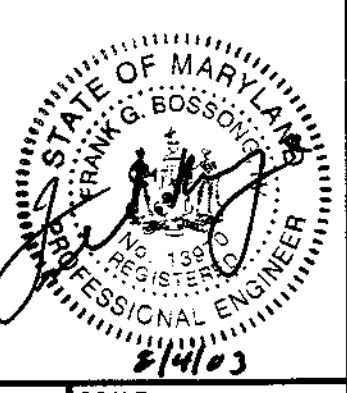


Rodgers Consulting, Inc.
 9250 Gaithers Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.roddgers.com

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

PHASES I, II & III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID-12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

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

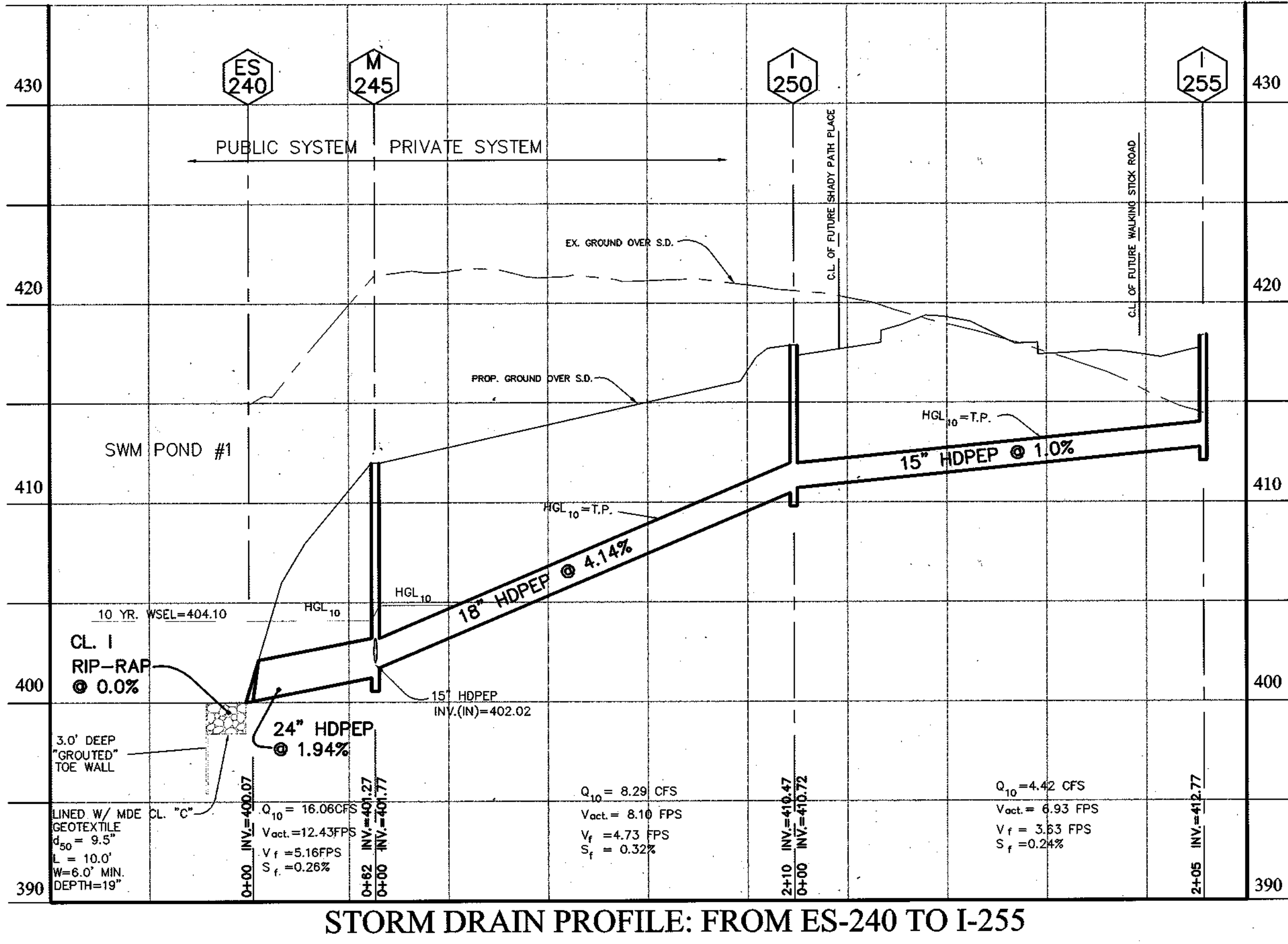


SCALE: AS SHOWN
 JOB No. 506v3
 DATE: 12/20/02
 INDEX No. SD-3
 SHEET No. 24 OF 50

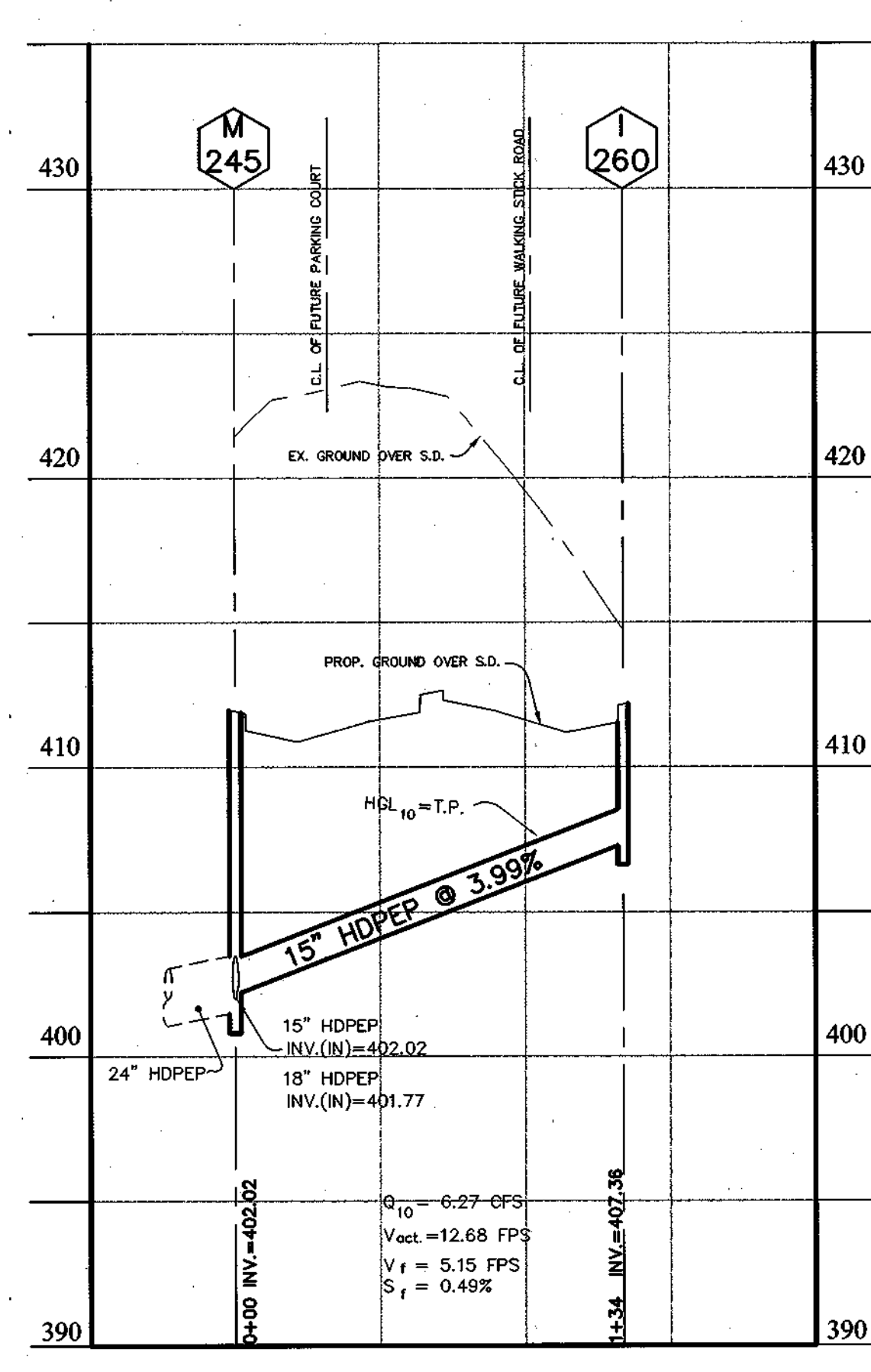
STRUCTURE SCHEDULE

STR. No.	STRUCTURE TYPE	STRUCTURE LOCATION	STRUCTURE ELEVATION	INVERT (IN)	INVERT (IN)	INVERT (OUT)	REMARKS	STR. No.	STRUCTURE TYPE	STRUCTURE LOCATION	STRUCTURE ELEVATION	INVERT (IN)	INVERT (IN)	INVERT (OUT)	REMARKS
ES-1	30" METAL END SECTION HOWARD CO. STD. SD-5.61	N 573271.5853 E 1363207.6011	379.50	377.00 (30")	---	---	SEE SHEET SD-2 FOR CONNECTION DETAIL	I-140	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	EXECUTIVE PARK DRIVE STA. 1+462.27 O/S 26.80' LT.	425.41 / 425.36	420.45 (18")	---	420.20 (18")	
M-5	MANHOLE HOWARD CO. STD. GS.11	FUTURE WETHERED DRIVE STA. 3+470.78 O/S 13.61' RT.	391.67	380.26 (30")	387.11 (18")	380.01 (30")	GRANITE BLOCK BOTTOM	I-145	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	EXECUTIVE PARK DRIVE STA. 1+463.02 O/S 26.86' RT.	425.41 / 425.42	421.26 (15")	---	421.01 (18")	
I-10	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE CARSON COURT STA. 0+52.24 O/S 10.00' RT.	392.47 / 392.30	383.55 (30")	---	383.30 (30")		I-150	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE JOYFUL WAY STA. 0+41.65 O/S 12.00' LT.	426.73 / 426.72	---	---	422.64 (15")	
M-15	MANHOLE HOWARD CO. STD. GS.11	FUTURE CARSON COURT STA. 1+81.78 O/S 13.14' RT.	394.07	388.75 (30")	390.00 (15")	388.50 (30")		ES-155	24" METAL END SECTION HOWARD CO. STD. SD-5.61	N 57241.2808 E 1363989.0010	402.00	400.07 (24")	---	---	SEE SHEET SD-2 FOR CONNECTION DETAIL
I-20	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE CARSON COURT STA. 2+37.37 O/S 10.00' RT.	395.25 / 395.15	---	---	390.78 (15")		M-158	MANHOLE HOWARD CO. STD. GS.11	N 57241.2808 E 1363989.0010	411.50	405.43 (24")	---	400.62 (24")	GRANITE BLOCK BOTTOM
I-25	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572984.6587 E 1363300.8602	395.73	390.25 (30")	---	390.00 (30")		I-160	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	N 57241.2808 E 1363989.0010	418.58 / 418.40	407.94 (18")	407.44 (24")	407.19 (24")	
M-30	MANHOLE HOWARD CO. STD. GS.11	N 572980.3179 E 1363345.8602	400.90	393.89 (30")	---	393.64 (30")		M-165	MANHOLE HOWARD CO. STD. GS.11	STA. 3+42.85 O/S 14.77' LT.	422.50	416.95 (18")	416.95 (18")	416.70 (18")	
I-35	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572755.9150 E 1363378.9189	404.46	397.94 (30")	---	397.66 (30")		I-170	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	MONTOUY PLACE STA. 3+17.71 O/S 12.00' LT.	423.80 / 423.30	418.54 (15")	---	418.29 (18")	
M-40	MANHOLE HOWARD CO. STD. GS.11	N 572967.2590 E 1363290.6169	409.63	399.37 (30")	---	399.12 (30")		I-175	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	DAWSON MANOR DRIVE STA. 3+40.82 O/S 12.00' RT.	379.50	---	---	423.85 (15")	
I-45	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572431.8148 E 1363265.3023	400.42	400.42 (30")	---	400.17 (30")		I-180	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572302.8137 E 1363787.6156	423.63	411.07 (15")	---	410.82 (18")	
ES-50	12" METAL END SECTION HOWARD CO. STD. SD-5.61	N 572470.0444 E 1363290.4373	390.50	389.50 (12")	---	---	SEE SHEET SD-2 FOR CONNECTION DETAIL	I-185	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572150.0118 E 1363810.9992	424.83	---	---	416.57 (15")	
M-53	MANHOLE (INVERSION) HOWARD CO. STD. GS.11	N 572453.0227 E 1363204.5008	398.50	390.00 (12")	---	389.75 (12")		I-190	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	MONTOUY PLACE STA. 5+11.87 O/S 30.00' LT.	418.45 / 418.45	411.58 (24")	---	411.33 (24")	
M-55	MANHOLE (INVERSION) HOWARD CO. STD. GS.11	N 572410.1290 E 1363123.8870	406.50	401.51 (30")	---	401.26 (30")	SEE SHT. SD-3 FOR DET. - 12" HDPEP OUT AT 397.81	I-200	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	MONTOUY PLACE STA. 7+00.04 O/S 27.00' LT.	421.27 / 421.09	413.88 (24")	---	413.43 (24")	
I-60	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	LEE HOLLOW PLACE STA. 7+92.60 O/S 15.64' LT.	408.77 / 408.44	402.07 (30")	---	401.82 (30")		M-205	MANHOLE HOWARD CO. STD. GS.11	FUTURE WALKING STICK ROAD STA. 5+09.50 O/S 24.51' RT.	422.04	415.70 (18")	415.95 (15")	415.20 (24")	
M-65	MANHOLE HOWARD CO. STD. GS.11	LEE HOLLOW PLACE STA. 6+92.38 O/S 16.00' LT.	411.87	406.60 (24")	407.35 (15")	406.10 (30")		I-210	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE WALKING STICK ROAD STA. 4+27.76 O/S 32.86' RT.	424.87 / 424.68	419.86 (15")	419.86 (15")	419.61 (18")	
I-70	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	LEE MANOR DRIVE STA. 2+44.94 O/S 12.00' RT.	414.19 / 413.75	---	---	409.23 (15")		I-215	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE WALKING STICK ROAD STA. 3+54.75 O/S 30.00' RT.	426.74 / 426.32	---	---	422.72 (15")	
I-75	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	LEE HOLLOW PLACE STA. 5+71.88 O/S 12.00' LT.	415.81 / 415.65	408.57 (24")	409.07 (18")	408.32 (24")		I-220	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE EAST DAWSON DRIVE STA. 8+01.24 O/S 30.00' LT.	421.49 / 421.14	---	---	416.73 (15")	
I-80	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572174.0629 E 1363217.3211	417.59	411.07 (15")	---	410.82 (18")		I-235	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE JOYFUL WAY STA. 4+49.77 O/S 30.00' LT.	428.25 / 428.09	---	---	423.29 (15")	
I-85	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 572191.5683 E 1363331.4941	421.46	---	---	416.57 (15")		ES-240	24" METAL END SECTION HOWARD CO. STD. SD-5.61	N 572431.4083 E 1364064.6206	402.00	400.07 (24")	---	---	SEE SHEET SD-2 FOR CONNECTION DETAIL
M-90	MANHOLE HOWARD CO. STD. GS.11	STA. 4+51.89 O/S 18.63' LT.	417.88	409.66 (24")	410.41 (15")	409.41 (24")		M-245	MANHOLE HOWARD CO. STD. GS.11	N 572445.5899 E 1364124.8829	412.00	401.77 (18")	402.02 (15")	401.27 (24")	
I-95	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	SAMUEL JOY WAY STA. 2+25.86 O/S 12.00' RT.	419.74 / 419.31	---	---	414.90 (15")		I-250	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE SHADY PATH PLACE STA. 2+51.55 O/S 12.00' LT.	417.66 / 417.42	410.72 (15")	---	410.47 (18")	
M-100	MANHOLE HOWARD CO. STD. GS.11	STA. 3+93.89 O/S 16.86' LT.	417.92	410.36 (24")	---	410.11 (24")		I-255	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE WALKING STICK ROAD STA. 7+23.96 O/S 30.00' RT.	417.50 / 417.36	---	---	412.77 (15")	
M-105	MANHOLE HOWARD CO. STD. GS.11	LEE HOLLOW PLACE STA. 3+17.78 O/S 14.43' LT.	416.95	411.09 (24")	411.84 (15")	410.84 (24")		I-260	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE WALKING STICK ROAD STA. 1+43.09 O/S 30.00' RT.	411.31 / 411.17	---	---	407.36 (15")	
I-110	PRECAST STD. TYPE "D" INLET HOWARD CO. STD. S.D. 4.39	N 571946.6345 E 1363274.4779	419.76	---	---	413.61 (15")		I-265	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE PARKING AREA STA. 2+86.76 O/S 8.50' LT.	410.60 / 410.60	---	---	405.11 (15")	
I-115	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	LEE HOLLOW PLACE STA. 0+47 O/S 12.00' LT.	416.88 / 416.86	411.54 (24")	---	411.28 (24")		ES-270	18" END SECTION HOWARD CO. STD. SD-5.61	N 572832.6169 E 1363865.3907	399.50	398.07 (24")	---	---	SEE SHEET SD-2 FOR CONNECTION DETAIL
I-120	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	LEE HOLLOW PLACE STA. 2+10.56 O/S 12.00' LT.	418.03 / 417.77	412.54 (18")	---	412.04 (24")		I-275	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE PARKING AREA STA. 1+43.09 O/S 30.00' RT.	408.35 / 408.10	399.70 (24")	---	399.45 (24")	
I-125	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	BERNINI VIEW DRIVE STA. 0+50.34 O/S 17.52' RT.	424.69 / 424.59	419.24 (18")	419.49 (18")	418.99 (18")	INLET LOCATED IN A CURVE	M-280	MANHOLE HOWARD CO. STD. GS.11	FUTURE PARKING AREA STA. 0+31.83 O/S 33.62' RT.	409.00	402.19 (18")	402.44 (15")	401.44 (24")	
I-130	STD. A-5 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.40	EXECUTIVE PARK DRIVE STA. 2+54.66 O/S 23.33' RT.	425.46 / 425.46	421.49 (15")	---	421.24 (18")	INLET LOCATED IN A CURVE	I-285	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	N 572790.8223 E 1364627.3748	407.44 / 407.27	---	---	402.67 (15")	
I-135	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE WALKING STICK ROAD STA. 0+43.82 O/S 24.50' LT.	427.51 / 427.18	---	---	424.08 (15")		I-290	STD. A-10 INLET (WIDTH=2.5') HOWARD CO. STD. SD. 4.41	FUTURE WALKING STICK ROAD STA. 1+44.09 O/S 30.00' RT.	408.50	---	---	403.89 (15")	

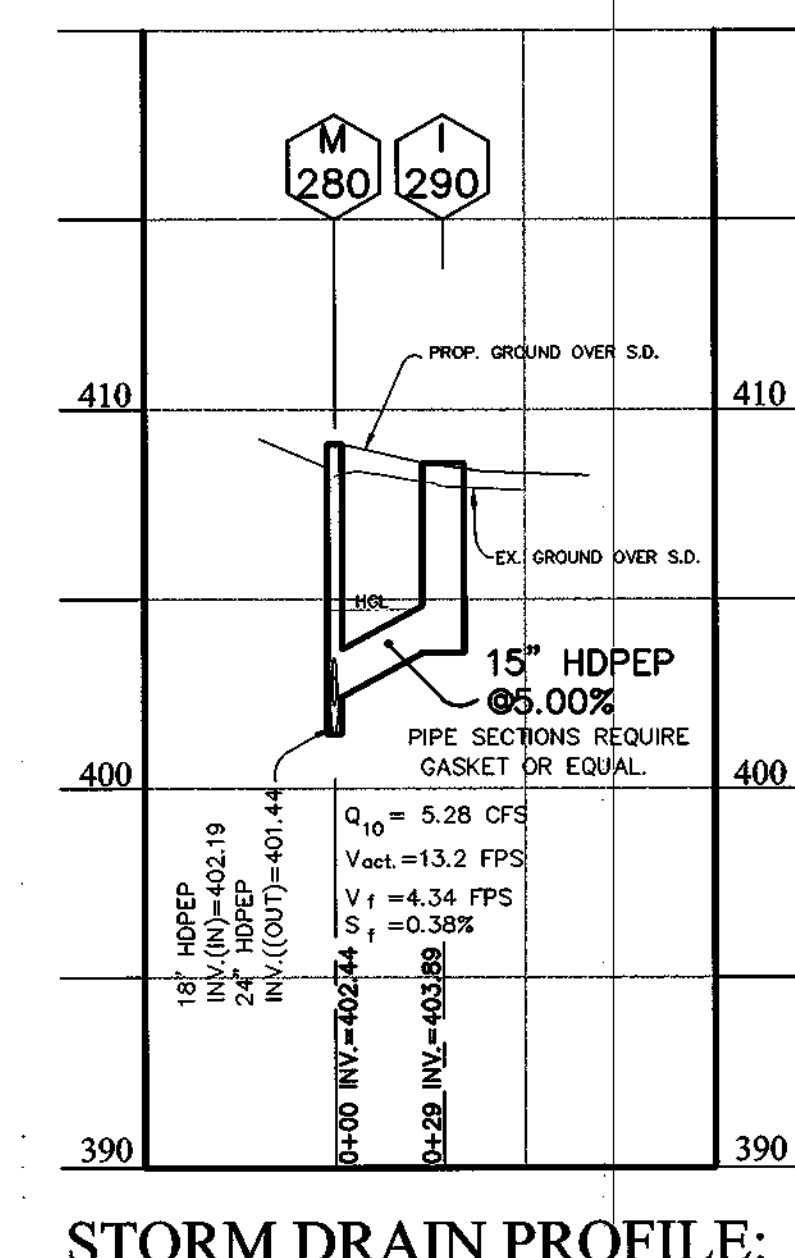
- NOTES:
 1. ALL CURB INLETS SHALL BE CAST FOR STANDARD 7" COMBINATION CURB & GUTTER (HOWARD CO. STD. R-3.01).
 2. OFFSET FOR INLETS IS TO FACE OF CURB AND FOR MANHOLES IS TO CENTER OF STRUCTURE.
 3. STATION INDICATES THE CENTER OF THE OUTSIDE WALL OF THE THROAT SECTION FOR INLETS AND THE CENTER OF THE STRUCTURE FOR MANHOLES.
 4. TO ELEV. / TO ELEV. DENOTES THE UPSTREAM AND DOWNSTREAM EDGE OF THE OUTSIDE WALL OF THE THROAT SECTION FOR INLETS AND CENTER OF THE STRUCTURE FOR MANHOLES.



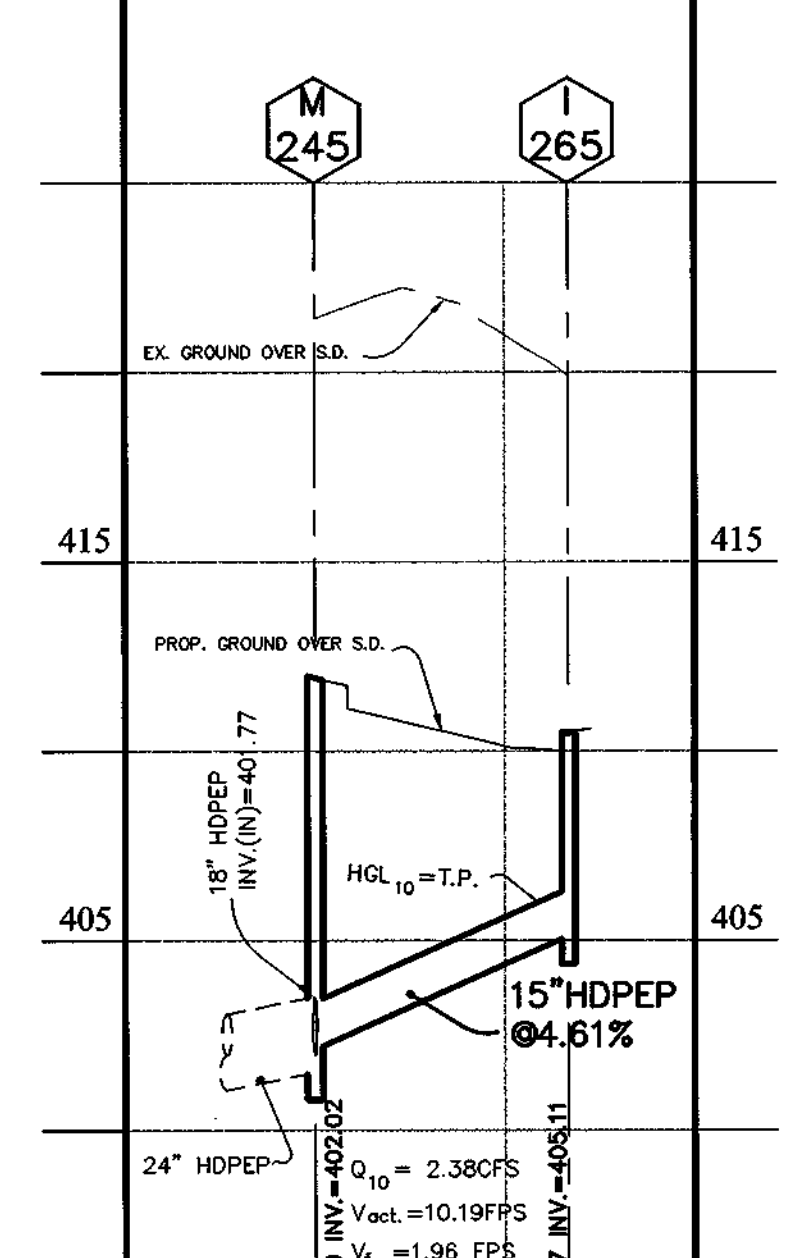
STORM DRAIN PROFILE: FROM ES-240 TO I-255



STORM DRAIN PROFILE: FROM M-245 TO I-260 (PRIVATE SYSTEM)



STORM DRAIN PROFILE: FROM M-280 TO I-290 (PRIVATE SYSTEM)



STORM DRAIN PROFILE: FROM M-245 TO I-265 (PRIVATE SYSTEM)

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 9/1/03
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 9/1/03
 CHIEF, BUREAU OF HIGHWAY

DATE	REVISION	DATE	BY	DATE

Developer/Owner:
 Winchester Homes, Inc. &
 Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

**CONSTRUCTION PLANS
 STORM DRAIN PROFILES**

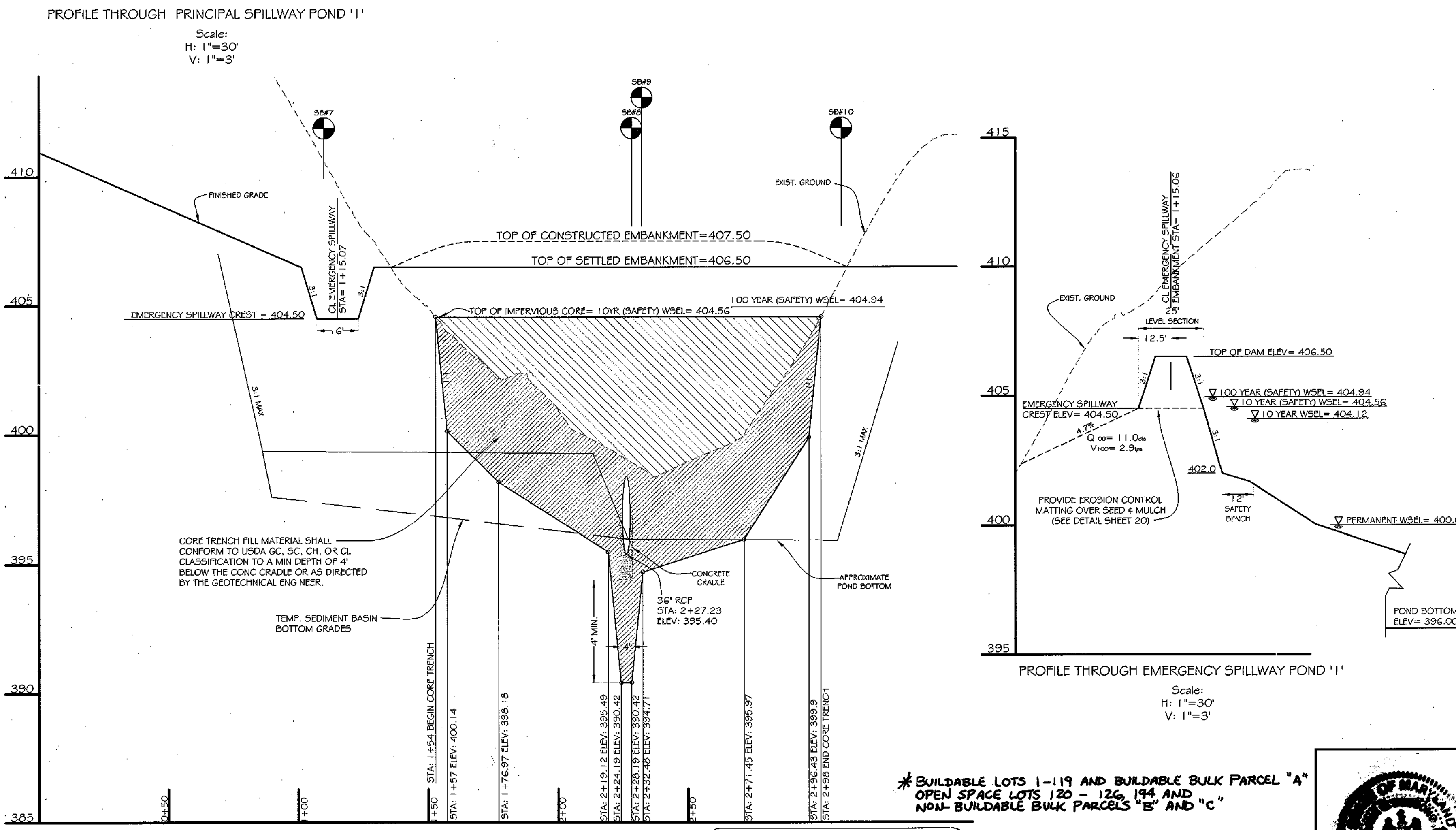
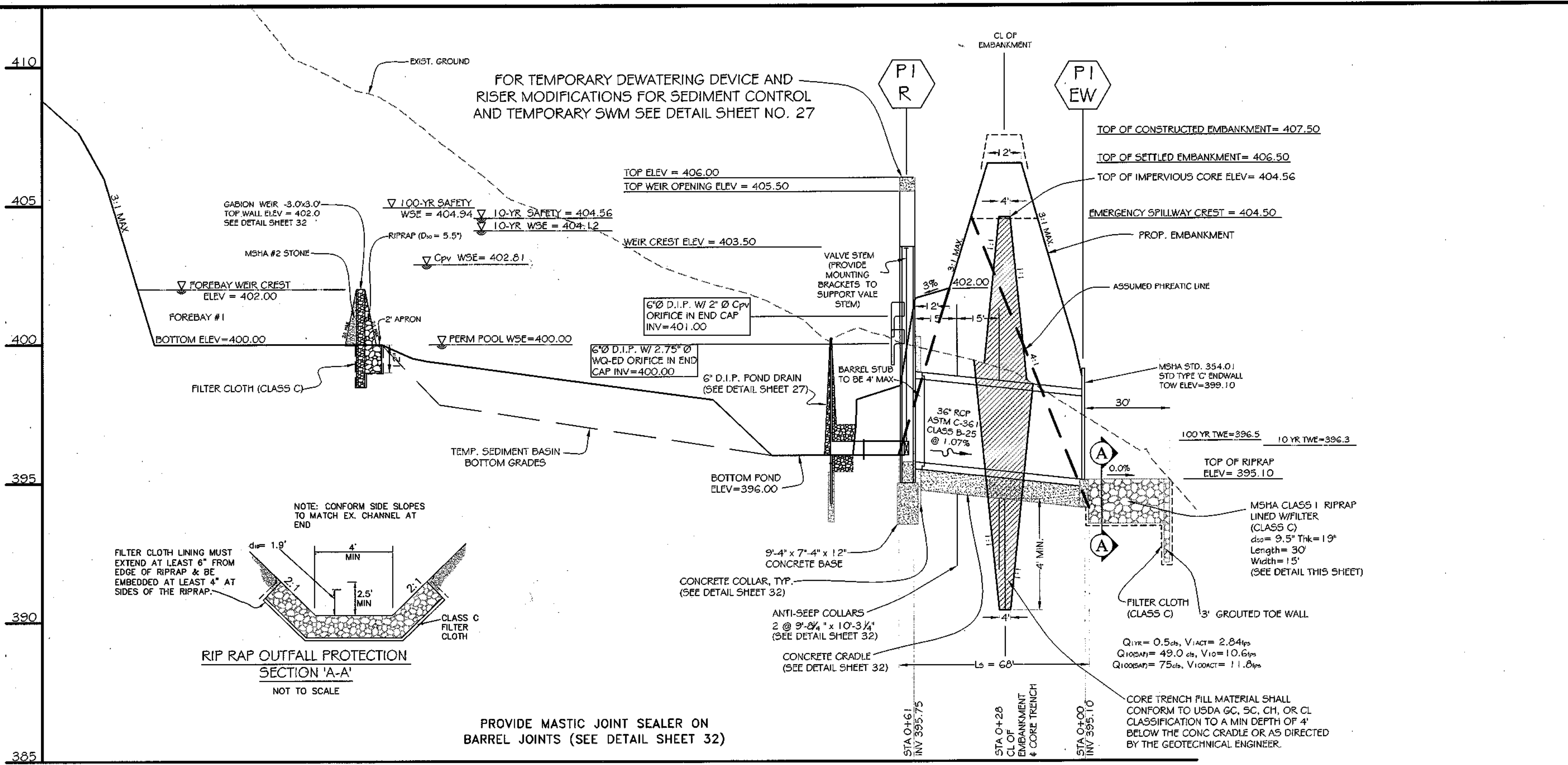
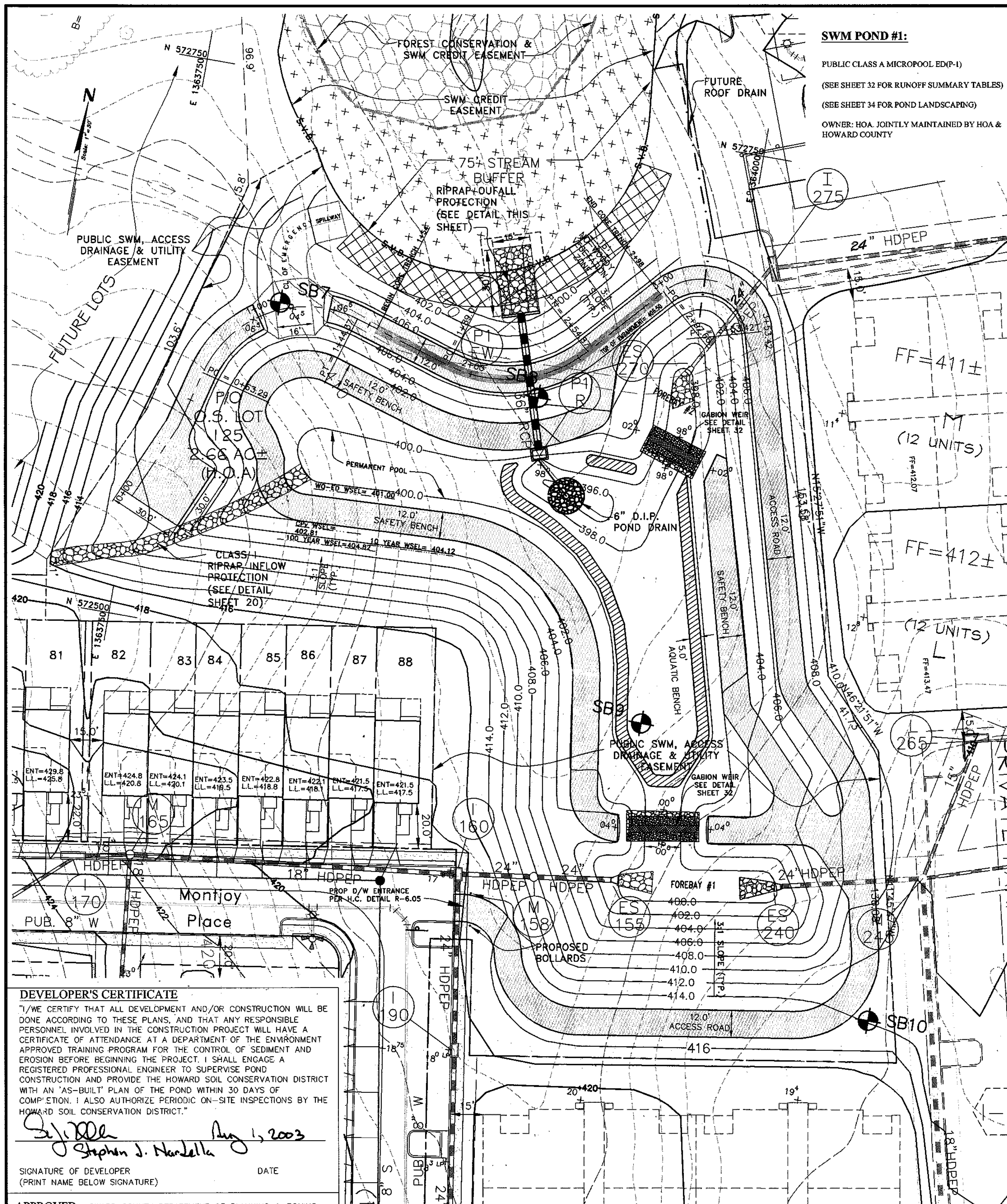


Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.roddgers.com

* PHASES I, II & III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-03-78, P-02-17, P-03-03

SCALE: AS SHOWN

JOB No.	506v3
DATE	12/20/02
INDEX No.	SD-4
SHEET No.	25 OF 50



DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Nardella Aug 1, 2003
 SIGNATURE OF DEVELOPER DATE
 (PRINT NAME BELOW SIGNATURE)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kat Shalwood 9/1/03
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Mahan 8-21-03
 CHIEF, BUREAU OF HIGHWAY DATE

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Frank G. Rosenberg 8/1/03
 SIGNATURE OF ENGINEER DATE
 (PRINT NAME BELOW SIGNATURE)

APPROVED:
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Shirley Selis 8/18/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:
 THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
Jim Myers 8/18/03
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PF, YSL	
	DRAWN		YSL	
	REVIEWED		PF, YSL	
	RELEASE FOR			
	ISSUED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

SWM POND 1
 SWM PLAN, PROFILES & DETAILS

RODGERS CONSULTING
 Enhancing the value of land assets

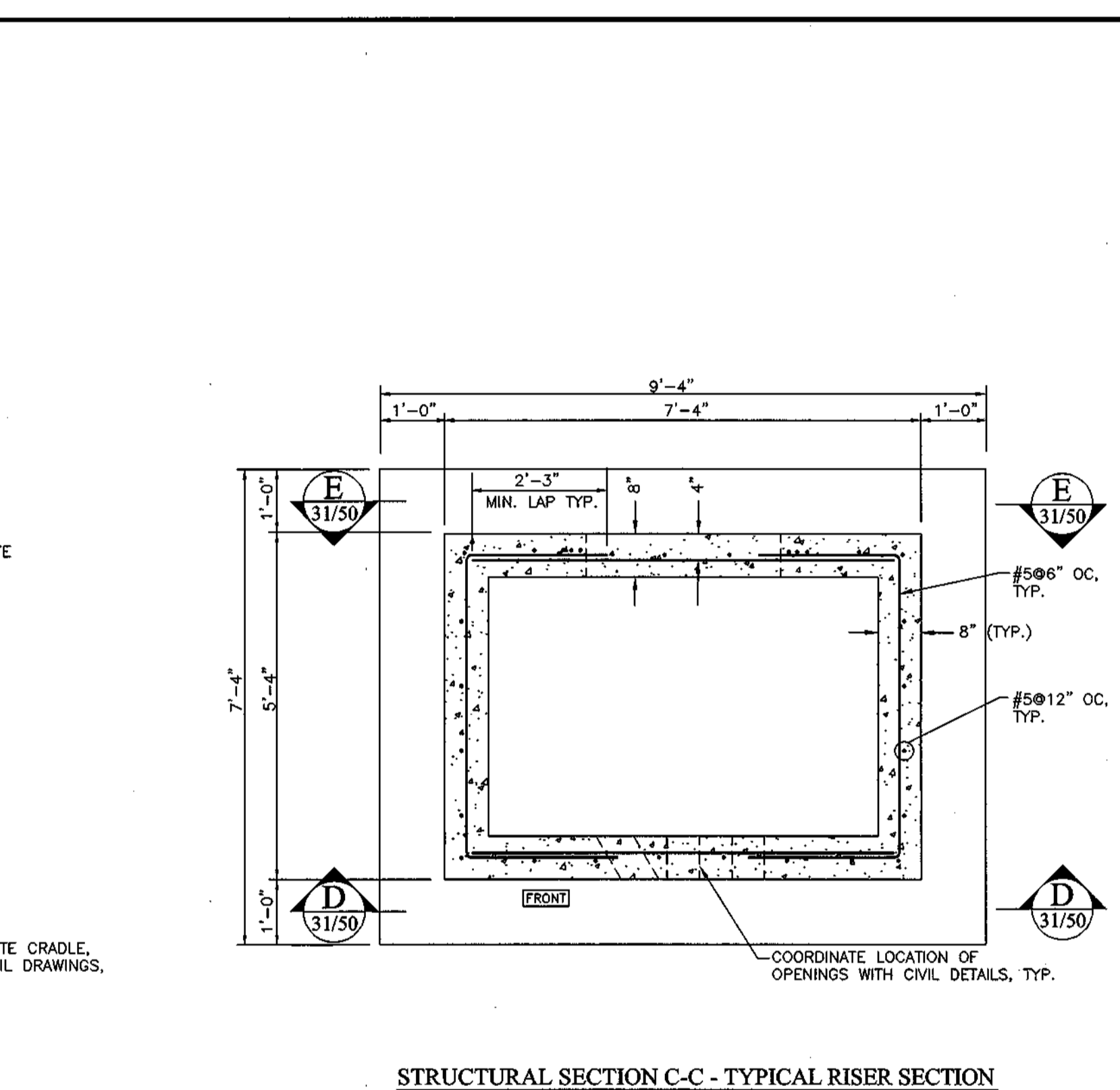
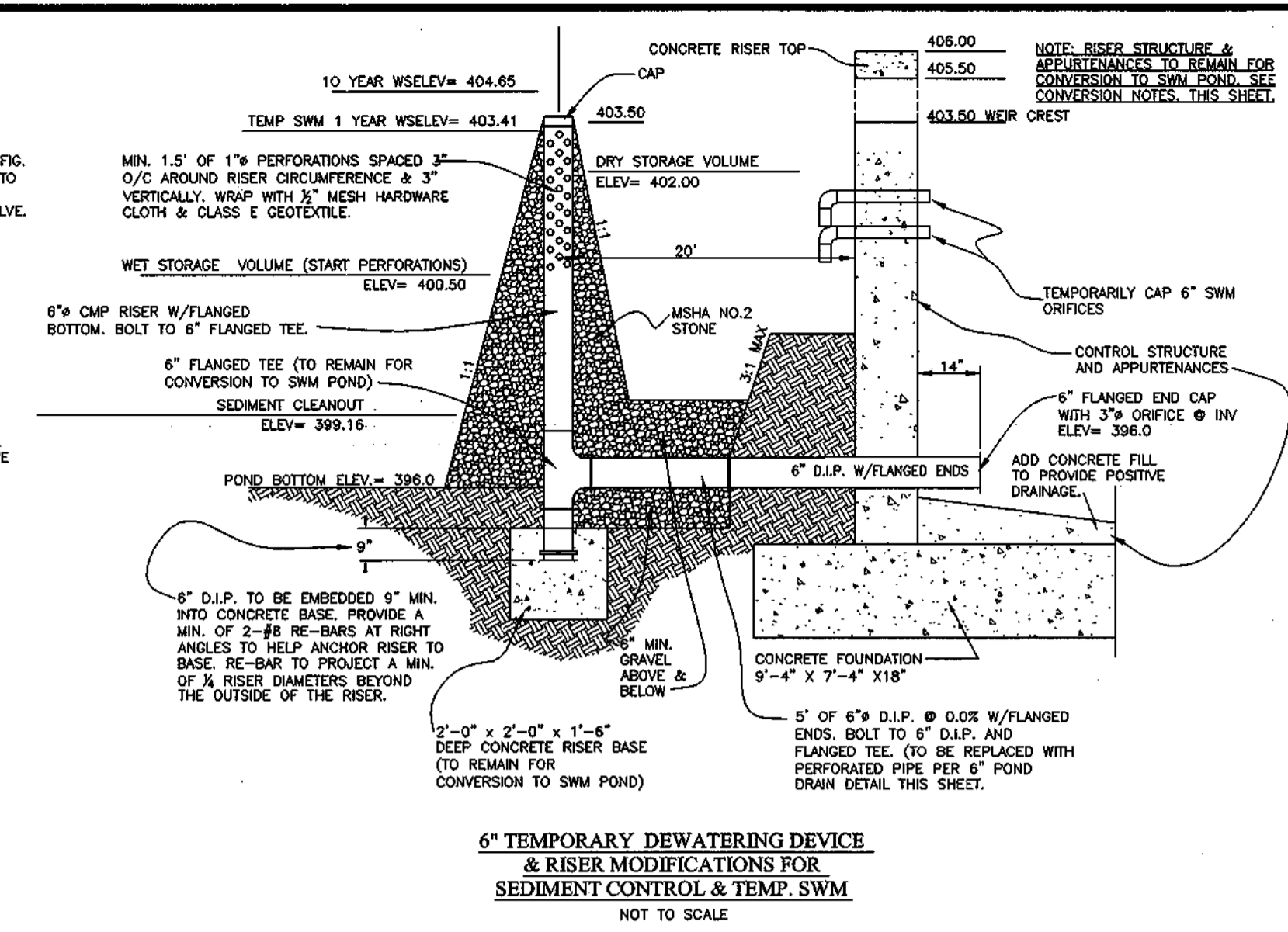
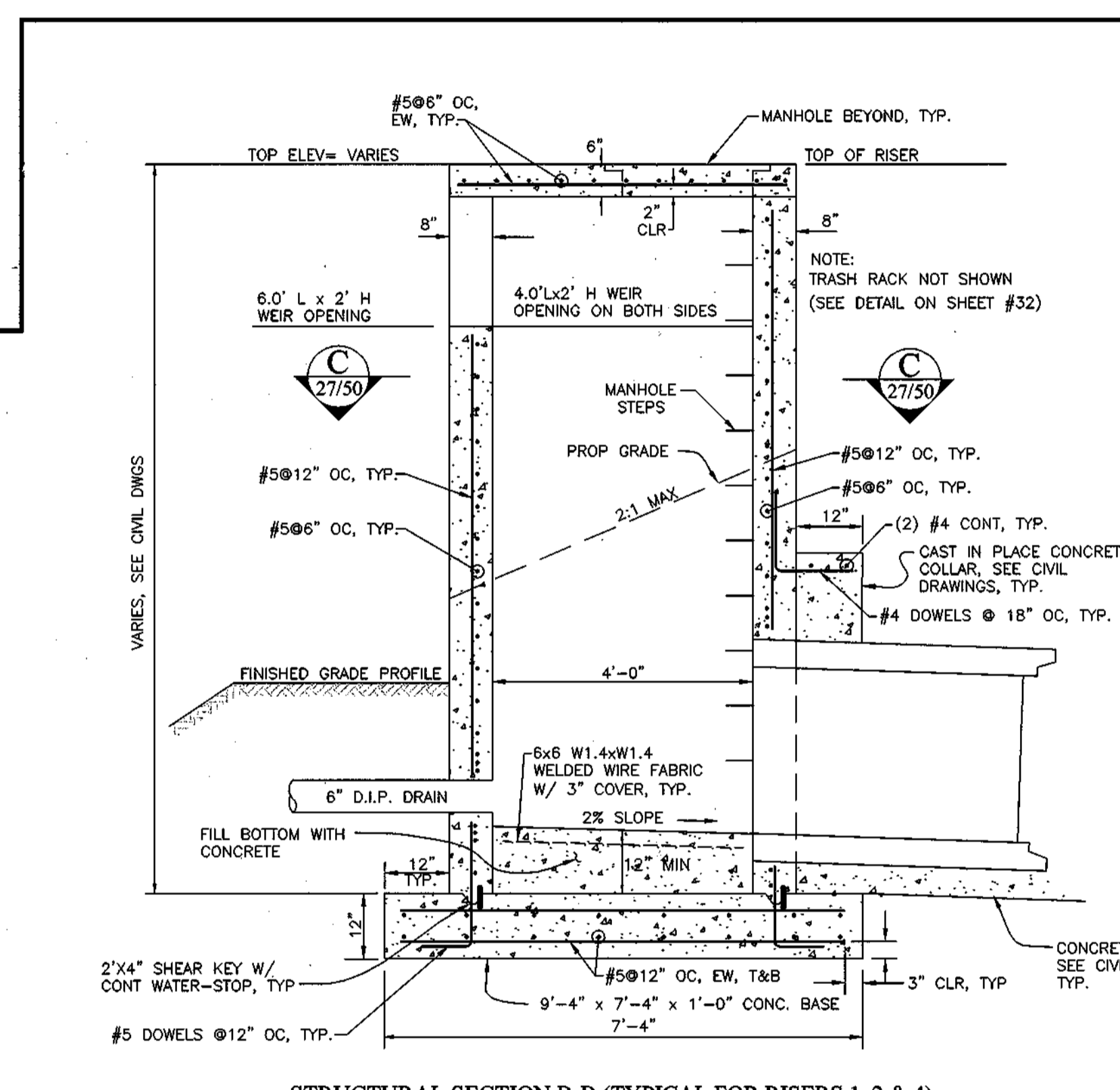
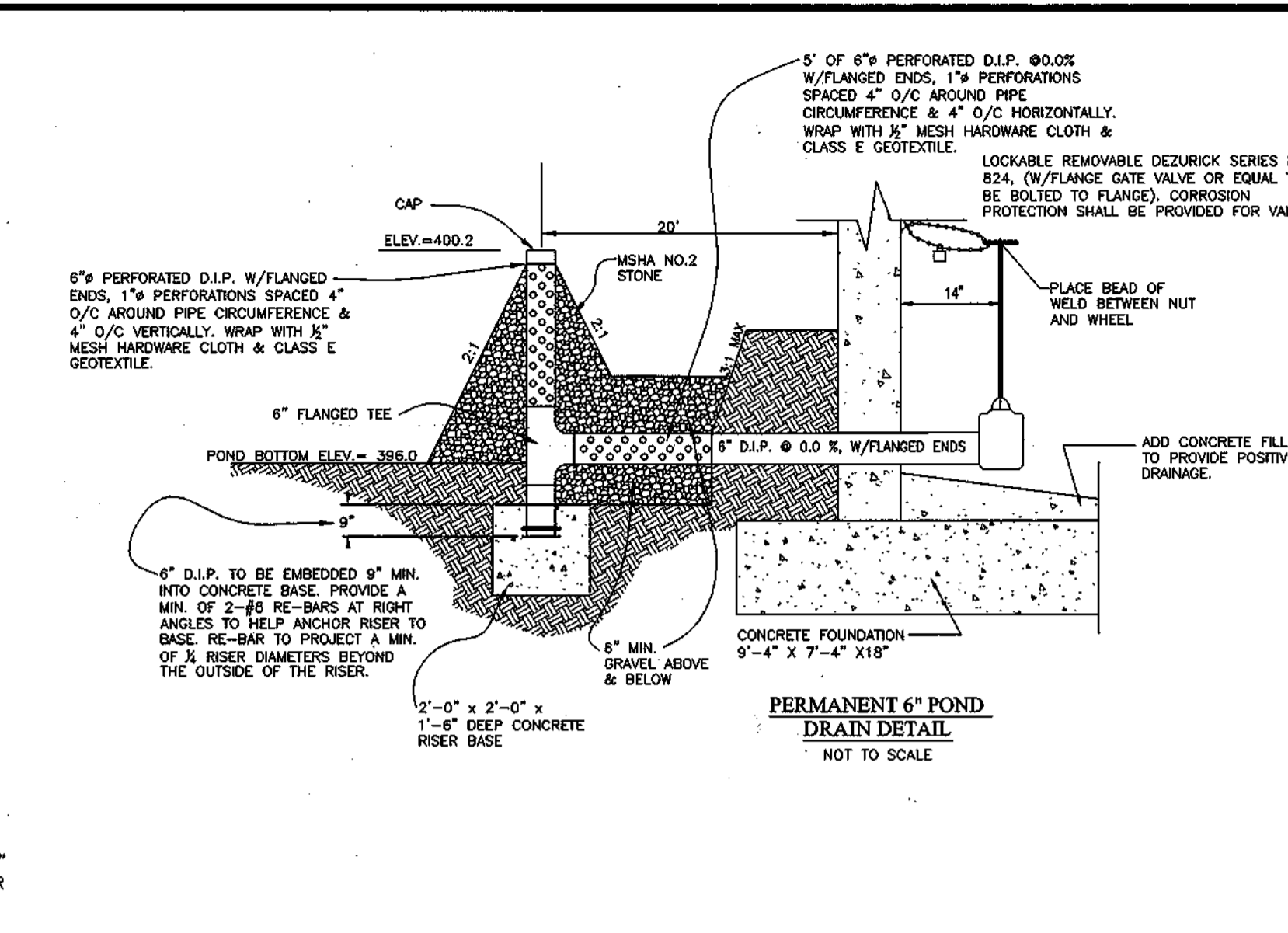
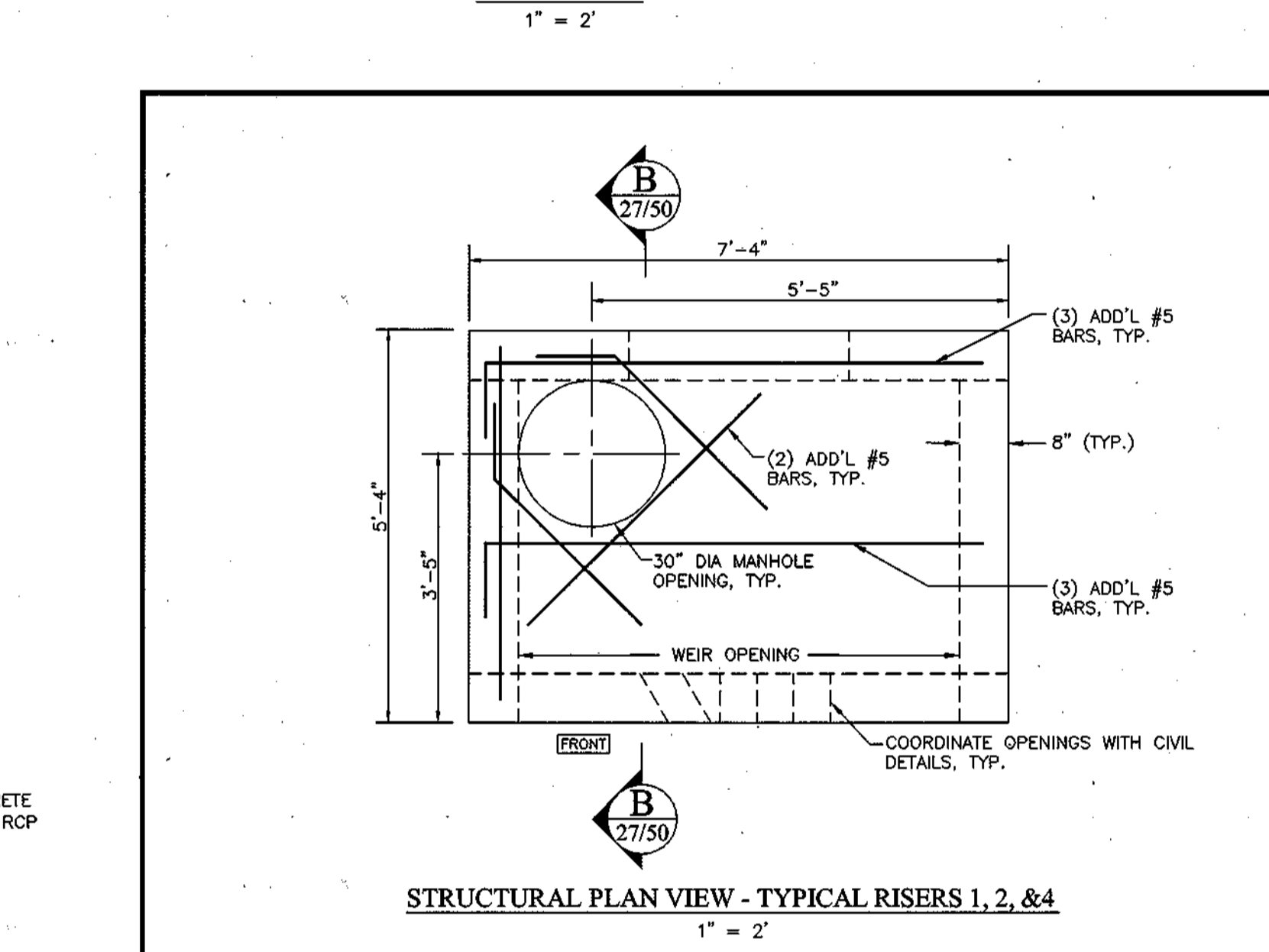
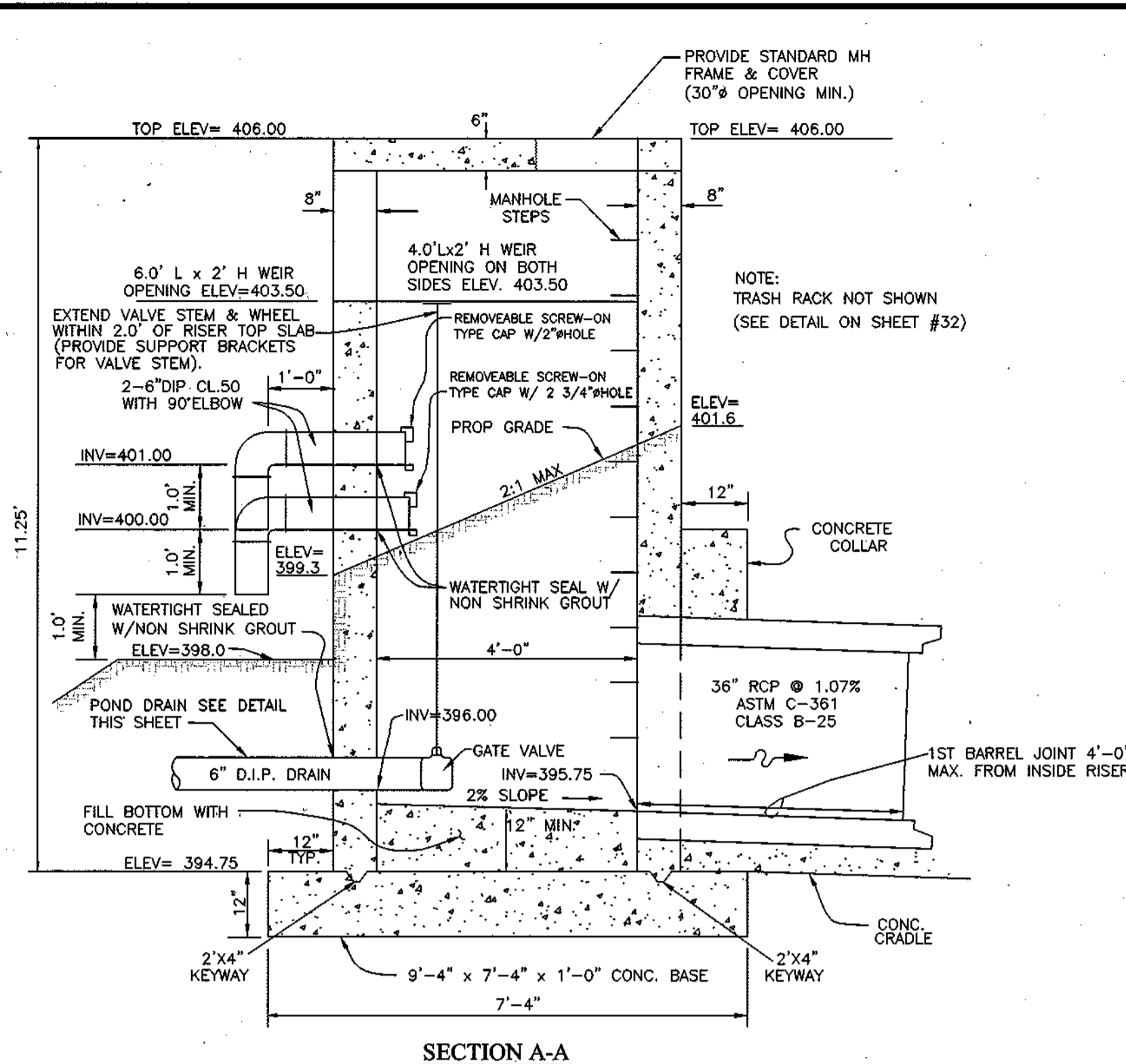
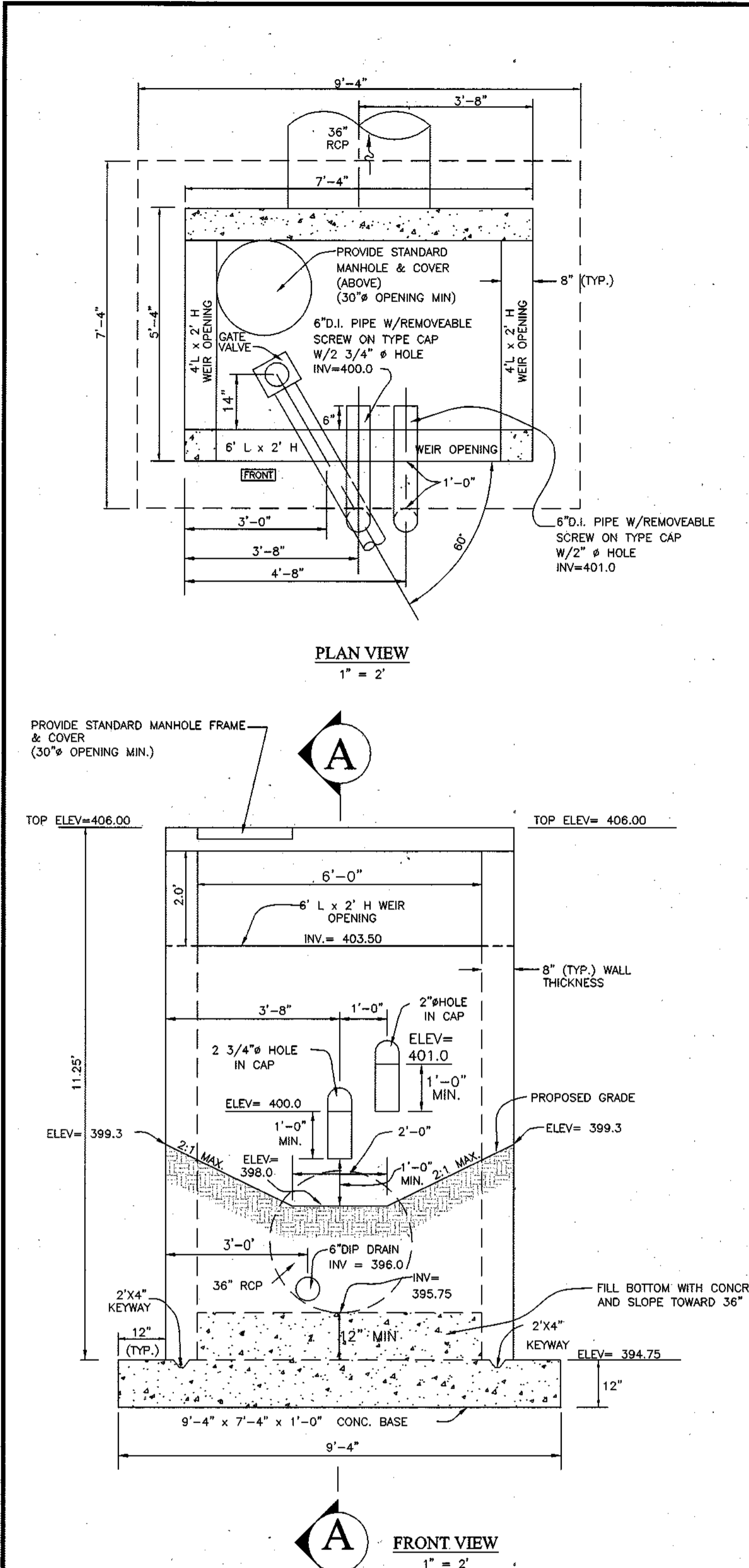
Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I, II & III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-09

NOTE: THIS PLAN TO BE USED FOR STORMWATER MANAGEMENT ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start of Construction

SCALE: 1" = 30'
 JOB No: 506V3
 DATE: 12/20/02
 INDEX No: SWM1
 SHEET No: 26 OF 50



SWM RISER CONTROL STRUCTURE CIVIL DETAILS
SCALE: 1"=2'

STRUCTURAL REINFORCING DETAILS FOR CAST-IN-PLACE RISERS 1, 2 & 4

6" TEMPORARY DEWATERING DEVICE & RISER MODIFICATIONS FOR SEDIMENT CONTROL & TEMP. SWM
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William T. Mahler 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kurt Sheehy 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT

Chris Damann 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

Frank G. Branga 8/14/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Nardella Aug 1, 2003
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

Jim Mays 8/19/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John A. ... 8/14/03
HOWARD SOIL CONSERVATION DISTRICT DATE

***BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120-126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"**

CONVERSION NOTES: TEMPORARY SEDIMENT DEWATERING DEVICE TO PERMANENT POND DRAIN
(SEE 6" PERMANENT POND DRAIN AND TEMPORARY DEWATERING DEVICE AND RISER MODIFICATION DETAILS THIS SHEET)

- OBTAIN PERMISSION FROM EROSION AND SEDIMENT CONTROL INSPECTOR. REMOVE CONTAMINATED 2" MSHA NO. 2 STONE FROM AROUND TEMPORARY SEDIMENT DEWATERING DEVICE. REMOVE VERTICAL 6" DIA. PERFORATED ALCPM RISER FROM FLANGED TEE. FLANGED TEE AND CONCRETE BASE TO REMAIN.
- REMOVE HORIZONTAL SECTION OF 6" DIP BETWEEN FLANGED TEE AND FLANGED END OF 6" DIP COMING FROM RISER STRUCTURE AND REPLACE WITH PERFORATED 6" DIP.
- INSTALL PERFORATED 6" DIP RISER AND CAP. INSTALL MSHA NO. 2 STONE ENVELOPE AS PER DETAIL THIS SHEET.
- REMOVE TEMPORARY BRICK BLOCKING FROM RISER STRUCTURE WEIR CREST AND REPLACE THE TWO 6" SWM CAPS W/ PROPER CAP ORIFICES.
- REMOVE LOWER 6" FLANGED END CAP W/ SED. CONTRL. ORIFICE AND INSTALL GATE VALVE AND APPURTENANCES AS SPECIFIED. DRESS UP AND STABILIZE DISTURBED AREA AS REQUIRED.

NOTE: THIS PLAN TO BE USED FOR STORMWATER MANAGEMENT ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED			
	DRAWN		PFB	
	REVIEWED			
	RELEASE FOR			
	ISSUED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

SWM POND 1 NOTES & DETAILS

RODGERS CONSULTING
Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Galther Road
Gathersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.255.6509
www.rodgers.com

*** PHASES I, II & III**

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID.12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-11, P-03-03

SCALE: 1"=30'
JOB No. 506V3
DATE: 12/20/02
INDEX No. SW2
SHEET No. 27 of 50



SWM POND #2:
 PUBLIC CLASS A SAND FILTER (F-1) WATER QUALITY ONLY
 (SEE SHEET 32 FOR RUNOFF SUMMARY TABLES)
 (SEE SHEET 34 FOR POND LANDSCAPING)
 (SEE SHEET 17 FOR TEMPORARY SEDIMENT BASIN GRADES)
 OWNER: HOA, JOINTLY MAINTAINED BY HOA & HOWARD COUNTY

APPROVED:
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 8/18/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:
 THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
[Signature] 8/18/03
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[Signature] 9-4-03
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 8-21-03
 CHIEF, BUREAU OF HIGHWAY DATE

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTICED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
[Signature] 8/18/03
 SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

DEVELOPER'S CERTIFICATE
 I, THE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."
[Signature] Aug 1, 2003
 SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

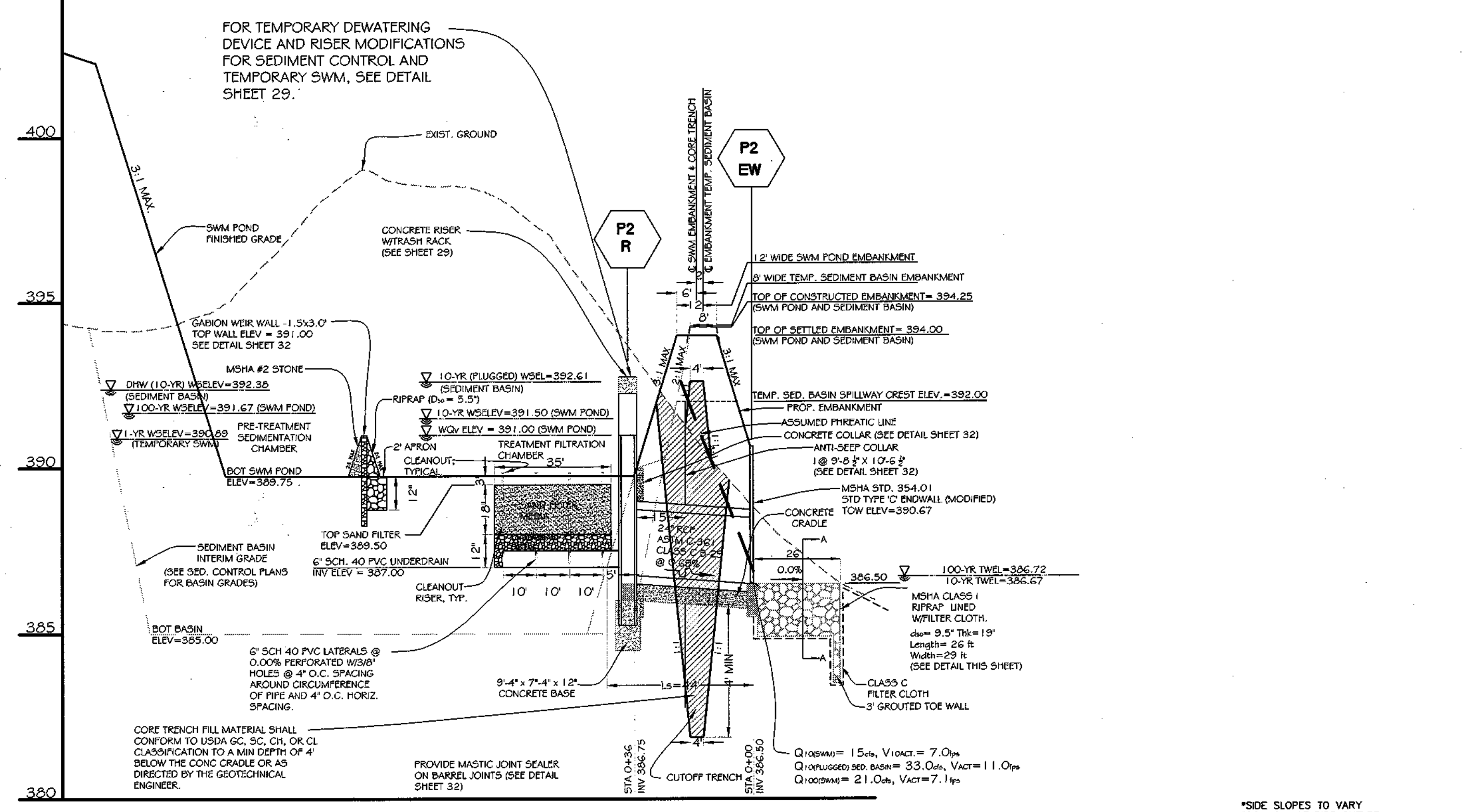
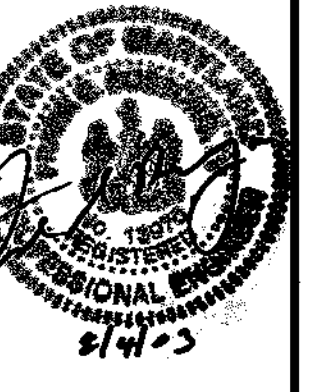
DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	TITLE BLOCK REVISION	7/9/03		
	FINAL VPIR SUBMITTAL FOR SIGNATURE	06-05-03		
	REV. PER HOWARD CO. DPZ COMMENTS OF 05/12/03	05-30-03		
	REV. PER HOWARD CO. DPZ COMMENTS OF 02/12/03	03-28-03		
	ISSUED FOR REVIEW	12/20/02		

Developer/Owner:
 Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

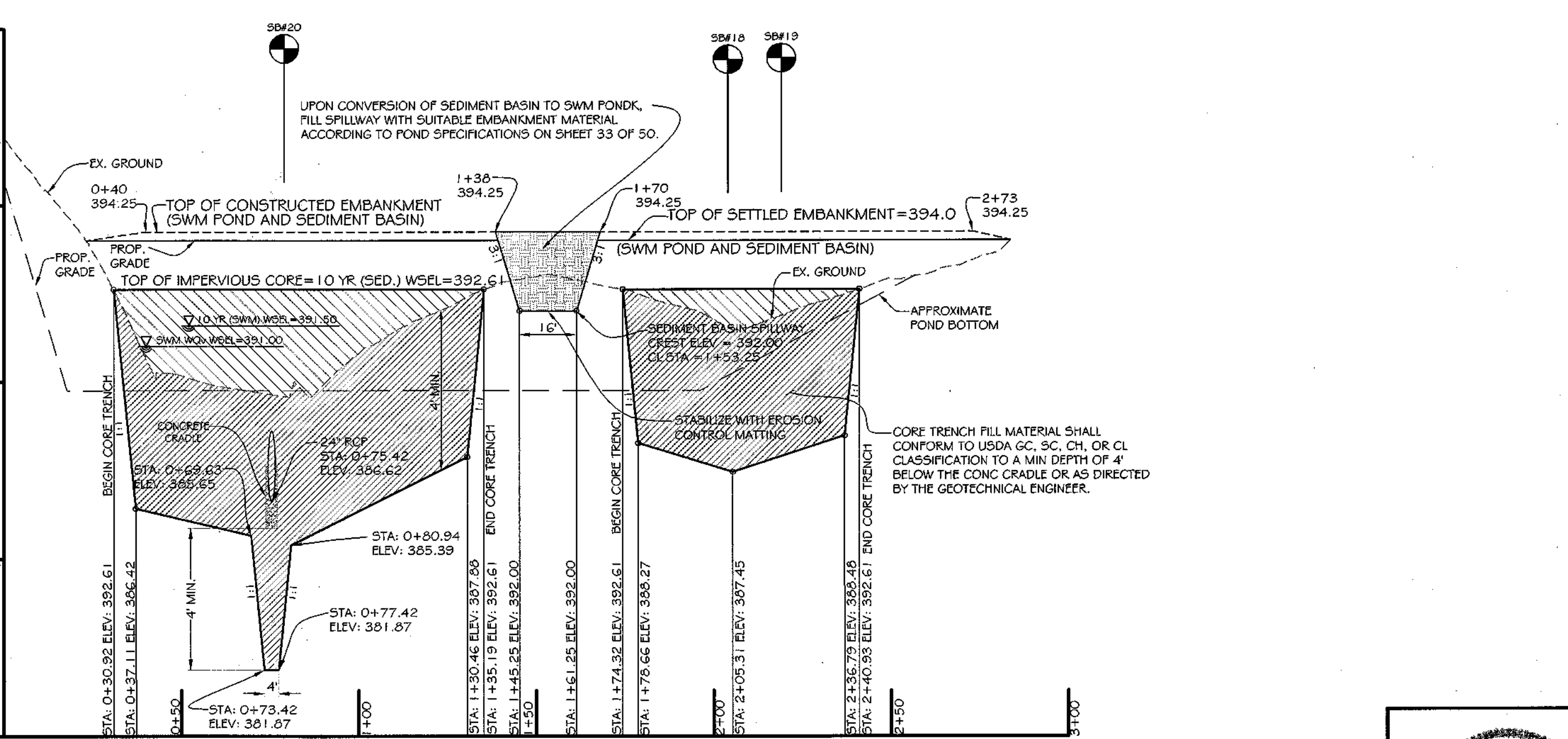
SWM POND 2
SWM PLAN, PROFILES & DETAILS

RODGERS CONSULTING
 Enhancing the value of land assets
 Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

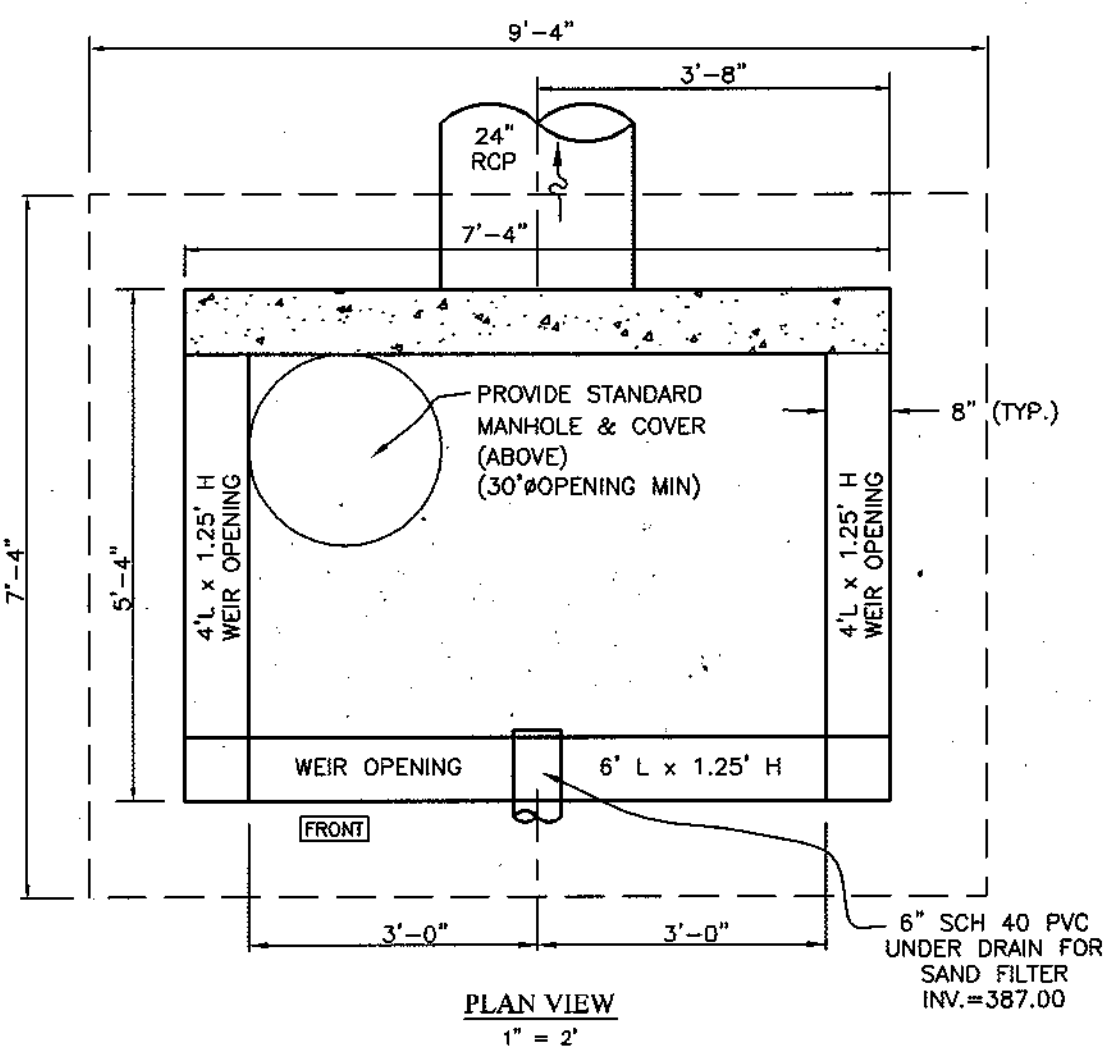
*** PHASES I, II & III**
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03



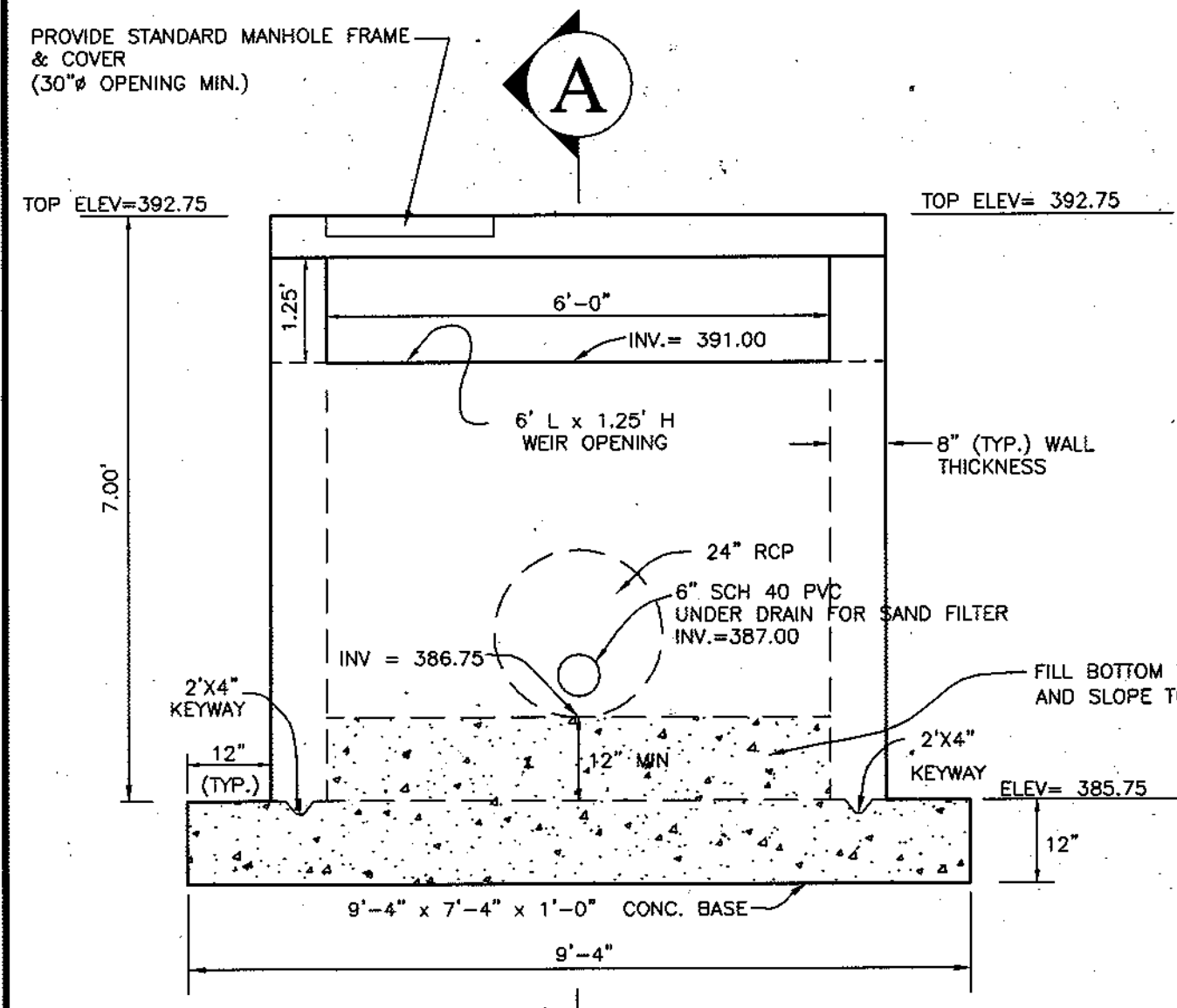
PROFILE THROUGH PRINCIPAL SPILLWAY POND/BASIN '2'
 Scale: H: 1"=30', V: 1"=3'
 *SIDE SLOPES TO VARY FROM 2:1 AT PIPE CULLET TO FLAT AT FLARED END OF RIP-RAP.
 3" MIN. Ø PIPE 24" WIDTH AT END
 FILTER FABRIC LINING SHALL BE EMBEDDED A MIN. OF 4" AND SHALL EXTEND AT LEAST 6" BEYOND THE EDGE OF THE RIP-RAP.
 CLASS C FILTER FABRIC
 RIP RAP OUTFLOW PROTECTION SECTION 'A-A'
 N.T.S.



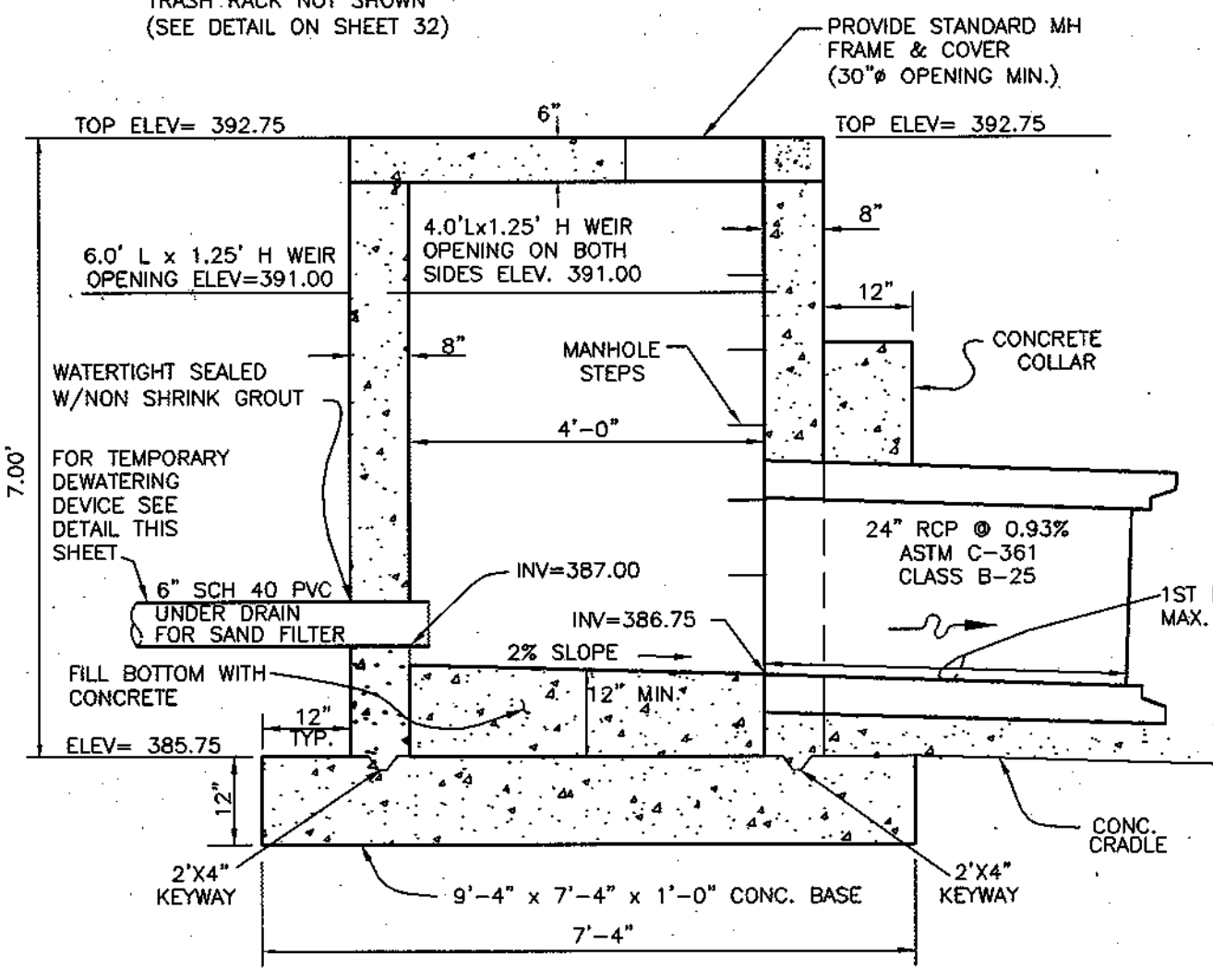
PROFILE ALONG CENTERLINE OF EMBANKMENT POND/BASIN '2'
 Scale: H: 1"=30', V: 1"=3'
 *BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120, 126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"
 NOTE: THIS PLAN TO BE USED FOR STORMWATER MANAGEMENT ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.
 CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start of Construction



PLAN VIEW
1" = 2'



FRONT VIEW
1" = 2'



SECTION A-A
1" = 2'

SWM RISER STRUCTURE DETAILS
SCALE 1"=2'

NOTE: FOR CAST-IN-PLACE OPTION FOR SWM RISER, SEE STRUCTURAL REINFORCEMENT DETAILS ON SHEETS 27 AND 31.

RISER STRUCTURE GENERAL NOTES (FOR PRECAST OPTION):

1. PRECAST RISER AND TOP SLAB TO BE MANUFACTURED AND SUPPLIED BY FREDERICK PRECAST CONCRETE, INC. OR APPROVED EQUIVALENT.
2. SHOP DRAWINGS FOR RISER AND TOP SLAB MUST BE REVIEWED BY THE ENGINEER OF RECORD.
3. IF ANY DIMENSIONS ARE CHANGED OR REDUCED, REVISED ANTI-FLOTATION COMPUTATION MUST BE SUBMITTED WITH THE SHOP DRAWINGS TO HOWARD COUNTY FOR APPROVAL.
4. PRECASTER SHALL ENSURE THAT RISER STRUCTURE JOINTS ARE WATERTIGHT (JOINTS SHALL INCLUDE RUBBER GASKET). RISER JOINTS THAT WILL BE BURIED SHALL BE WRAPPED IN CLASS "C" FILTER FABRIC 1' ON EACH SIDE OF JOINTS, OVERLAP 1' MIN.
5. ALL JOINTS SHALL BE FASTENED TOGETHER PER DETAIL ON SHEET 32 OR AN APPROVED EQUAL.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Pat Seelbach/brch 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT
Paul Williams 9/9/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William T. Whelan 8-21-03
CHIEF, BUREAU OF HIGHWAY

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

John L. Brown 8/16/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Nardella 8/16/03
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

APPROVED:

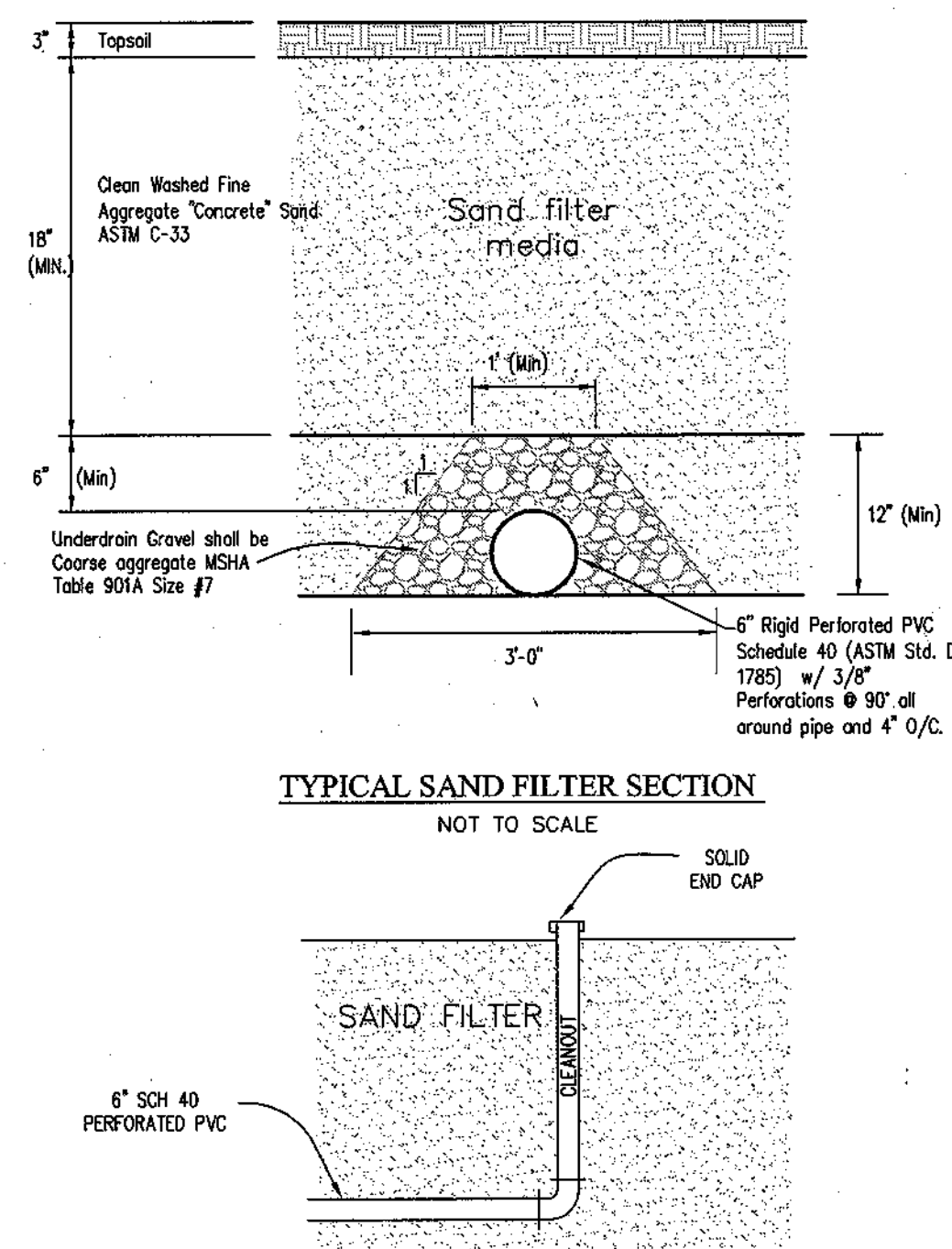
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
John A. ... 8/16/03
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:

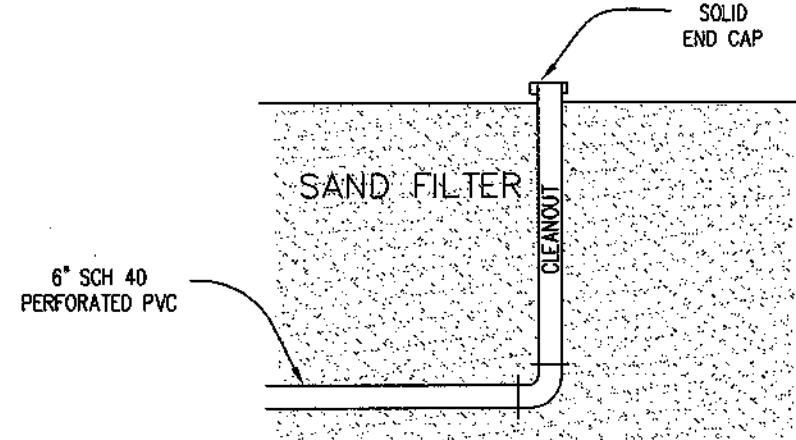
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
Jim Myer 8/16/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

CONVERSION NOTES: TEMPORARY SEDIMENT DEWATERING DEVICE TO SANDFILTER

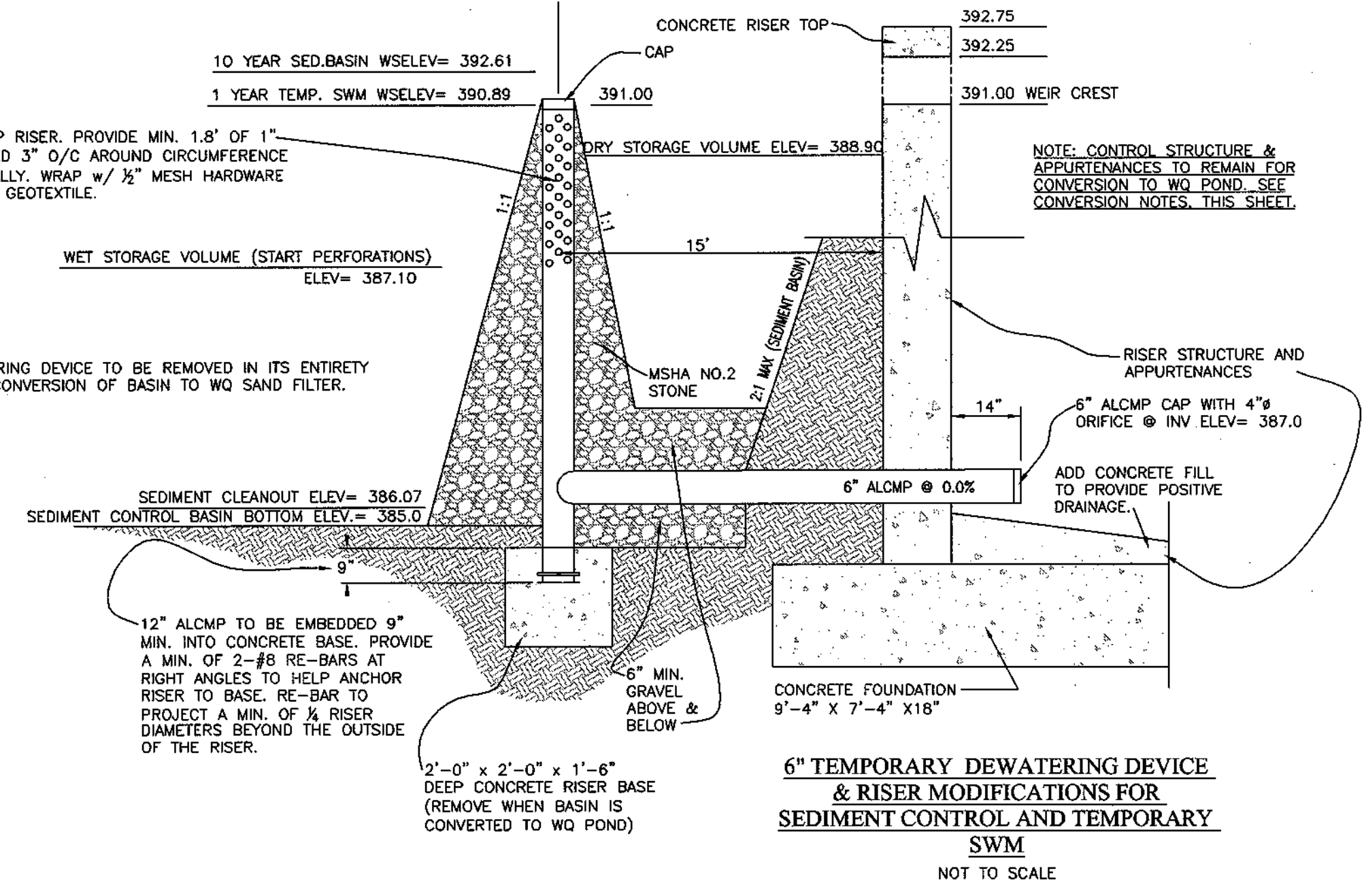
1. OBTAIN PERMISSION FROM EROSION & SEDIMENT CONTROL INSPECTOR. REMOVE MSHA NO. 2 STONE, 12" CMP RISER, CONCRETE BASE FOR 12" ALCMP RISER, & ENTIRE HORIZONTAL 6" CMP PIPE TO THE RISER STRUCTURE. REPLACE OR REPAIR ANY DAMAGE TO RISER STRUCTURE RESULTING FROM THE REMOVAL OF THE DEWATERING DEVICE & APPURTENANCES.
2. BRING BASIN TO PROPOSED GRADES AS SHOWN ON THE SWM PLAN (SHEET 28).
3. INSTALL WATER QUALITY SAND FILTER & APPURTENANCES AS PER PLAN, ONLY AFTER THE CONTRIBUTORY DRAINAGE AREA HAS BEEN VEGETATIVELY STABILIZED.
4. INSTALL 6" SCH 40 PVC FROM SAND FILTER THROUGH CONTROL STRUCTURE AS PER PLAN. PROVIDE WATER-TIGHT SEAL AROUND PIPE THROUGH THE CONTROL STRUCTURE WALL.
5. DRESS UP & STABILIZE DISTURBED AREA AS REQUIRED.



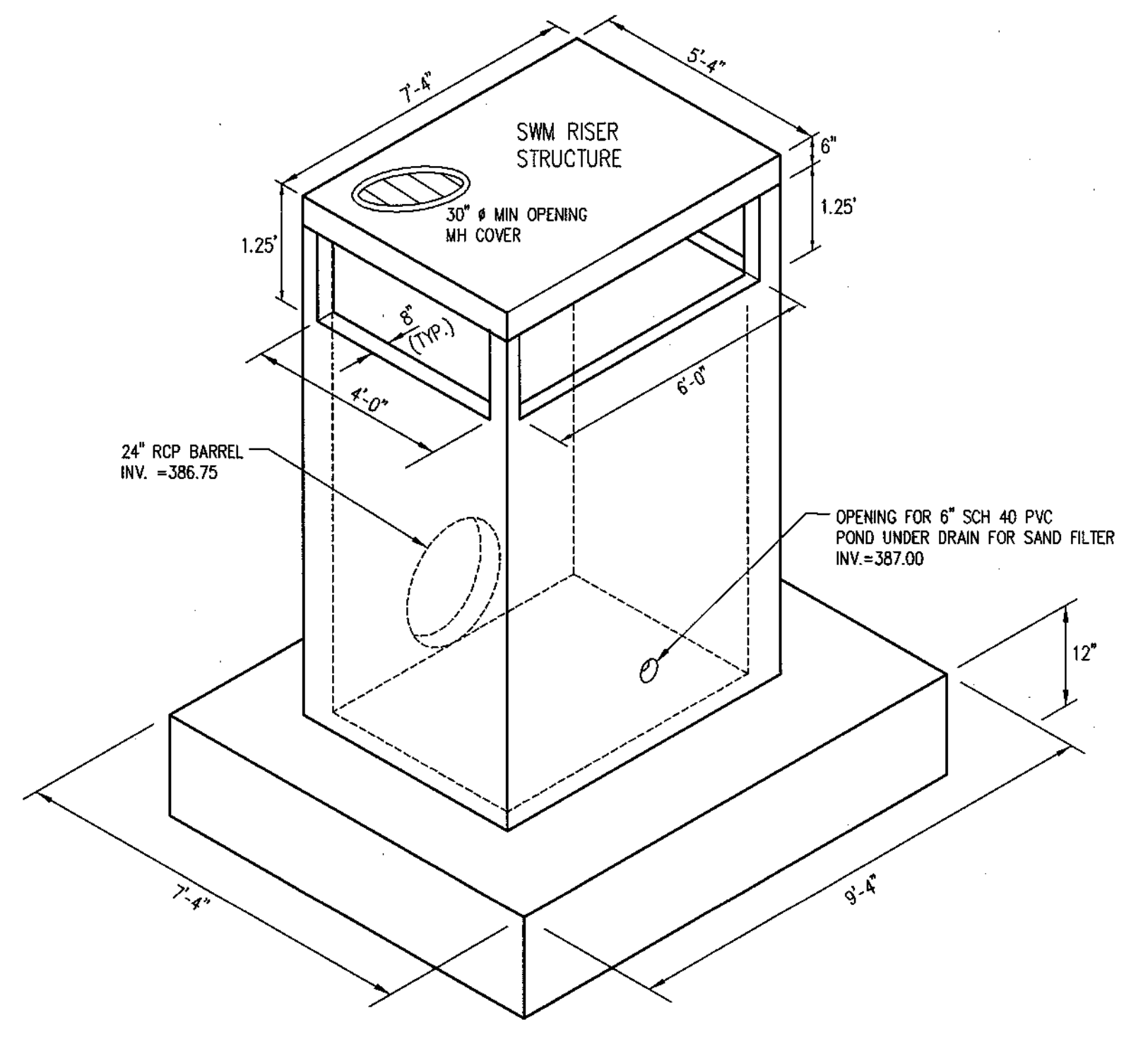
TYPICAL SAND FILTER SECTION
NOT TO SCALE



SAND FILTER CLEANOUT
NOT TO SCALE



6" TEMPORARY DEWATERING DEVICE & RISER MODIFICATIONS FOR SEDIMENT CONTROL AND TEMPORARY SWM
NOT TO SCALE



ISOMETRIC VIEW
NOT TO SCALE

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction

NOTE: THIS PLAN TO BE USED FOR STORMWATER MANAGEMENT ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED			
	DRAWN			
	REVIEWED		PFB	
	RELEASE FOR			
	ISSUED FOR REVIEW	12/20/02		

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

SWM POND 2

NOTES & DETAILS

Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DP2 FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=30'

JOB No. 506V3
DATE: 12/20/02
INDEX No. SWM
SHEET No. 29 OF 50

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Stephen J. Nardella 8/1/03
 SIGNATURE OF DEVELOPER DATE
 (PRINT NAME BELOW SIGNATURE)

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

James L. Nardella 8/1/03
 SIGNATURE OF ENGINEER DATE
 (PRINT NAME BELOW SIGNATURE)

SWM POND #4:
 PUBLIC CLASS A WET POND (P-2)
 (SEE SHEET 32 FOR RUNOFF SUMMARY TABLES)
 (SEE SHEET 36 FOR POND LANDSCAPING)
 OWNER: HOA
 JOINTLY MAINTAINED BY: HOA & HOWARD COUNTY

APPROVED:
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Staff 8/18/03
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED:
 THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

Jia 8/18/03
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

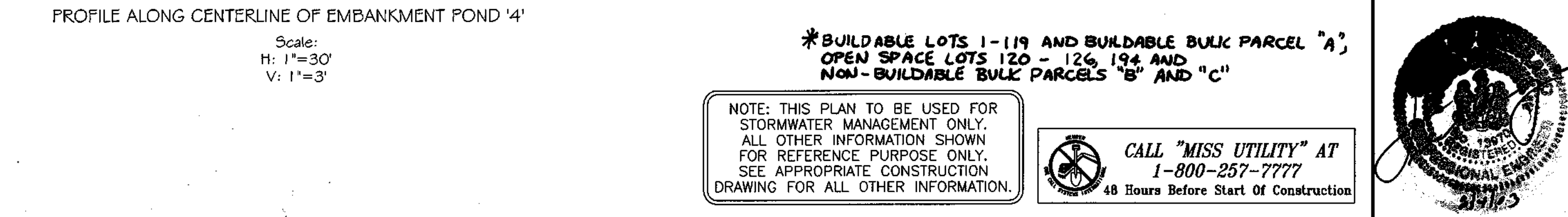
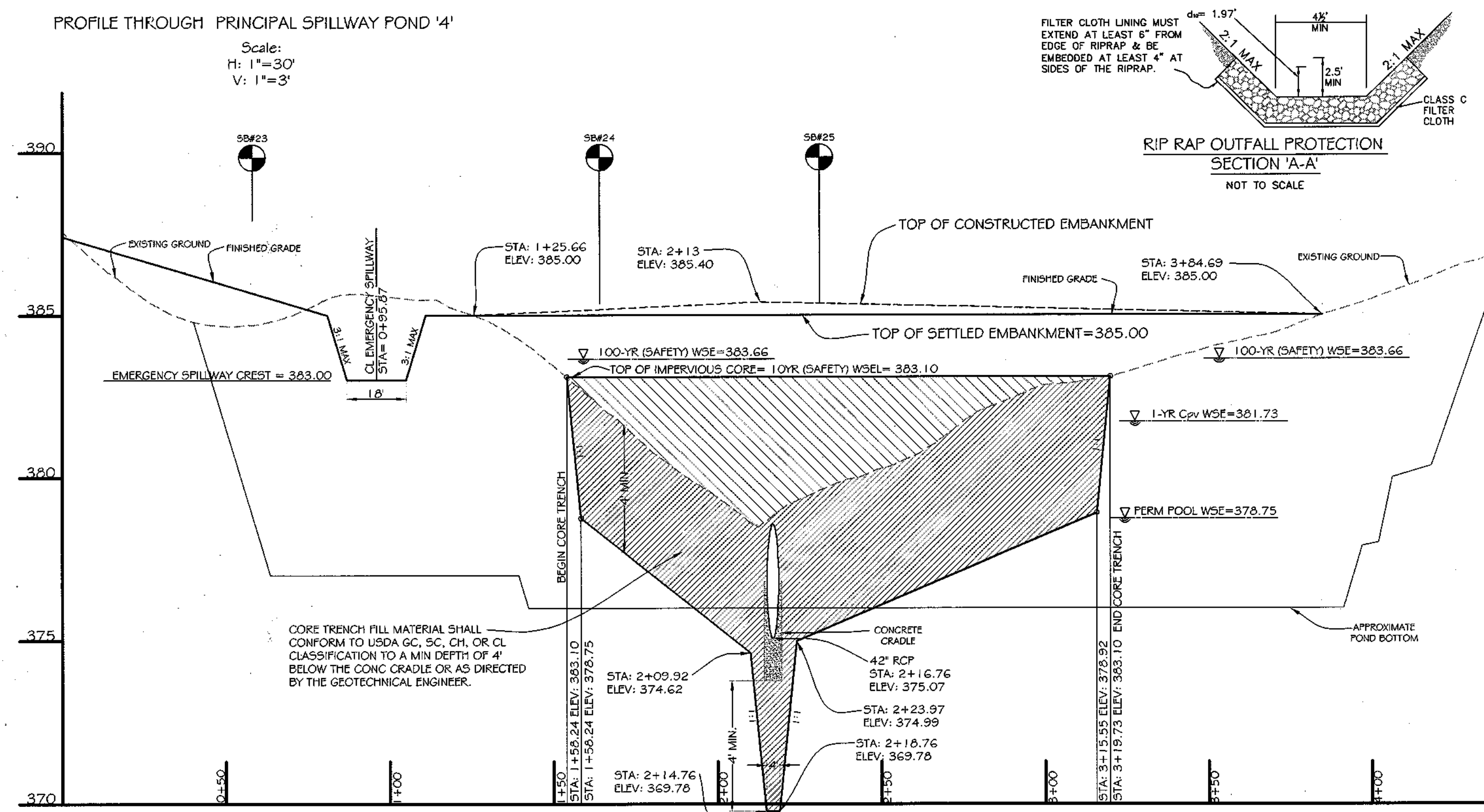
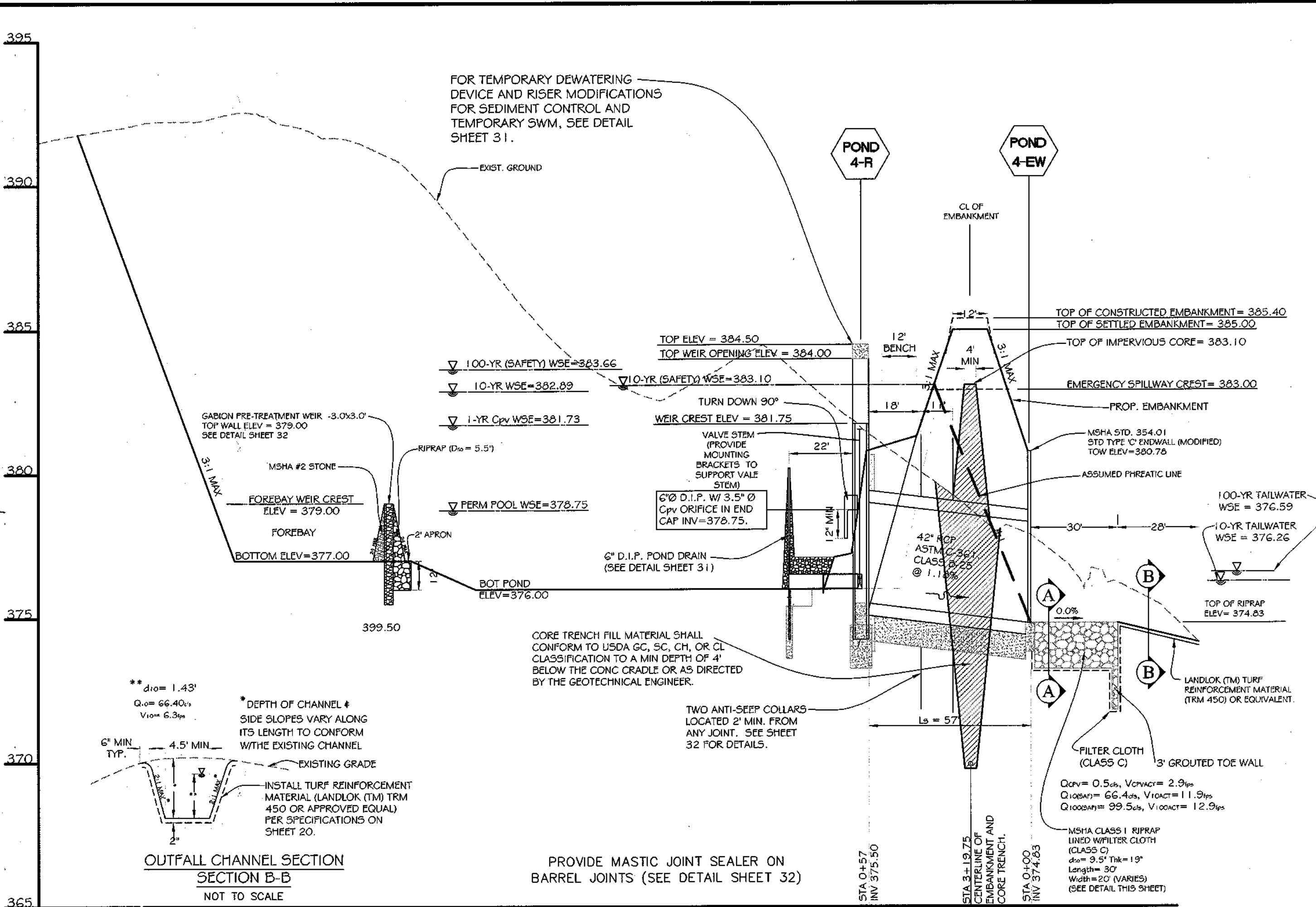
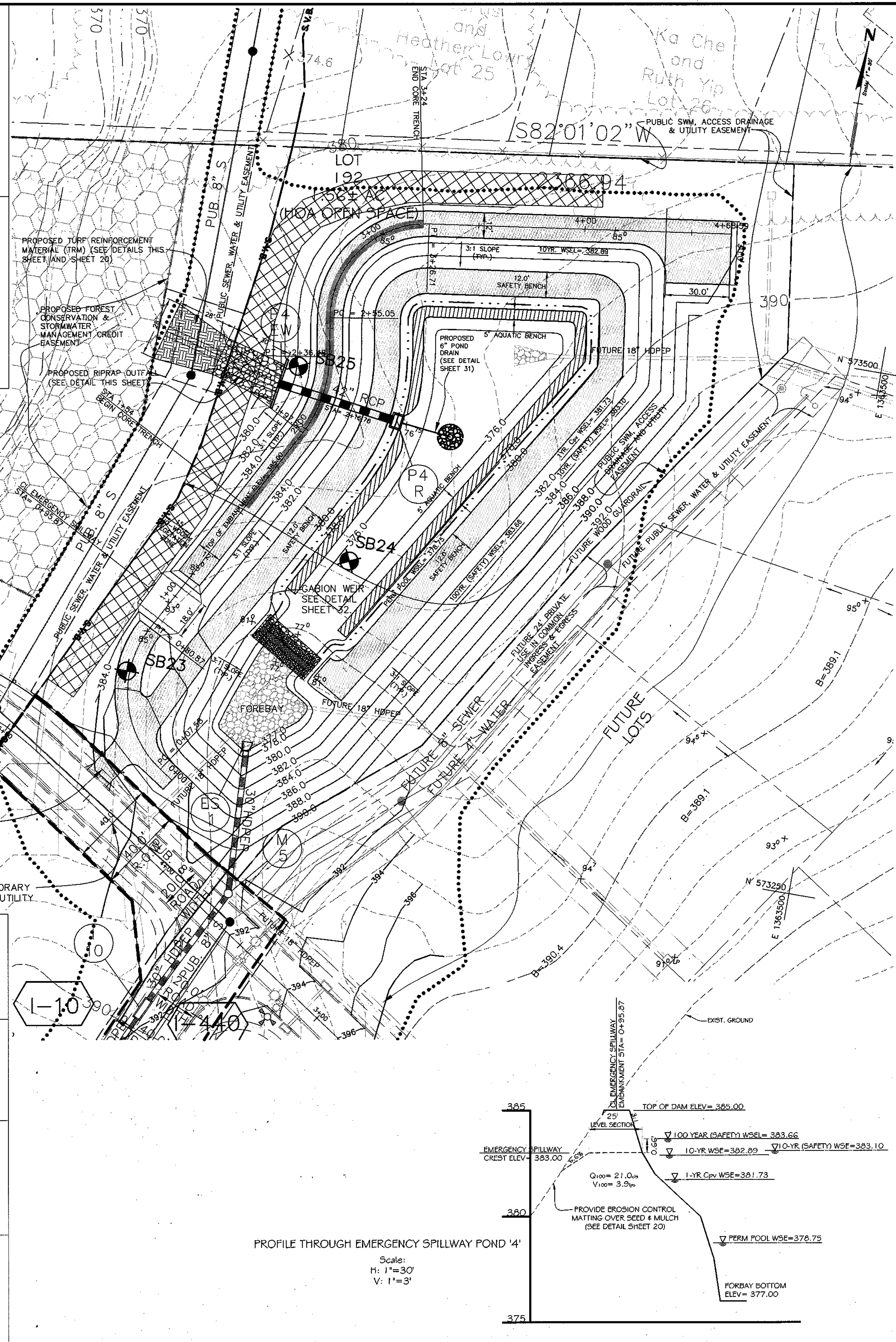
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Kat 9/1/03
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris 9/1/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William 8-21-03
 CHIEF, BUREAU OF HIGHWAY DATE



DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
 Winchester Homes, Inc. &
 Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

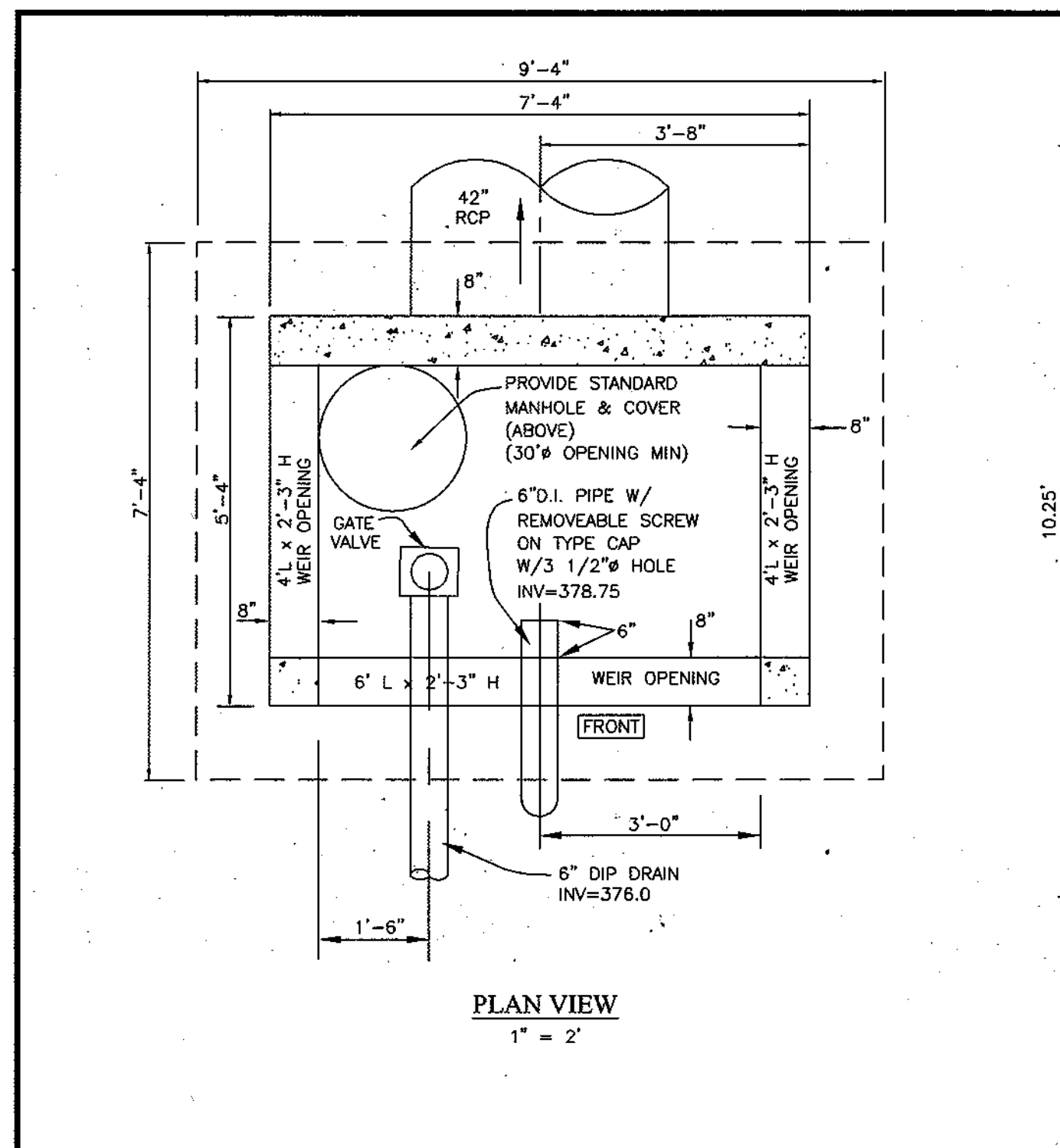
SWM POND 4
SWM PLAN, PROFILES & DETAILS

RODGERS CONSULTING
 Enhancing the value of land assets

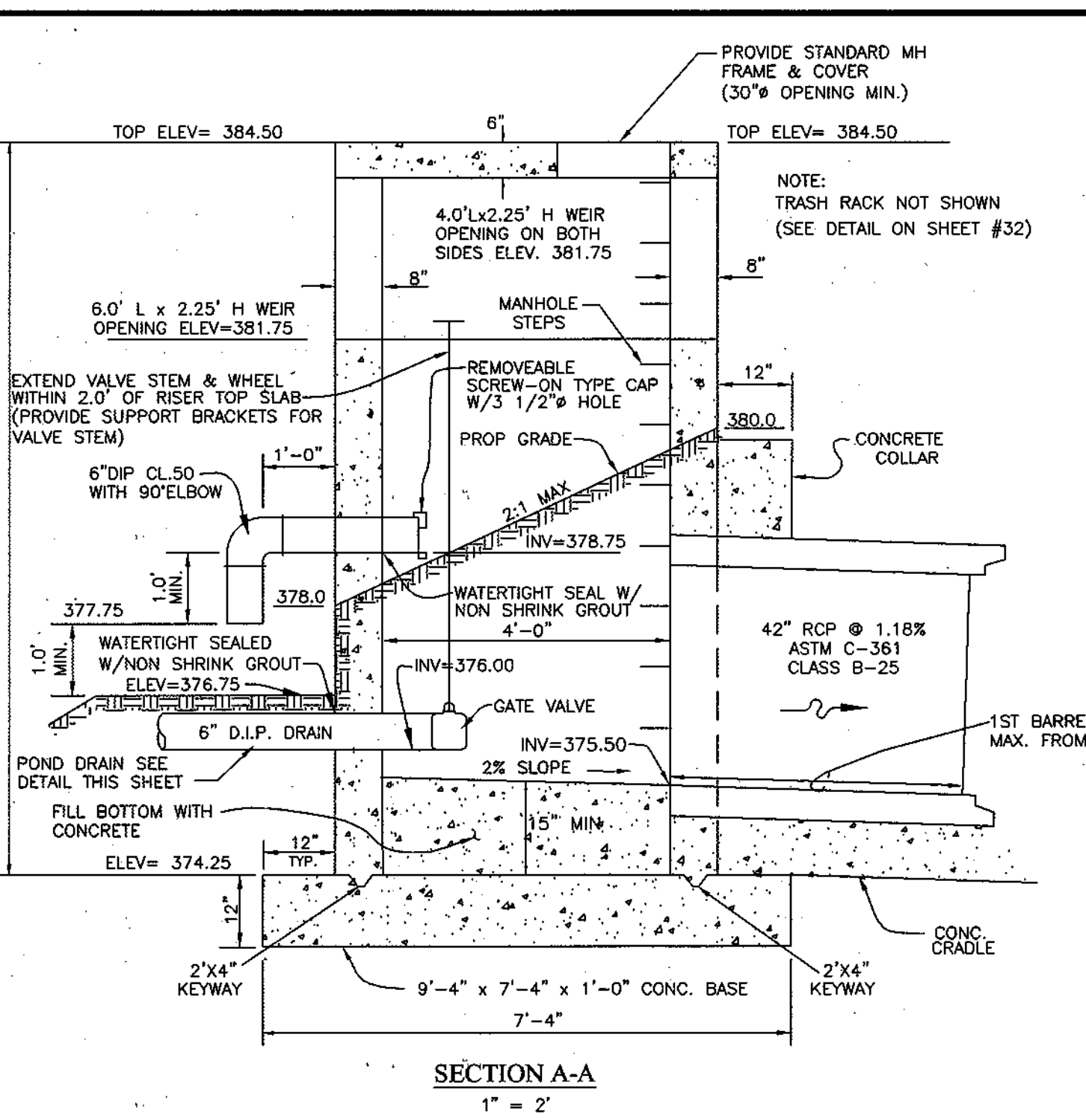
Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

*** PHASES I, II & III**
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID-12 PARCEL 260
 DPZ FILES: 8-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

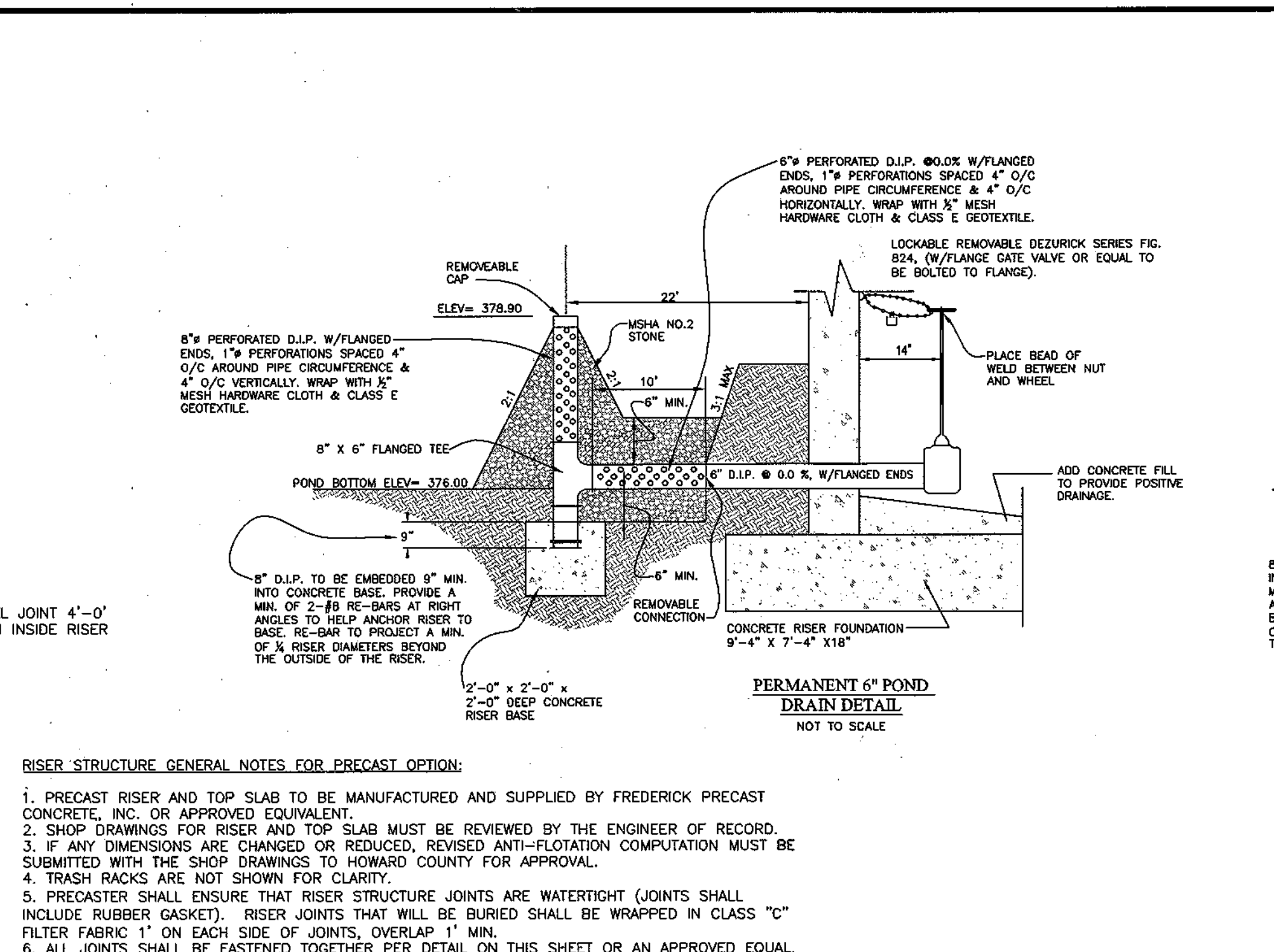
SCALE: 1"=30'
 JOB No. 506V3
 DATE: 12/20/02
 INDEX No. SWMS
 SHEET No. 30 of 50



PLAN VIEW
1" = 2"

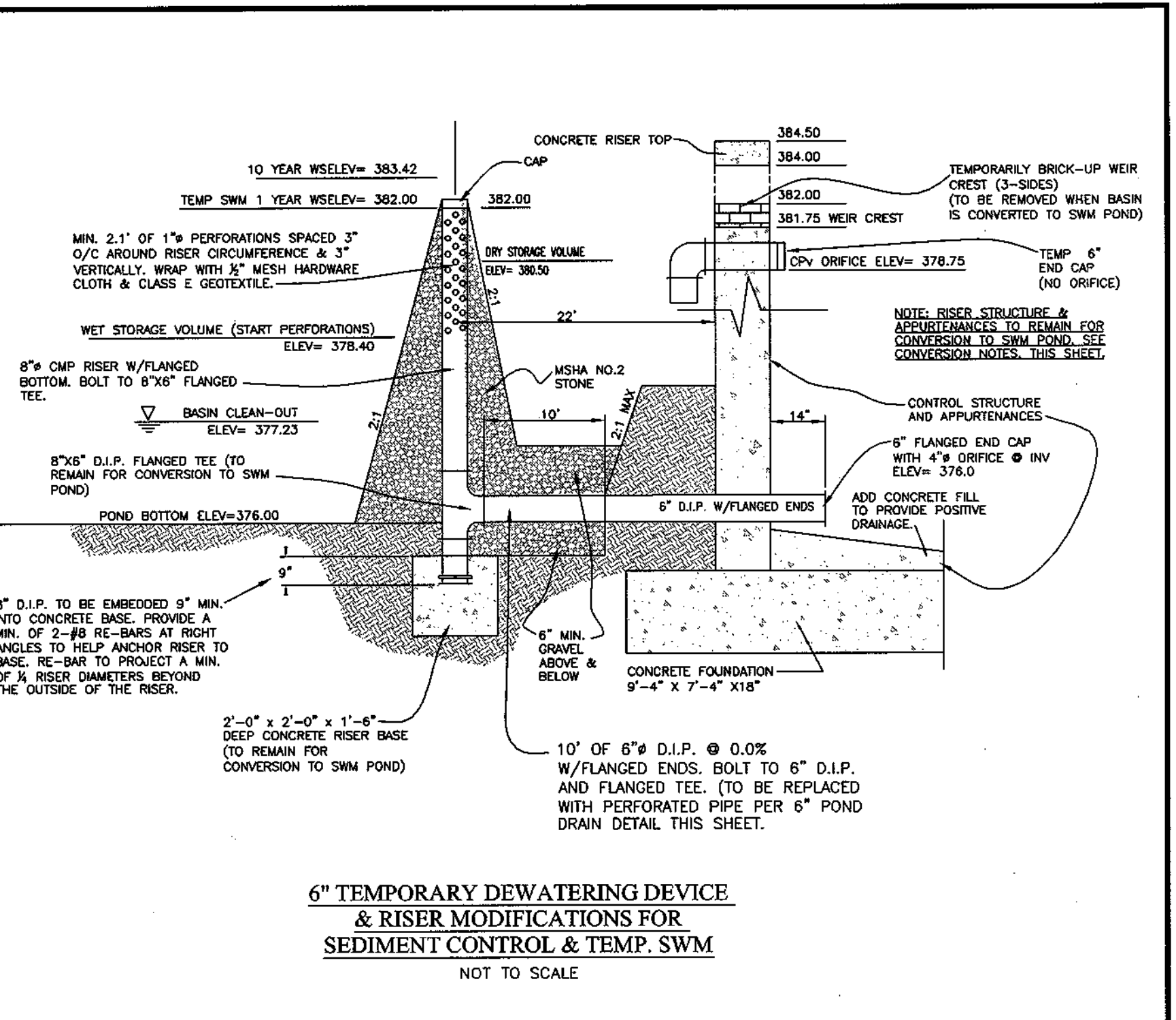


SECTION A-A
1" = 2"

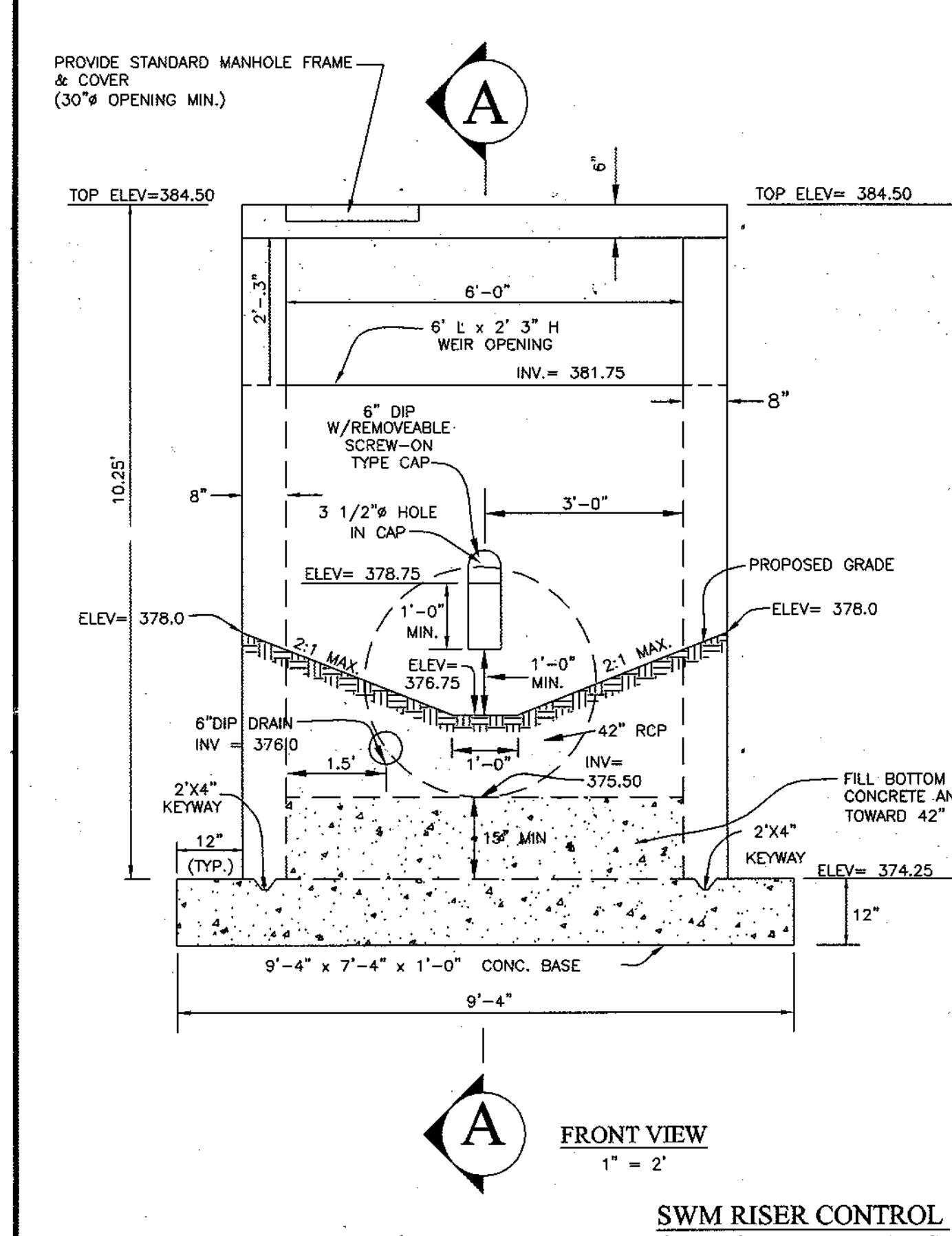


RISER STRUCTURE GENERAL NOTES FOR PRECAST OPTION:

1. PRECAST RISER AND TOP SLAB TO BE MANUFACTURED AND SUPPLIED BY FREDERICK PRECAST CONCRETE, INC. OR APPROVED EQUIVALENT.
2. SHOP DRAWINGS FOR RISER AND TOP SLAB MUST BE REVIEWED BY THE ENGINEER OF RECORD.
3. IF ANY DIMENSIONS ARE CHANGED OR REDUCED, REVISED ANTI-FLOTATION COMPUTATION MUST BE SUBMITTED WITH THE SHOP DRAWINGS TO HOWARD COUNTY FOR APPROVAL.
4. TRASH RACKS ARE NOT SHOWN FOR CLARITY.
5. PRECASTER SHALL ENSURE THAT RISER STRUCTURE JOINTS ARE WATERTIGHT (JOINTS SHALL INCLUDE RUBBER GASKET). RISER JOINTS THAT WILL BE BURIED SHALL BE WRAPPED IN CLASS "C" FILTER FABRIC 1" ON EACH SIDE OF JOINTS, OVERLAP 1" MIN.
6. ALL JOINTS SHALL BE FASTENED TOGETHER PER DETAIL ON THIS SHEET OR AN APPROVED EQUAL.



6" TEMPORARY DEWATERING DEVICE & RISER MODIFICATIONS FOR SEDIMENT CONTROL & TEMP. SWM
NOT TO SCALE



FRONT VIEW
1" = 2"

SWM RISER CONTROL STRUCTURE DETAILS
SCALE: 1" = 2"

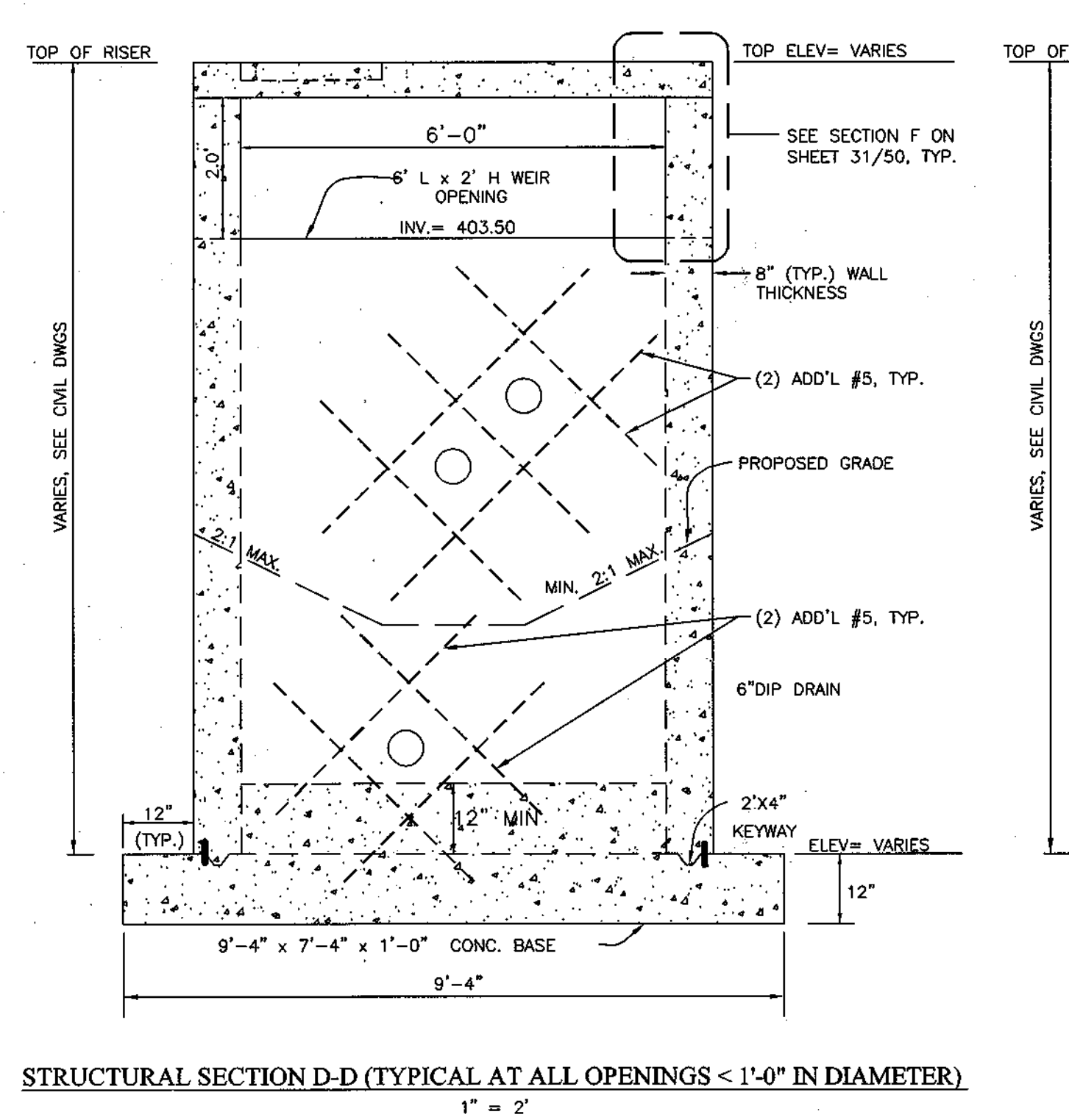
STRUCTURAL NOTES

1. BUILDING CODES
 - A. ALL CONSTRUCTION SHALL CONFORM WITH THE 2000 INTERNATIONAL BUILDING CODE AND ALL SUBSEQUENT SUPPLEMENTS.
 - B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH THE GOVERNING LOCAL BUILDING CODE.
2. DESIGN LOADS
 - A. THE MINIMUM DESIGN DEAD LOADING FOR ALL FRAMING IS BASED ON THE CONSTRUCTION MATERIALS SHOWN ON THE DRAWINGS AND INDICATED IN THE SPECIFICATIONS.
 - B. THE CONTRACTOR SHALL NOT STORE ANY CONSTRUCTION MATERIALS OR UNDERTAKE ANY CONSTRUCTION OPERATION WHICH WILL EXCEED THE DESIGN LIVE LOADINGS NOTED.
3. MISCELLANEOUS
 - A. THE CONTRACTOR SHALL REVIEW CIVIL DRAWINGS PREPARED BY RODGERS CONSULTING, INC. DATED 12/20/02 FOR LOCATION AND DIMENSION OF CHANGES, INSERTS, OPENINGS, SLEEVES, DEPRESSIONS AND OTHER PROJECT REQUIREMENTS WHICH IMPACT THE STRUCTURAL COMPONENTS.
 - B. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
 - C. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.
 - D. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.
4. FOUNDATIONS
 - A. ALL FOUNDATIONS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2000 PSF. THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE FIELD VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER. CONTRACTOR SHALL BACKFILL AROUND PERIMETER OF RISER AT AN EVEN RATE SO AS NOT TO CAUSE AN OVERTURNING MOMENT.
 - B. ALL FILL PLACED UNDER FOUNDATIONS SHALL BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 998.
 - C. ALL EXCAVATION AND BACKFILL OPERATIONS WITHIN THE BUILDING FOOTPRINT, INCLUDING ALL CONVICTION TESTS AND INSPECTIONS, SHALL BE DONE UNDER THE DIRECTION AND SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER. CONTRACTOR SHALL BACKFILL AROUND PERIMETER OF RISER AT AN EVEN RATE SO AS NOT TO CAUSE AN OVERTURNING MOMENT.
 - D. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ALL FOUNDATION AND SOIL CONDITIONS WHICH DIFFER FROM THOSE ANTICIPATED OR INDICATED IN THE CONTRACT DOCUMENTS.
 - E. ALL EXISTING SOIL CONTAINING GRAVEL, CONSTRUCTION OR DEMOLITION DEBRIS, ORGANIC SUBSTANCES, OR OTHER FOREIGN OBJECTS SHALL BE REMOVED FROM THE REGION WITHIN THE FOOTPRINT OF THE STRUCTURE.
5. CAST IN PLACE CONCRETE
 - A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR ENVIRONMENTAL ENGINEERING CONCRETE STRUCTURES 2001", AND TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (AC 318).
 - B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:
 1. RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING (AC 305).
 2. RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (AC 308).
 3. RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (AC 347).
 - C. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 6% TO 8%. NO ADJUTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1/4" WATER/CEMENT RATIO SHALL BE 0.45. MAXIMUM SLUMP SHALL BE 4". 7" FOR SLABS ON GRADE. ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN A WATER REDUCING ADJUTANT. PORTLAND CEMENT SHALL CONFORM TO ASTM C 150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C 33.
 - D. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A 615 GRADE 60. ALL WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A 185. ALL REINFORCING BARS A MINIMUM OF 48 BAR DIAMETERS AND ALL W.W.F. A MINIMUM OF TWO FULL GRIDS, UNLESS OTHERWISE INDICATED.
 - E. ALL CONCRETE SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE CRS "MANUAL OF STANDARD PRACTICE", ACI 318 DETAILS AND DETAILING OF CONCRETE REINFORCEMENT", ACI SP 86 "DETAILING MANUAL".
 - F. ALL CONCRETE MIX DESIGNS, INCLUDING GEMENT CONTENT, WATER CEMENT RATIO, FINE AND COARSE AGGREGATE CONTENT AND ALL ADJUTURES, SHALL BE REVIEWED BY ENGINEER PRIOR TO PLACING FIRST CONCRETE.
 - G. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY THE TESTING AGENCY. THE CONTRACTOR SHALL NOTIFY THE TESTING AGENCY 48 HOURS PRIOR TO THE PLACING OF ANY CONCRETE.
 - H. GROUND-BLAST FURNACE SLAG MAY BE USED TO REPLACE UP TO 50 PERCENT OF THE PORTLAND CEMENT IN A CONCRETE MIX AND FLY ASH OR POZZOLAN MAY BE USED TO REPLACE UP TO 25 PERCENT OF PORTLAND CEMENT, SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER AND SHALL CONFORM TO ASTM C 989.
 - I. MINIMUM COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:

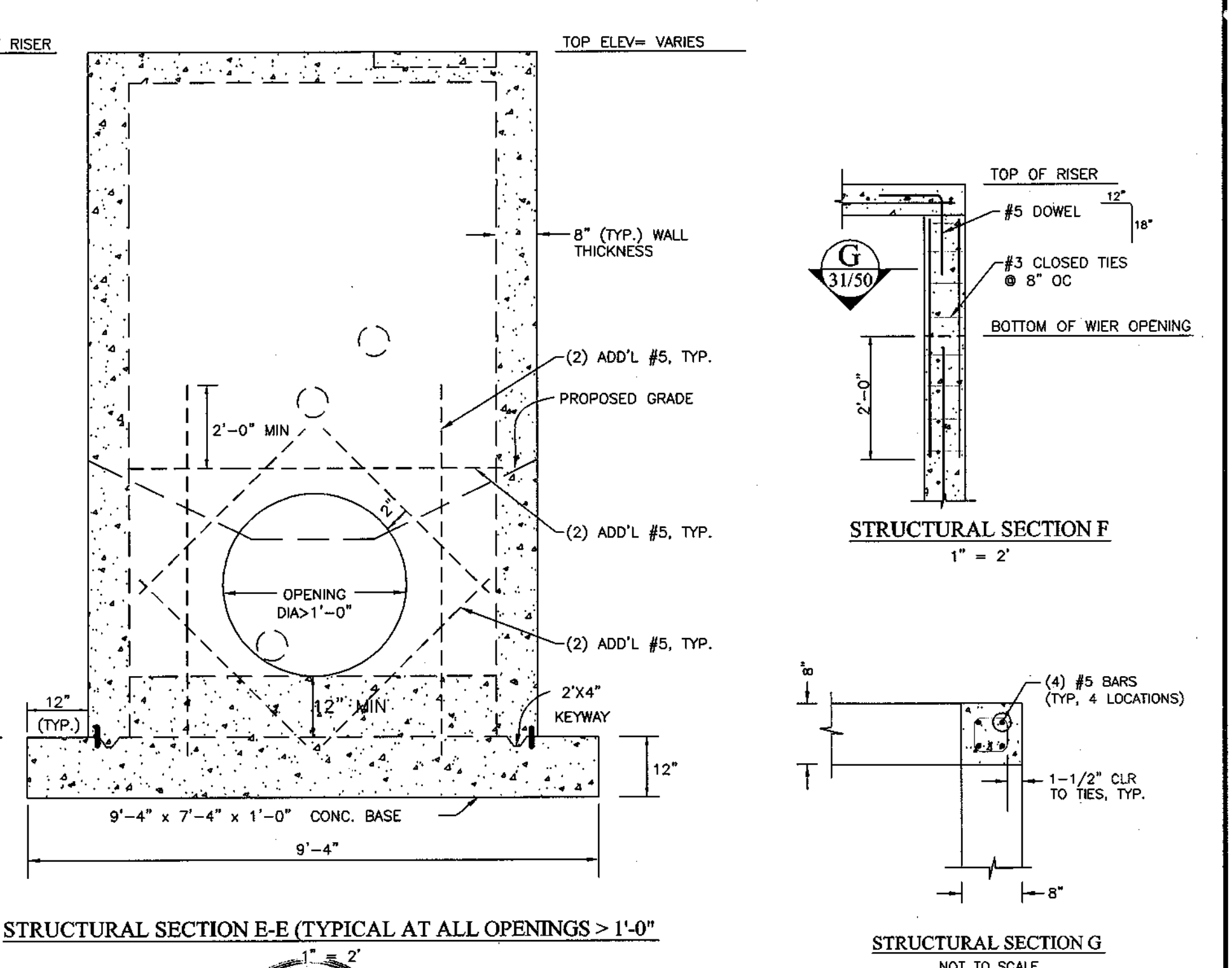
FOUNDATIONS	3 INCHES
WALLS	2 INCHES
 - J. THE GENERAL CONTRACTOR SHALL SUBMIT PLANS SHOWING ALL PENETRATIONS THROUGH THE FRAMED CONCRETE SLABS. THE OPENINGS SHALL BE ACCURATELY LOCATED AND DIMENSIONED.
6. RETAINING WALLS
 - A. RISER WALLS HAVE BEEN DESIGNED WITH BACKFILL MATERIAL HAVING THE FOLLOWING CHARACTERISTICS:

Unit Weight	= 125.0 PCF
RD	= 3.0
Equivalent Fluid	= 50H
 - B. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THE BACK FILL MATERIAL MEETS THESE CHARACTERISTICS.
 - C. RISER HAS BEEN DESIGNED FOR THE FOLLOWING MINIMUM FACTORS OF SAFETY:

OVERTURNING	2.0
-------------	-----
 - D. ALL RISER WALLS SHALL BE BRACED AND SHORED AS REQUIRED DURING BACKFILLING. BOTH SUPPORTING ELEMENTS SHALL BE IN PLACE AND DEVELOPING FULL REQUIRED STRENGTH PRIOR TO BACK FILLING OF WALLS SUPPORTED AT TOP AND BOTTOM.



STRUCTURAL SECTION D-D (TYPICAL AT ALL OPENINGS < 1'-0" IN DIAMETER)
1" = 2"



STRUCTURAL SECTION E-E (TYPICAL AT ALL OPENINGS > 1'-0" IN DIAMETER)
1" = 2"

STRUCTURAL REINFORCING DETAILS FOR CAST-IN-PLACE RISERS 1, 2 & 4

*NOTE: STRUCTURAL DRAWINGS SHOWN WITHIN BOXED OUT REGION. STRUCTURAL PLANS, SECTIONS, & DETAILS ARE TYPICAL FOR ALL 3 RISERS. FOR CLARITY, RISER 1 HAS BEEN DEPICTED IN ALL STRUCTURAL DRAWINGS. CONTRACTOR SHALL VERIFY DIMENSIONS AND OPENING LOCATIONS FOR RISERS 2 & 4 TO MATCH CIVIL DRAWINGS. STRUCTURAL DRAWINGS ARE SHOWN ON SHEETS 27 & 31 OF THIS CONSTRUCTION DOCUMENT SET.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Kent Sheehy 9/11/03
CHIEF, DIVISION OF LAND DEVELOPMENT

Chris Dammann 9/11/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William T. Mahan 8-21-03
CHIEF, BUREAU OF HIGHWAY

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Frank G. Rossmore 8/14/03
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Stephen J. Nardella Aug 1, 2003
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Jim Mays 8/18/03
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.

Jim Mays 8/18/03
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

CONVERSION NOTES: TEMPORARY SEDIMENT DEWATERING DEVICE TO PERMANENT POND DRAIN

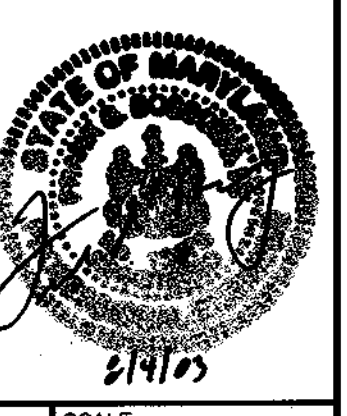
(SEE 6" PERMANENT POND DRAIN AND TEMPORARY DEWATERING DEVICE AND RISER MODIFICATION DETAILS THIS SHEET)

1. OBTAIN PERMISSION FROM EROSION AND SEDIMENT CONTROL INSPECTOR. REMOVE CONTAMINATED 2" MSHA NO. 2 STONE FROM AROUND TEMPORARY SEDIMENT DEWATERING DEVICE. REMOVE VERTICAL 6" DIA. PERFORATED ALUMINUM RISER FROM FLANGED TEE. FLANGED TEE AND CONCRETE BASE TO REMAIN.
2. REMOVE HORIZONTAL SECTION OF 6" DIP BETWEEN FLANGED TEE AND FLANGED END OF 6" DIP COMING FROM RISER STRUCTURE AND REPLACE WITH PERFORATED 6" DIP.
3. INSTALL PERFORATED 6" DIP RISER AND CAP. INSTALL MSHA NO. 2 STONE ENVELOPE AS PER DETAIL THIS SHEET.
4. REMOVE TEMPORARY BRICK BLOCKING FROM RISER STRUCTURE WEIR CREST AND REPLACE THE 6" SWM CAP W/ PROPER CAP DRIFCS.
5. REMOVE LOWER 6" FLANGED END CAP W/ SED. CONTRL. ORIFICE AND INSTALL GATE VALVE AND APPURTENANCES AS SPECIFIED. DRESS UP AND STABILIZE DISTURBED AREA AS REQUIRED.



CALL "MISS UTILITY" AT 1-800-257-7777
48 Hours Before Start Of Construction

NOTE: THIS PLAN TO BE USED FOR STORMWATER MANAGEMENT ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.



DATE	REVISION	DATE	BY	DATE
	DESIGNED			
	DRAWN			
	REVIEWED			
	RELEASE FOR			

DATE	REVISION	DATE	BY	DATE
08-05-03	FINAL W/LAR SUBMITTAL FOR SIGNATURE			
05-26-03	REV. PER HOWARD CO. DPZ COMMENTS OF 05/12/03			
03-28-03	REV. PER HOWARD CO. DPZ COMMENTS OF 02/12/03			
12/20/02	ISSUED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

**SWM POND 4
NOTES & DETAILS**



Rodgers Consulting, Inc.
9260 Gathers Road
Gathersburg, MD 20877
301-948-4700
301-948-6256 (fax)
301-253-6609
www.rodgers.com

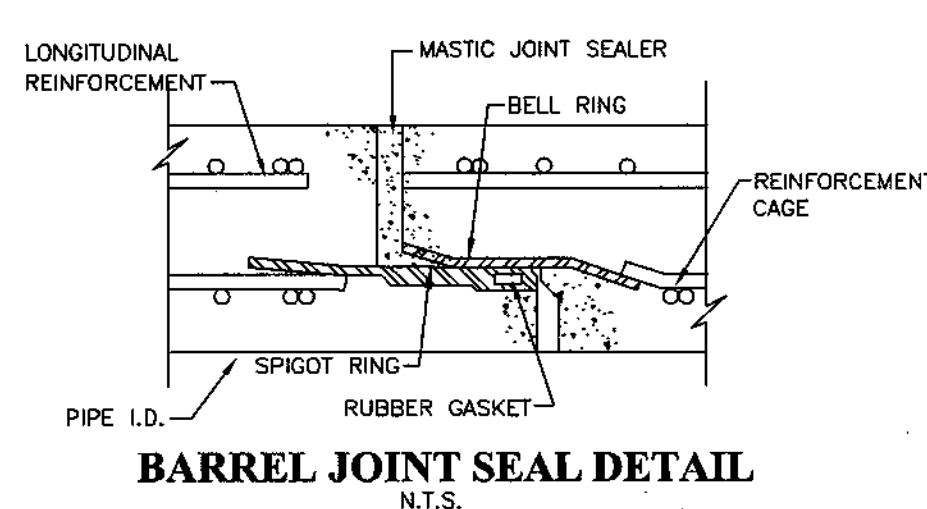
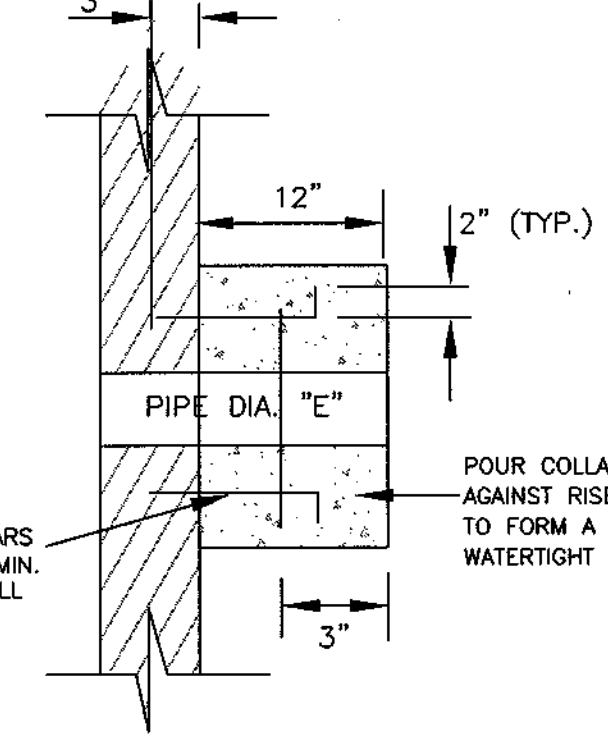
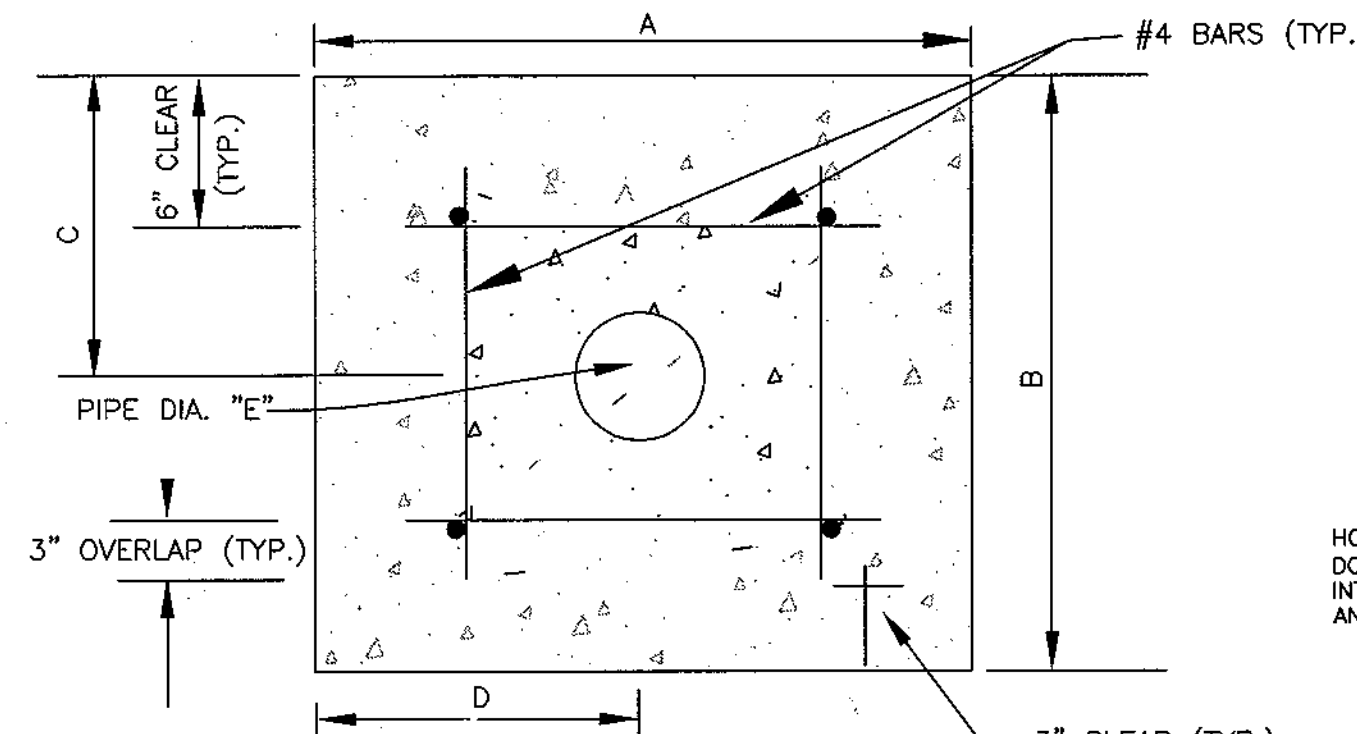
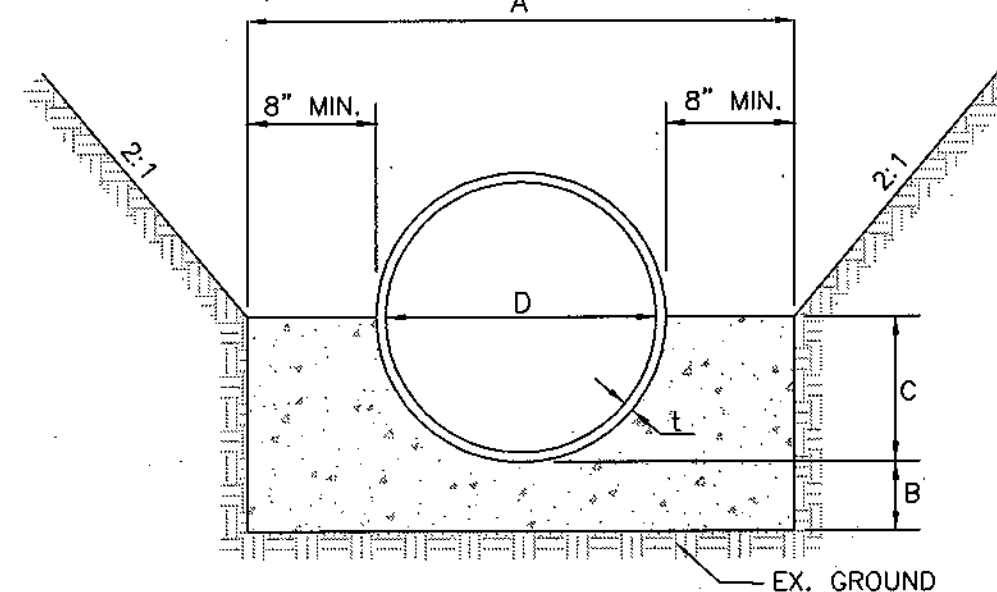
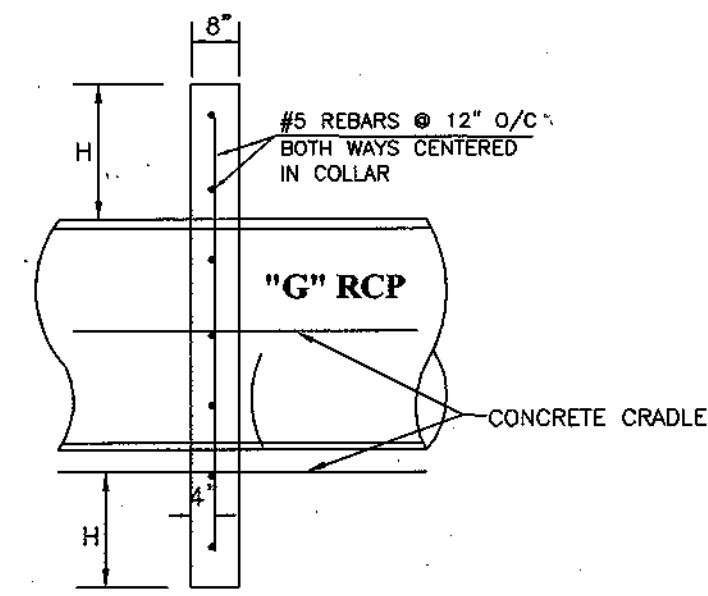
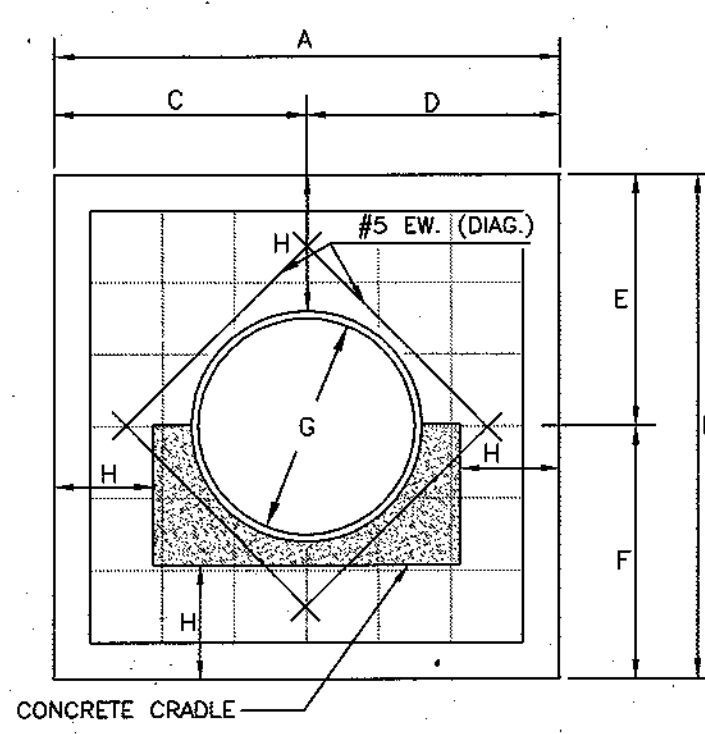
* PHASES I, II & III

Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1" = 30'
JOB No. 506V3
DATE: 12/20/02
INDEX No. SWM
SHEET No. 31 OF 50

*BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 196 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

NOTE: ANTI-SEEP COLLARS SHALL BE PLACED A MINIMUM OF 2 FT. FROM ANY PIPE JOINT.



ANTI-SEEP COLLAR NOTES:
 1. ANTI-SEEP COLLARS ARE TO BE FIELD-LOCATED A MINIMUM OF 2' AWAY FROM ANY PIPE JOINT. SEE PIPE PROFILE FOR APPROX. SPACING.
 2. CONCRETE SHALL BE MSHA MIX NO. 3 (F'c=3500 PSI).

ANTI-SEEP COLLAR DETAILS
N.T.S.

ANTI-SEEP COLLAR DETAIL DIMENSION TABLE

	"A"	"B"	"C"	"D"	"E"	"F"	"G"	"H"
POND 1	10'-3 1/4"	9'-8 1/4"	5'-1 3/8"	5'-1 3/8"	4'-5 3/8"	5'-2 3/8"	36"	2'-7"
POND 2	10'-6 1/4"	9'-8 1/4"	5'-3 1/4"	5'-3 1/4"	4'-7 1/4"	5'-1 1/4"	24"	3'-3 1/2"
POND 4	10'-0"	9'-7"	5'-0"	5'-0"	4'-4"	5'-3"	42"	2'-2"

CONCRETE CRADLE NOTES:
 1. POUR CONCRETE AGAINST UNDISTURBED EARTH.
 2. CONCRETE SHALL BE MSHA MIX NO. 3 (F'c=3500 PSI).
 3. BARREL MAY BE PLACED ON PRECAST CONCRETE BLOCKS PRIOR TO CRADLE POUR.
 4. POURING AN ADDITIONAL 4" TO 6" THICK "MUDMAT" MAY BE ACCEPTABLE IF SUBCONDITIONS ARE WET AND WITH APPROVAL OF GEOTECHNICAL ENGINEER.
 5. IF ALL OF CONCRETE CRADLE CANNOT BE POURED AT ONE TIME, ONE HORIZONTAL JOINT IS ALLOWED. PLACE A MINIMUM OF THREE (3) - 6" LONG #4 REBAR DOWELS TO CONNECT POURS.
 6. IF A CRADLE HORIZONTAL JOINT IS USED, DO NOT LOCATE WITHIN 2' OF PIPE JOINT.

CONCRETE CRADLE DETAIL
N.T.S.

CONCRETE CRADLE DETAIL DIMENSION TABLE

	"A"	"B"	"C"	"D"	"E"
POND 1	5'-1 1/4"	9"	22 3/8"	36"	4 3/8"
POND 2	3'-11 1/4"	6"	15 3/8"	24"	3 3/8"
POND 4	5'-8"	11"	26"	42"	5"

CONCRETE COLLAR NOTES:
 1. CONCRETE SHALL BE MSHA MIX #3 (F'c=3500psi)
 2. TO BE USED WITH PRE-CAST RISER ONLY.

CONCRETE COLLAR DETAIL
N.T.S.

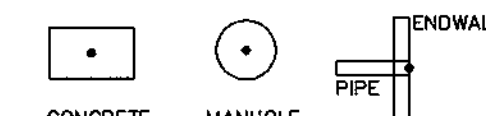
CONCRETE COLLAR DETAIL DIMENSION TABLE

	"A"	"B"	"C"	"D"	"E"
POND 1	5'-10"	5'-4 3/8"	2'-10 3/8"	2'-11"	36"Ø PIPE
POND 2	4'-7 1/4"	4'-3 3/8"	2'-3 3/8"	2'-3 3/8"	24"Ø PIPE
POND 4	6'-4"	6'-2"	3'-2"	3'-2"	42"Ø PIPE

STORMWATER MANAGEMENT STRUCTURE SCHEDULE

STRUCTURE NUMBER	STRUCTURE TYPE	LOCATION	COORDINATES	MSHA STD. NO.	REMARKS
P1-EW	TYPE "C" ENDWALL	POND 1	N572662.61 E1363906.21	MD-354.01	
P1-R	CONCRETE RISER	POND 1	N572602.29 E1363925.21		PRECAST STRUCTURE OR CAST-IN-PLACE (SEE DETAIL SHEET 27)
P2-EW	TYPE "C" ENDWALL	POND 2	N572579.27 E1363010.70	MD-354.01 (MODIFIED)	
P2-R	CONCRETE RISER	POND 2	N572579.27 E1363047.24		PRECAST STRUCTURE OR CAST-IN-PLACE (SEE DETAIL SHEET 29)
P4-EW	TYPE "C" ENDWALL	POND 4	N573446.28 E1363222.09	MD-354.01 (MODIFIED)	
P4-R	CONCRETE RISER	POND 4	N573438.27 E1363280.03		PRECAST STRUCTURE OR CAST-IN-PLACE (SEE DETAIL SHEET 31)
M-55	FLOW SPLITTER MANHOLE	POND 2	N572410.13 E1363123.90	H.C. STD G-5.11	SEE DETAIL ON SHEET 24.

COORDINATE LOCATION GIVEN TO CENTERLINE OF PIPE AT FACE OF ENDWALLS, AT CENTER OF CONCRETE RISER/MANHOLES AND CENTERLINE OF END OF PIPE FOR CONNECTION OF END SECTIONS.



APPROVED:
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature: [Signature] DATE: 8/18/03
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED:
 THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION, AND SEDIMENT CONTROL.
 Signature: [Signature] DATE: 8/18/03
 USDA NATURAL RESOURCES CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE
 I, THE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Signature: [Signature] DATE: Aug 1, 2003
 SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE

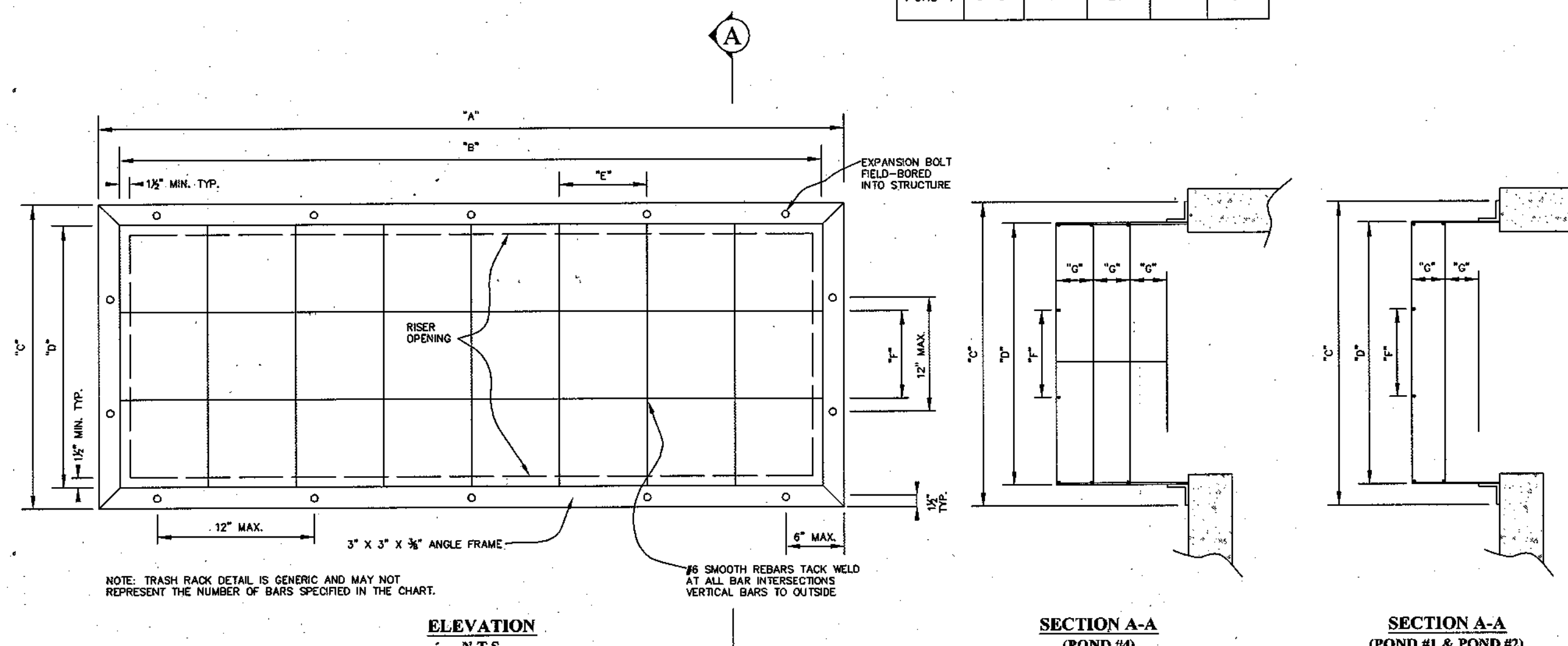
ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Signature: [Signature] DATE: 8/18/03
 SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Signature: [Signature] DATE: 9-11-03
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: [Signature] DATE: 9/16/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

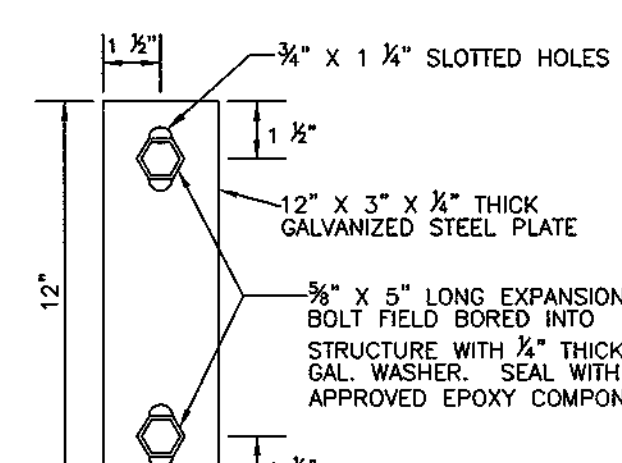
DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			



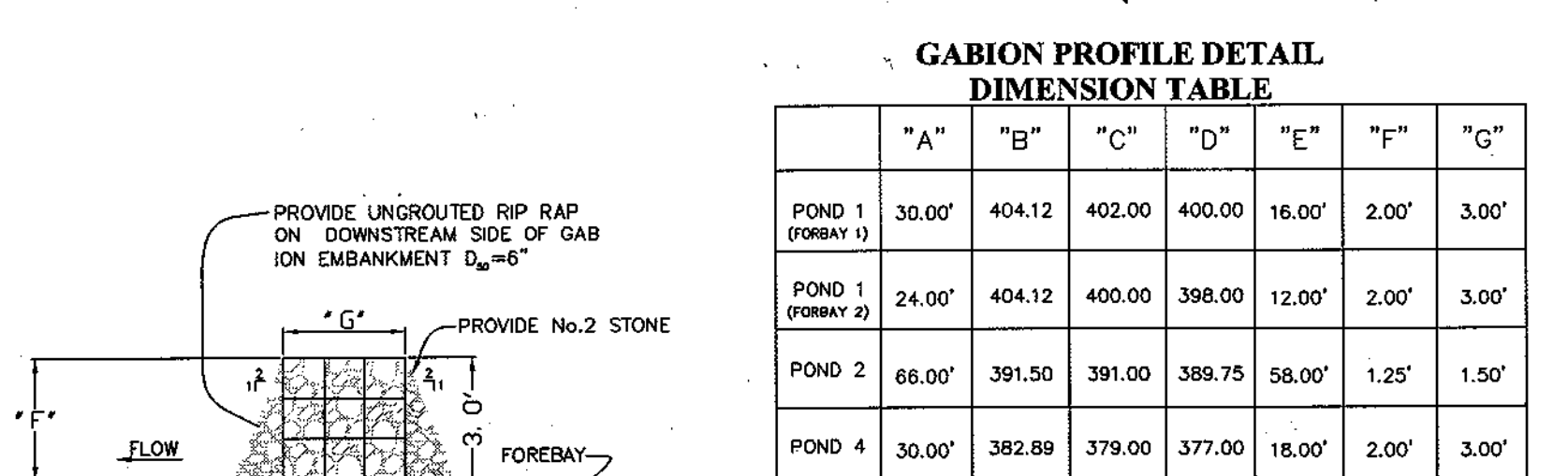
LOCATION OF TRASH RACK

LOCATION OF TRASH RACK	QUANTITY REQUIRED	"A"	"B"	"C"	"D"	"E"	"F"	"G"	NOTES:
POND 1-FRONT	1	6'-9"	6'-3"	2'-9"	2'-3"	8 1/2"	8 1/2"	9"	10 VERTICAL BARS IN FRONT, BENT TOP & BOTTOM 2 HORIZONTAL BARS IN FRONT, BENT SIDE BENT AROUND SIDES 2 HORIZONTAL BARS IN ALONG TOP & 1 ALONG BOTTOM 2 VERTICAL BARS 1 ALONG EACH SIDE
POND 1-SIDES	2	4'-9"	4'-3"	2'-9"	2'-3"	8 1/2"	8 1/2"	9"	7 VERTICAL BARS IN FRONT, BENT TOP & BOTTOM 2 HORIZONTAL BARS IN FRONT, BENT SIDE BENT AROUND SIDES 2 HORIZONTAL BARS IN ALONG TOP & 1 ALONG BOTTOM 2 VERTICAL BARS 1 ALONG EACH SIDE
POND 2-FRONT	1	6'-9"	6'-3"	2'-9"	1'-8"	8 1/2"	8 1/2"	8"	10 VERTICAL BARS IN FRONT, BENT TOP & BOTTOM 2 HORIZONTAL BARS IN FRONT, BENT SIDE BENT AROUND SIDES 2 HORIZONTAL BARS IN ALONG TOP & 1 ALONG BOTTOM 2 VERTICAL BARS 1 ALONG EACH SIDE
POND 2-SIDES	2	4'-9"	4'-3"	2'-9"	1'-8"	8 1/2"	8 1/2"	8"	7 VERTICAL BARS IN FRONT, BENT TOP & BOTTOM 2 HORIZONTAL BARS IN FRONT, BENT SIDE BENT AROUND SIDES 2 HORIZONTAL BARS IN ALONG TOP & 1 ALONG BOTTOM 2 VERTICAL BARS 1 ALONG EACH SIDE
POND 4-FRONT	1	6'-9"	6'-3"	3'-9"	2'-6"	8 1/2"	9 1/2"	8"	10 VERTICAL BARS IN FRONT, BENT TOP & BOTTOM 2 HORIZONTAL BARS IN FRONT, BENT SIDE BENT AROUND SIDES 2 HORIZONTAL BARS IN ALONG TOP & 1 ALONG BOTTOM 2 VERTICAL BARS 1 ALONG EACH SIDE
POND 4-SIDES	2	4'-9"	4'-3"	3'-9"	2'-6"	8 1/2"	9 1/2"	8"	7 VERTICAL BARS IN FRONT, BENT TOP & BOTTOM 2 HORIZONTAL BARS IN FRONT, BENT SIDE BENT AROUND SIDES 2 HORIZONTAL BARS IN ALONG TOP & 1 ALONG BOTTOM 2 VERTICAL BARS 1 ALONG EACH SIDE

RISER TRASH RACK DETAILS
N.T.S.

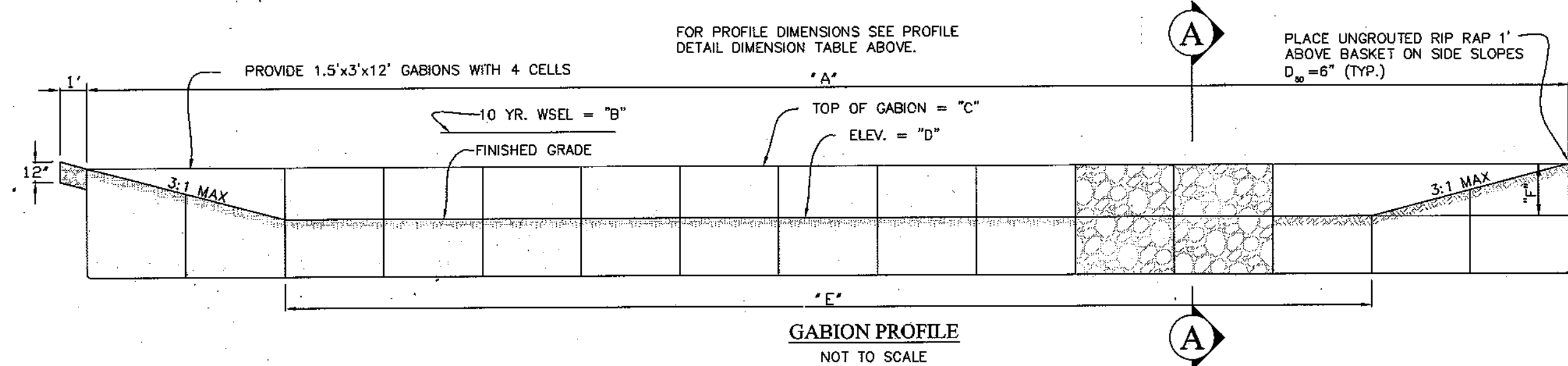


RISER JOINT FASTENER DETAIL (FOR PRECAST ONLY)
(IF REQUIRED)
NOT TO SCALE



GABION FOREBAY NOTES

- ALL WIRE USED IN GABION CONSTRUCTION SHALL BE GALVANIZED AND PLASTIC COATED. ALL PLIERS AND TOOLS SHALL BE PLASTIC COATED.
- FILTER CLOTH SHALL BE PLACED WHENEVER GABION COMES IN CONTACT WITH SOIL.
- STONE FILL SHALL CONSIST OF HARD, DURABLE CLEAN STONE, 4"-8" IN SIZE OR APPROVED BY THE ENGINEER.
- CONSTRUCTION MATERIALS AND METHODS SHALL BE IN ACCORDANCE WITH MACCAFERRI GABIONS INC., SPECS OR EQUAL.



GABION PROFILE
NOT TO SCALE

Study Point #1 SWM Storage Requirement Summary And Treatment Strategy

Study Point # 1	Proposed Conditions						Remarks
	DA (Ac)	WQV (Ac-ft)	Rev (Ac-ft)	CPV (Ac-ft)	Overbank Protection (Ac-ft)	Extreme Flood (Q)	
Total onsite area to Study Point (Prop)	37.89	---	---	---	N/A	N/A	
Total Offsite area to Study Point	649	---	---	---	N/A	N/A	
Pond #1 (Micropond P-1)	15.02	0.66**	0.176/0.14	0.8500	N/A	N/A	Provides WQV & Cpv
Pond #3 (Sandfilter F-1)	4.15	0.114**	0.03/0.33	---	N/A	N/A	Provides WQV only
By-Pass Areas (Combined)	16.52	---	---	---	---	---	

Treatment Strategy
 *Rev - Treated by Grass Swales, Sheet Flow to Buffers
 **WQV - Treated by Micropond ED for Pond 1, Sand filter in Pond 3, & Sheet flow to buffer credits for By-Pass areas
 ***CPV - Provided in Pond # 1, remaining areas by-passed. One year flows pre & post checked at study point. CPV are used 2.0cfs excluded.

For Backup computations see SWM computation Package

Study Point #2 SWM Storage Requirement Summary And Treatment Strategy

Study Point # 2	Proposed Conditions						Remarks
	DA (Ac)	WQV (Ac-ft)	Rev (Ac-ft)	CPV (Ac-ft)	Overbank Protection (Ac-ft)	Extreme Flood (Q)	
Total onsite area to Study Point (Prop)	38.7	---	---	---	N/A	N/A	
Total Offsite area to Study Point	50.3	---	---	---	N/A	N/A	
Pond #4 (Micropond P-1)	17.83	0.5510	0.143/0.84	1.1400	N/A	N/A	Provides WQV & Cpv
Pond #2 (Sandfilter F-1)	9.34	0.4390	0.11/0.33	---	N/A	N/A	Provides WQV only
By-Pass Areas (Combined)	12.76	---	---	---	---	---	

Treatment Strategy
 *Rev - Treated by Grass Swales, Sheet Flow to Buffers & Disconnected Roof tops
 **WQV - Treated by Micropond ED for Pond 4, Sand filter in Pond 2, & Sheet flow to buffer credits & disconnected roof tops for By-Pass areas
 ***CPV - Provided in Pond # 4, remaining areas by-passed. One year flows pre & post checked at study point. CPV are used 2.0cfs excluded.

For Backup computations see SWM computation Package

Montjoy Existing Conditions Summary Table

Study Point #	DA (Ac)	DA (Ac)	RCN (Ac)	Tc (hr)	Proposed Conditions				
					1-Year (cfs)	2-Year (cfs)	10-Year (cfs)	100-Year (cfs)	
Offline	649.23	64	0.51	0.8	95.9cfs	234.6cfs	836.7cfs	n/a	1693.9cfs
Pond 1 Inflow	15.02	82	0.11	0.1	23.1cfs	33.4cfs	68.5cfs	68.5cfs	168.8cfs
Pond 1 WWSL	---	---	---	---	0.5cfs	0.7cfs	22.8cfs	22.8cfs	49.0cfs
Combined Flows	664.25	142	0.62	0.9	116.6cfs	368.7cfs	907.9cfs	907.9cfs	1812.7cfs
Pond 2 Inflow	4.15	72	0.22	0.2	38.1cfs	n/a	n/a	n/a	n/a
Pond 2 WWSL	---	---	---	---	0.1cfs	n/a	n/a	n/a	n/a
Combined Flows	668.40	214	0.84	1.1	154.7cfs	368.7cfs	907.9cfs	907.9cfs	1812.7cfs

Proposed Conditions Study Point 1 Summary Table

Study Point #1	DA (Ac)	RCN (Ac)	Tc (hr)	WQV (Ac-ft)	Proposed Conditions				
					1-Year (cfs)	2-Year (cfs)	10-Year (cfs)	100-yr Safety	
Offline	649.23	64	0.51	0.8	95.9cfs	234.6cfs	836.7cfs	n/a	1693.9cfs
Pond 1 Inflow	15.02	82	0.11	0.1	23.1cfs	33.4cfs	68.5cfs	68.5cfs	168.8cfs
Pond 1 WWSL	---	---	---	---	0.5cfs	0.7cfs	22.8cfs	22.8cfs	49.0cfs
Combined Flows	664.25	142	0.62	0.9	116.6cfs	368.7cfs	907.9cfs	907.9cfs	1812.7cfs
Pond 2 Inflow	4.15	72	0.22	0.2	38.1cfs	n/a	n/a	n/a	n/a
Pond 2 WWSL	---	---	---	---	0.1cfs	n/a	n/a	n/a	n/a
Combined Flows	668.40	214	0.84	1.1	154.7cfs	368.7cfs	907.9cfs	907.9cfs	1812.7cfs

Proposed Conditions Study Point 2 Summary Table

Study Point #2	DA (Ac)	RCN (Ac)	Tc (hr)	WQV (Ac-ft)	Proposed Conditions				
					1-Year (cfs)	2-Year (cfs)	10-Year (cfs)	100-yr Safety	
Offline	50.28	59	0.38	0.8	3 cfs	10.7 cfs	57.3 cfs	126.5 cfs	126.5 cfs
Pond 2 Inflow	9.84	---	---	---	6.46 cfs	n/a	n/a	15.0 cfs	20.2 cfs
At flow splitter	1.01	81	0.15	0.66cfs	12.66cfs	18.06cfs	36.2cfs	36.2cfs	58.8cfs
Combined to pond	1.82**	67	0.12	n/a	16.8cfs	2.0cfs	5.0cfs	5.0cfs	9.0cfs
Pond 2 WWSL	---	---	---	---	n/a	n/a	391.50	391.50	391.07
PD 3 (Micropond P-1)	---	---	---	---	0.251	n/a	n/a	n/a	n/a
Pond 4 Inflow	17.83	74	0.23	0.23	24.2cfs	32.3cfs	88.7cfs	88.7cfs	147.4cfs
Pond 4 WWSL	---	---	---	---	4.5cfs	5.8cfs	27.6cfs	27.6cfs	127.2cfs
Combined Flows	---	---	---	---	37.7cfs	38.1cfs	381.8cfs	381.8cfs	583.6cfs
PD 4 Storage (cfs)	---	---	---	---	0.414	1.30	1.93	0.83	2.43
By-Pass Areas (Combined)	12.76**	67	0.19	0.414	5.1cfs	10.2cfs	31.0cfs	31.0cfs	58.2cfs
Combined Flows	88.98	---	---	---	6.9cfs	18.2cfs	134.0cfs	134.0cfs	295.1cfs

SUMMARY TABLES

NOTE: THIS PLAN TO BE USED FOR STORMWATER MANAGEMENT ONLY. ALL OTHER INFORMATION SHOWN FOR REFERENCE PURPOSE ONLY. SEE APPROPRIATE CONSTRUCTION DRAWING FOR ALL OTHER INFORMATION.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120-126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

* PHASES I, II & III

Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ PERMITS: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-117, P-03-08

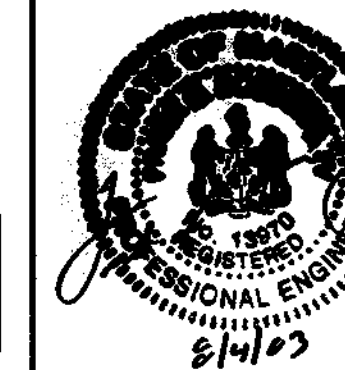
CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start of Construction

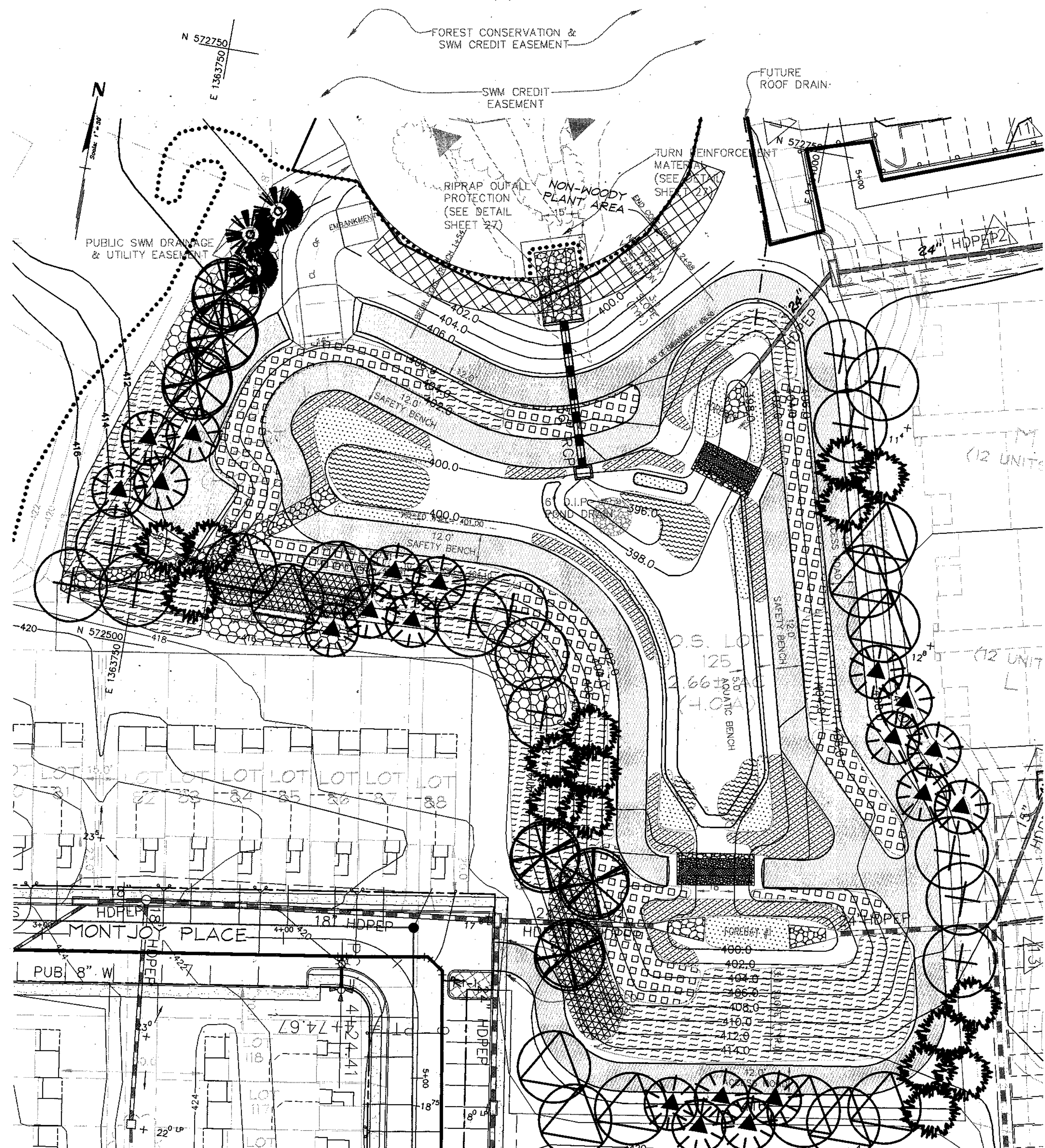
RODGERS CONSULTING
 Enhancing the value of land assets

Rodgers Consulting, Inc.
 9260 Galther Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.4256 (fax)
 301.253.6600
 www.rodgers.com

SWM SCHEDULES & GENERAL DETAILS

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803 - 4800





THIS PLAN FOR LANDSCAPE USE ONLY

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 APPROVED: CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	ISSUED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

Pond #1 - Tree Schedule for Required Buffer

POND PERIMETER=1,540' REQ'D PLANTING=31 SHADE TREES, 39 EVERGREEN

SYMBOL	BOTANICAL NAME (COMMON NAME)	QTY	SIZE	ROOT	REMARKS
(+)	ACER RUBUM (RED MAPLE) ALTERNATE: PLATANUS OCCIDENTALIS (AMERICAN Sycamore)	13	2 1/2"-3" cal	B4B	
(△)	LIQUIDAMBAR STRACIFLUA (SWEET GUM) ALTERNATE: LIRIODENDRON TULIPIFERA (TULIP TREE)	12	2 1/2"-3" cal	B4B	
(*)	CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)	3	6'-8' ht	B4B	
(▲)	PINUS STROBUS (WHITE PINE)	20	6'-8' ht	B4B	
(●)	ILEX OPACA (AMERICAN HOLLY)	16	6'-8' ht	B4B	
(○)	NYSSA SYLVATICA (BLACK GUM) ALTERNATE: CRATAEGUS PHAEOCYPRIFOLIA (WASHINGTON HAWTHORNE)	6	2 1/2"-3" cal	B4B	

- *General Landscaping Guidance for All Stormwater BMP's**
- Trees, shrubs, and/or any type of woody vegetation are not allowed on the embankment.
 - Plant trees and shrubs at least 15ft away from the toe of slope of a dam.
 - Plant trees and shrubs at least 25ft away from perforated pipes.
 - Plant trees and shrubs at least 25ft away from a principal spillway structure.
 - Provide 15ft clearance from a non-clogging, low flow orifice.
 - Use erosion control mats and fabrics in channels to reduce the potential for erosion.
 - Divert flows temporarily from seeded areas until stabilized.
 - Do not block maintenance access to structures with trees or shrubs.
 - To reduce thermal warming, shade inflow and outflow channels as well as southern exposures of ponds.
 - For planting success, soils should be loosened to a depth of 3 - 5 inches.
 - Soils should be loosened regardless of plant type.
 - Whenever possible, topsoil should be spread to a depth of 4 - 8 inches and lightly compacted to a minimum thickness of 4 inches.
 - Be sure to provide a source of water, especially in dry periods.
 - Native plant species should be specified over exotic or foreign species.
 - Species layout should generally be random and natural.
 - A canopy should be established with an understory of shrubs and herbaceous material.
 - Existing and proposed utilities must be identified and considered.

*These guidelines were taken from the 2000 Maryland Stormwater Design Manual.

Wildflower Seed Mix

TYPE	Lbs. per Acre (kg/ha)
Wildflower Seed Mix:	
Black-Eyed Susan (Rudbeckia hirta)	2.0 lbs./Acre
Corn Poppy (Papaver rhoeas)	1.25 lbs./Acre
Gold Yarrow (Achillea filipendulina)	0.2 lbs./Acre
Or-Eyed Daisy (Chrysanthemum leucanthemum)	1.0 lbs./Acre
Plains Coreopsis (Coreopsis tinctoria)	1.0 lbs./Acre
White Yarrow (Achillea millefolium)	0.2 lbs./Acre
Cornflower (Centaurea cyanea)	1.25 lbs./Acre
Cosmos (Cosmos bipinnatus)	1.5 lbs./Acre
Dane's Rocket (Hesperis matronalis)	1.5 lbs./Acre
Evening Primrose (Oenothera biennis)	2.0 lbs./Acre
Long-Leaved Coreopsis (Coreopsis lanceolata)	2.0 lbs./Acre
Purple Coneflower (Echinacea purpurea)	2.0 lbs./Acre
Rocket Larkspur (Delphinium ajacis)	1.0 lbs./Acre
Gay Feather (Liatris spicata) with awns	2.0 lbs./Acre
Gallardia (Gallardia pulchella)	1.0 lbs./Acre
Meadow Grasses:	
Hard or Sheep Fescue (Companion Seed)	10 lbs./Acre

- Wildflower Mixtures:**
- Plant in spring or fall for best results. Spring seeding should be completed to take advantage of the spring rainfall. Fall planting should be late enough so germination does not occur until the following spring or seedling will be lost to winter freeze.
 - Planting Rates: The seeding rate is about 16 to 20 lbs./acre. Minimum rate is 10 lbs./acre and maximum rates are 8 to 22 lbs./acre. Avoid using more than the recommended rates since poor perennial establishment may result.
 - A wildflower planting requires the same weed control as traditional landscaping. Before planting, remove existing weeds by tilling or by using a nonselective herbicide such as Roundup Pro or a combination of these methods.
 - Seed Application: For seeding large areas over one acre, use a drill seeder. Work to a depth of 1/4 inch and firm soil with a cultipacker. On small sites use a hand cyclone or drop seeder to apply the seed after the site has been tilled.
 - Supplemental Water: Soak the planted areas thoroughly and maintain moisture for 4 to 6 weeks then gradually reduce waterings.
 - Fertilizer: If the soil needs improvement, use a fertilizer with a 10-22-22 ratio at the rate of 450 lbs./acre immediately after seeding. Avoid over-fertilization.
- Management:**
- Mowing: Mow twice a year, once in early summer to remove spring flower seed heads and then again in the fall. Mow to a height of 6-8 inches, leave residue on ground.
 - Weed control: After the flowers have germinated, weeds should be controlled as soon as they can be recognized either by pulling, spot spraying with a selective herbicide or by cutting with a string trimmer. Annual and some perennial grasses can be controlled with herbicides such as Ornace and Fusilade.
 - Re-seeding: Sometimes it is necessary to reseed in the second and additional years if establishment of wildflowers is poor or spotty. The bare areas can be reseeded with original mixture either in the spring or fall.

Pond #1 - Herbaceous Plant Listing

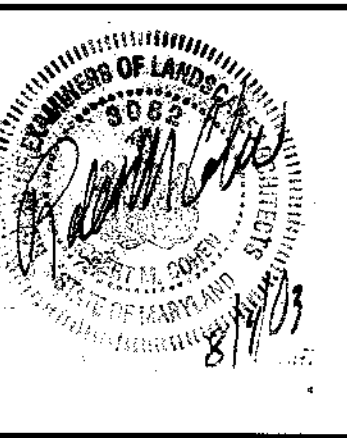
- Zone 1 - Deep Water Pool - 1 to 6 foot deep permanent pool**
 Nuphar lutea - Spatterdock (Yellow water-lily)
 Nymphaea odorata - White Water-lily
 Sagittaria latifolia - Duck Potato
 Potamogeton var. - Pondweed
 - Zone 2 - Shallow Water Bench - 6 inches to 1 foot deep**
 Aster spp.
 Carex vulpinoidea - Fox Sedge
 Iris versicolor - Blue Flag Iris
 Sagittaria latifolia - Duck Potato (Arrowhead)
 Scirpus spp. - Bulrush
 - Zone 3 - Shoreline Fringe - Regularly Inundated**
 Aster spp.
 Carex vulpinoidea - Fox Sedge
 Eupatorium purpurea - Joe Pye Weed
 Iris versicolor - Blue Flag Iris
 Typha latifolia - Broad Leaved Cattail
 - Zone 4 - Riparian Fringe - Periodically Inundated**
 Andropogon virginicus - Broomsedge
 Lobelia cardinalis - Cardinal Flower
 Panicum virgatum - Switch Grass
 Spirea virginiana - Meadow Sweet Spirea
 Viola papilionacea - Common Blue Violet
 - Zone 5 - Floodplain Terrace - Infrequently Inundated**
 Aster ericoides - White Heath Aster
 Cyperus filicinus - Slender Flatsedge
 Lolium perenne - Perennial Rye Grass
 Panicum virgatum - Switch Grass
 Phlox paniculata - Fall Phlox
 Rudbeckia fulgida goldstrum - Blackeyed Susan
 Wild Flower Mix
 - Zone 6 - Upland Slopes - Seldom or Never Inundated**
 Aster ericoides - White Heath Aster
 Cyperus filicinus - Slender Flatsedge
 Festuca pratensis - Meadow Fescue
 Rudbeckia fulgida goldstrum - Blackeyed Susan
 Viola papilionacea - Common Blue Violet
 Wild Flower Mix
- Open Channel & Grass Seed Mixture**
- 15% - Agrostis palustris - Creeping Bentgrass
 - 15% - Andropogon gerardii - Big Bluestem
 - 20% - Festuca rubra - Red Fescue
 - 5% - Lolium perenne - Perennial Rye Grass
 - 15% - Panicum virgatum - Switch Grass
 - 15% - Phalaris arundinacea - Red Canary Grass
 - 15% - Poa pratensis - Kentucky Blue Grass
- Wildflower Seed Mix**
 See Wildflower Chart

Notes For Plant Selection

- Within each hydrologic planting zone, there are several suggestions for herbaceous plantings. It is intended that 3 to 4 plants be selected within each planting zone from the above list. If a plant on the list is not readily available, it is the contractor's responsibility to either choose a replacement plant for that zone, with guidance from the Plant Nursery they are dealing with, or the contractor may eliminate the plant and simply redistribute the square footage among the available plants.
- The square footages provided are approximate areas for each planting zone.
- The plants, when planted from (plug, pot or root) are to be spaced at a rate of ONE (1) plant per TWO (2) square feet.
- Grass seed should be planted at a rate of 50 pounds per acre.
- Plants should be clustered by species within each zone. It is the responsibility of the contractor to locate the plants in the field.

*BUILDABLE LOTS 1-119 AND BUILDABLE PARCEL "A", OPEN SPACE LOTS 120 - 126, 194, AND NON-BUILDABLE BULK PARCELS "B" AND "C"

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction

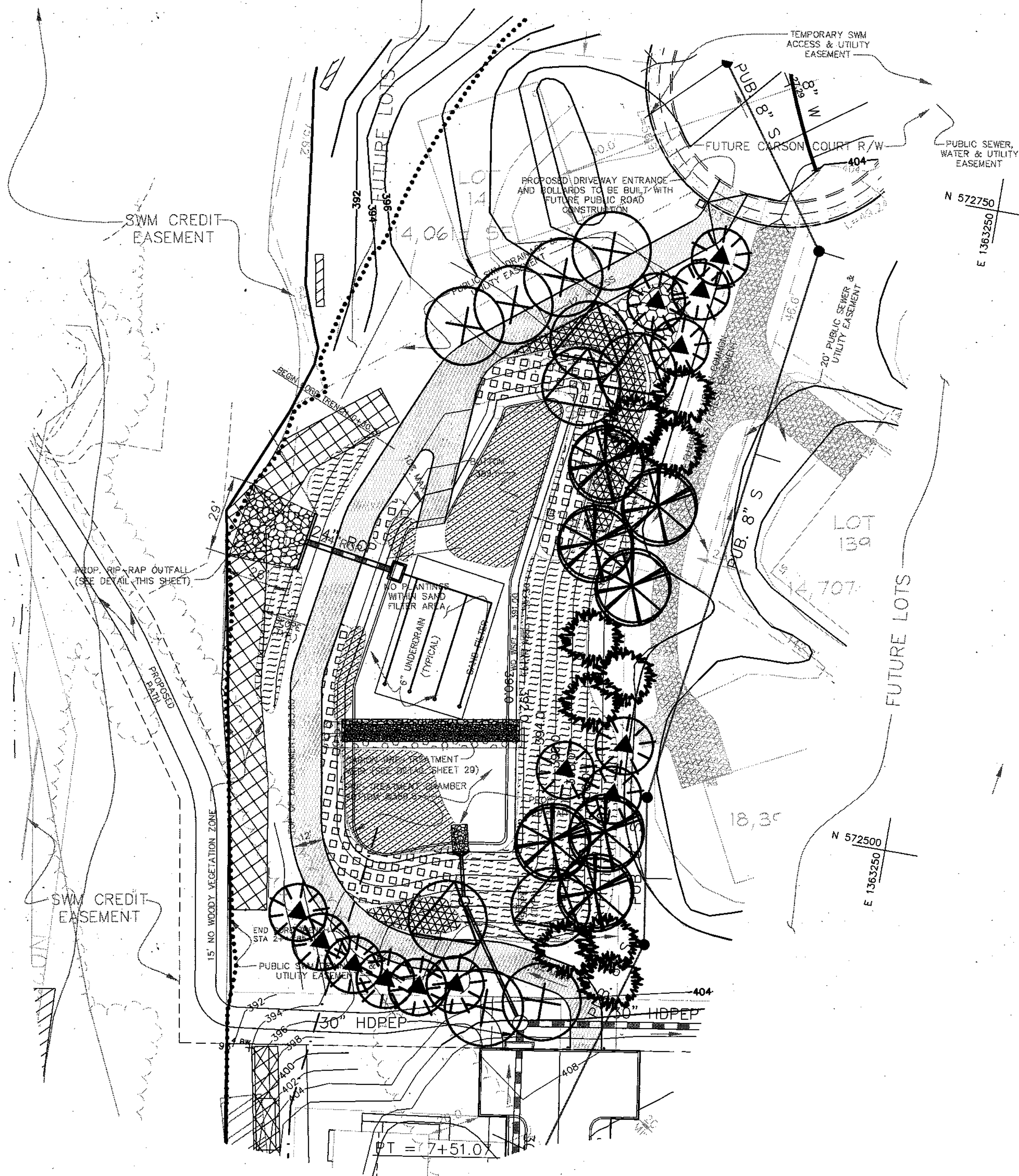


SWM POND 1 SWM LANDSCAPE PLAN

RODGERS CONSULTING
 Rodgers Consulting, Inc.
 9260 Gaither Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

* PHASES I, II & III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260

SCALE: 1"=30'
 JOB No. 506V3
 DATE: 12/20/02
 INDEX No. SWM-9
 SHEET No. 34 of 50



THIS PLAN FOR LANDSCAPE USE ONLY

POND #2 - Tree Schedule for Required Buffer					
POND PERIMETER=060' REQ'D PLANTING=18 SHADE TREES, 22 EVERGREEN					
SYMBOL	BOTANICAL NAME (COMMON NAME)	QTY	SIZE	ROOT	REMARKS
	ACER RUBUM (RED MAPLE) <small>ALTERNATE: PLATANUS OCCIDENTALIS (AMERICAN SYCAMORE)</small>	6	2 1/2"-3" cal	B4B	
	LIQUIDAMBAR STYRACIFLUA (SWEET GUM) <small>ALTERNATE: LIRIODENDRON TULIPIFERA (TULIP TREE)</small>	5	2 1/2"-3" cal	B4B	
	CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)	0	6'-8' ht	B4B	
	PINUS STROBUS (WHITE PINE)	13	6'-8' ht	B4B	
	ILEX OPACA (AMERICAN HOLLY)	9	6'-8' ht	B4B	
	NYSSA SYLVATICA (BLACK GUM) <small>ALTERNATE: CRATAEGUS PHAENOPHYTUM (WASHINGTON HAWTHORNE)</small>	7	2 1/2"-3" cal	B4B	

***General Landscaping Guidance for All Stormwater BMP's**

1. Trees, shrubs, and/or any type of woody vegetation are not allowed on the embankment.
2. Plant trees and shrubs at least 15ft away from the toe of slope of a dam.
3. Plant trees and shrubs at least 25ft away from perforated pipes.
4. Plant trees and shrubs at least 25ft away from a principal spillway structure.
5. Provide 15ft clearance from a non-clogging, low flow orifice.
6. Use erosion control mats and fabrics in channels to reduce the potential for erosion.
7. Divert flows temporarily from seeded areas until stabilized.
8. Do not block maintenance access to structures with trees or shrubs.
9. To reduce thermal warming, shade inflow and outflow channels as well as southern exposures of ponds.
10. For planting success, soils should be loosened to a depth of 3 - 5 inches.
11. Soils should be loosened regardless of plant type.
12. Whenever possible, topsoil should be spread to a depth of 4 - 8 inches and lightly compacted to a minimum thickness of 4 inches.
13. Be sure to provide a source of water, especially in dry periods.
14. Native plant species should be specified over exotic or foreign species.
15. Species layout should generally be random and natural.
16. A canopy should be established with an understory of shrubs and herbaceous material.
17. Existing and proposed utilities must be identified and considered.

*These guidelines were taken from the 2000 Maryland Stormwater Design Manual.

Wildflower Seed Mix	
TYPE	Lbs. per Acre (kg/ha)
Wildflower Seed Mix:	
Black-Eyed Susan (<i>Rudbeckia hirta</i>)	2.0 lbs./Acre
Common Poppy (<i>Papaver rhoeas</i>)	1.25 lbs./Acre
Gold Yarrow (<i>Achillea filipendulina</i>)	0.2 lbs./Acre
Ox-Eyed Daisy (<i>Chrysanthemum leucanthemum</i>)	1.0 lbs./Acre
Pink Coreopsis (<i>Coreopsis tinctoria</i>)	1.0 lbs./Acre
White Yarrow (<i>Achillea millefolium</i>)	0.2 lbs./Acre
Cornflower (<i>Centaurea cyanus</i>)	1.25 lbs./Acre
Cosmos (<i>Cosmos bipinnatus</i>)	1.5 lbs./Acre
Dane's Rocket (<i>Hesperis matronalis</i>)	1.8 lbs./Acre
Evening Primrose (<i>Oenothera hookeri</i>)	2.0 lbs./Acre
Lance-Leaved Coreopsis (<i>Coreopsis lanceolata</i>)	2.0 lbs./Acre
Purple Coneflower (<i>Echinacea purpurea</i>)	2.0 lbs./Acre
Rocket Larkspur (<i>Delphinium ajacis</i>)	1.0 lbs./Acre
Gay Feather (<i>Liatris spicata</i>) with awns	2.0 lbs./Acre
Gallardia (<i>Gallardia pulchella</i>)	1.0 lbs./Acre
Meadow Grasses:	
Hard or Sheep Fescue (Companion Seed)	10 lbs./Acre

Wildflower Mixtures:

- Plant in spring or fall for best results. Spring seeding should be completed to take advantage of the spring rainfall. Fall planting should be late enough so germination does not occur until the following spring or seeding will be lost to winter freeze.
- Planting Rates: The seeding rate is about 16 to 20 lbs./acre. Minimum rate is 10 lbs./acre and maximum rates are 8 to 22 lbs./acre. Avoid using more than the recommended rates since poor perennial establishment may result.
- A wildflower planting requires the same weed control as traditional landscaping. Before planting, remove existing weeds by tilling or by using a nonselective herbicide such as Roundup Pro or a combination of these methods.
- Seed Application: For seeding large areas over one acre, use a drill seeder. Work to a depth of 1/4 inch and firm soil with a cultipacker. On small sites use a hand cyclone or drop seeder to apply the seed after the site has been tilled.
- Supplemental Water: Soak the planted areas thoroughly and maintain moisture for 4 to 6 weeks then gradually reduce waterings.
- Fertilizer: If the soil needs improvement, use a fertilizer with a 10-22-22 ratio at the rate of 450 lbs./acre immediately after seeding. Avoid over-fertilization.
- Management:**
- Mowing: Mow twice a year, once in early summer to remove spring flower seed heads and then again in the fall. Mow to a height of 6-8 inches, leave residue on ground.
- Weed control: After the flowers have germinated, weeds should be controlled as soon as they can be recognized either by pulling, spot spraying with a selective herbicide or by cutting with a string trimmer. Annual and some perennial grasses can be controlled with herbicides such as Ornacem and Fusilade.
- Reseeding: Sometimes it is necessary to reseed in the second and additional years if establishment of wildflowers is poor or spotty. The bare areas can be reseeded with original mixture either in the spring or fall.

Pond #1 - Herbaceous Plant Listing

	Zone 1 - Deep Water Pool - 1 to 6 foot deep permanent pool Nuphar lutea - Spatterdock (Yellow water-lily) Nymphaea odorata - White Water-lily Sagittaria latifolia - Duck Potato Potamogeton var. - Pondweed 1,900 SF.
	Zone 2 - Shallow Water Bench - 6 inches to 1 foot deep Aster spp. Carex vulpinoidea - Fox Sedge Iris versicolor - Blue Flag Iris Sagittaria latifolia - Duck Potato (Arrowhead) Scirpus spp. - Bulrush 3,400 SF.
	Zone 3 - Shoreline Fringe - Regularly Inundated Aster spp. Carex vulpinoidea - Fox Sedge Eupatorium perfoliatum - Joe Pye Weed Iris versicolor - Blue Flag Iris Typha latifolia - Broad Leaved Cattail 4,200 SF.
	Zone 4 - Riparian Fringe - Periodically Inundated Andropogon virginicus - Bromesedge Lobelia cardinalis - Cardinal Flower Panicum virgatum - Switch Grass Spiraea virginiana - Meadow Sweet Spiraea Viola papilionacea - Common Blue Violet 6,500 SF.
	Zone 5 - Floodplain Terrace - Infrequently Inundated Aster ericoides - White Heath Aster Cyperus filicinus - Slender Flatsedge Lolium perenne - Perennial Rye Grass Panicum virgatum - Switch Grass Phlox paniculata - Fall Phlox Rudbeckia fulgida goldsturm - Blackeyed Susan Wild Flower Mix 2,600 SF.
	Zone 6 - Upland Slopes - Seldom or Never Inundated Aster ericoides - White Heath Aster Cyperus filicinus - Slender Flatsedge Festuca pratensis - Meadow Fescue Rudbeckia fulgida goldsturm - Blackeyed Susan Viola papilionacea - Common Blue Violet Wild Flower Mix 3,200 SF.
	Open Channel & Grass Seed Mixture 15% - Agrostis palustris - Creeping Bentgrass 15% - Andropogon gerardii - Big Bluestem 20% - Festuca rubra - Red Fescue 5% - Lolium perenne - Perennial Rye Grass 15% - Panicum virgatum - Switch Grass 15% - Phalaris arundinacea - Red Canary Grass 15% - Poa pratensis - Kentucky Blue Grass 48,000 SF.
	Upland Slopes - Wildflower Seed Mix See Wildflower Chart 15,000 SF.

Notes For Plant Selection
- Within each hydrologic planting zone, there are several suggestions for herbaceous plantings. It is intended that 3 to 4 plants be selected within each planting zone from the above list. If a plant on the list is not readily available, it is the contractor's responsibility to either choose a replacement plant for that zone, with guidance from the Plant Nursery they are dealing with, or the contractor may eliminate the plant and simply redistribute the square footage among the available plants.
- The square footages provided are approximate areas for each planting zone.
- The plants, when planted from (plug, pot or root) are to be spaced at a rate of ONE (1) plant per TWO (2) square feet.
- Grass seed should be planted at a rate of 50 pounds per acre.
- Plants should be clustered by species within each zone. It is the responsibility of the contractor to locate the plants in the field.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. White Jr. 8-21-03
CHIEF, BUREAU OF HIGHWAY
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Keat Sheehy 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

Chris Dammann 9-11-03
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
9/16/03	TRUE WORK REVIEW	9/16/03		
08-25-03	FINAL WORK SUBMITTAL FOR SIGNATURE			
3/28/03	REVISED PER DFC COMMENTS			
11/17/02	ISSUED FOR REVIEW			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

**SWM POND 2
SWM LANDSCAPE PLAN**



Rodgers Consulting, Inc.
9260 Galtier Road
Gaitherburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

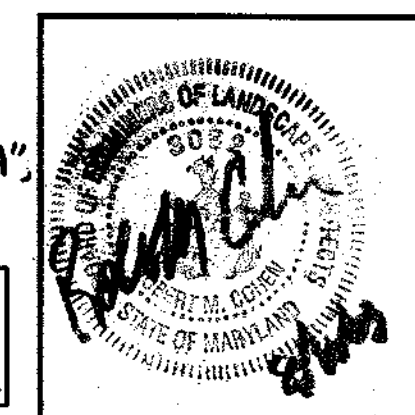
PHASES I & II, III

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND

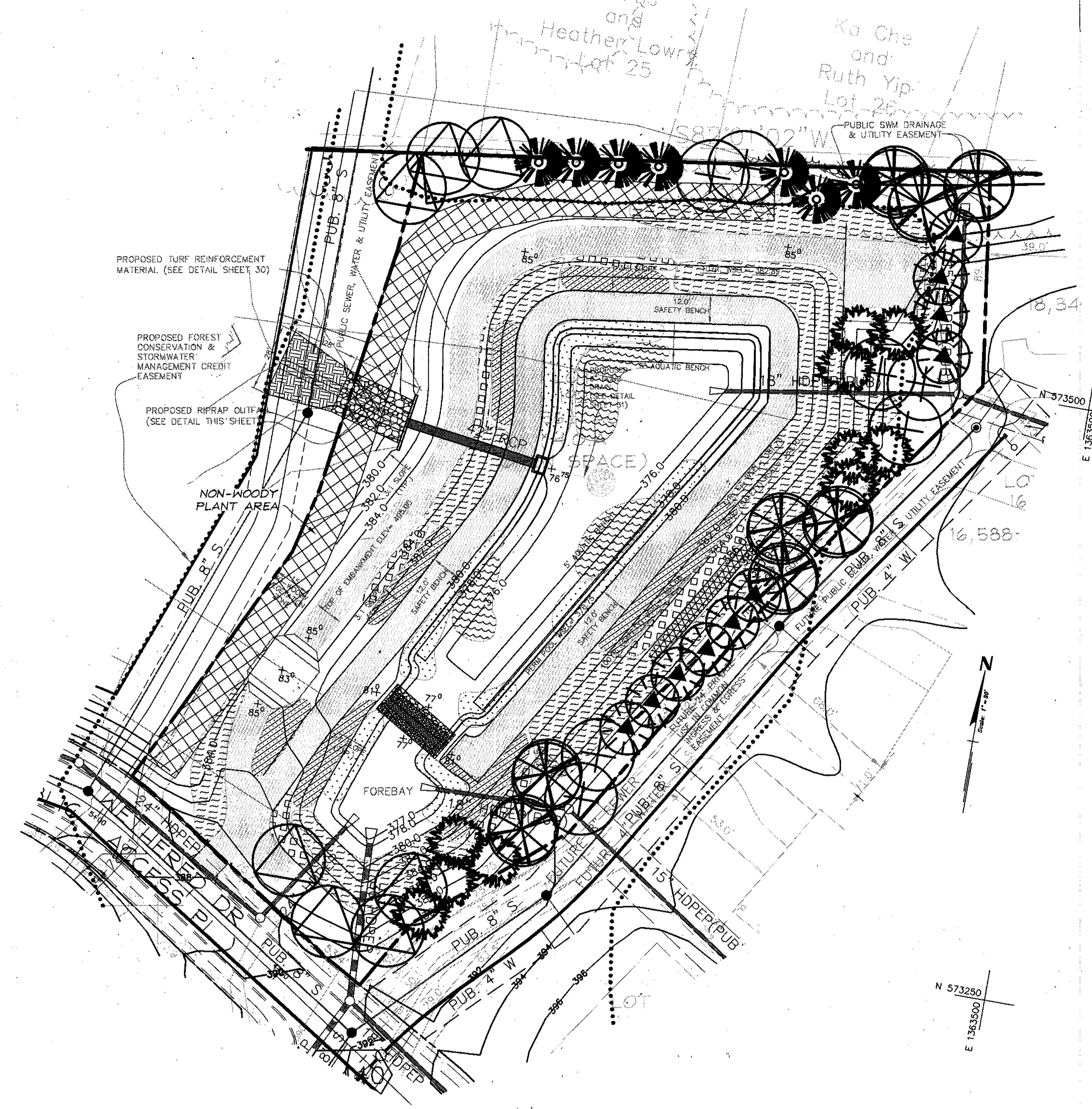
TAX MAP: 30 GRID:12 PARCEL 260
DP2 FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1" = 30'
JOB No. 506V3
DATE: 12/17/02
INDEX No. SWM-10
SHEET No. 35 OF 50



* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A",
OPEN SPACE LOTS 120 - 126, 194 AND
NON-BUILDABLE BULK PARCELS "B" AND "C"

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction



THIS PLAN FOR LANDSCAPE USE ONLY

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

DATE	REVISION	DATE	BY	DATE	Developer/Owner:
	BASE DATA		CADD		Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC 6905 Rockledge Drive Suite 800 Bethesda, Maryland 20817 Stephen J. Nardella, Vice President (301) 803 - 4800
	DESIGNED		PFB, YSL		
	DRAWN		YSL		
	REVIEWED		PFB		
	RELEASE FOR				
	TITLE BLOCK REVISIONS PER DED	9/1/06			
	FINAL MFLM SUBMITTAL FOR SIGNATURE	08-05-03			
	REVISED PER DPZ COMMENTS	03/28/03			
	ISSUED FOR REVIEW	12/17/02			

Pond #4 - Tree Schedule for Required Buffer

POND PERIMETER=1,098' REQ'D PLANTING=22 SHADE TREES, 27 EVERGREEN

SYMBOL	BOTANICAL NAME (COMMON NAME)	QTY	SIZE	ROOT	REMARKS
(+)	ACER RUBUM (RED MAPLE) ALTERNATE: PLATANUS OCCIDENTALIS (AMERICAN SYCAMORE)	7	2 1/2'-3' cal	B4B	
(△)	LIQUIDAMBAR STYRACIFLUA (SWEET GUM) ALTERNATE: LIRIODENDRON TULIPIFERA (TULIP TREE)	7	2 1/2'-3' cal	B4B	
(*)	CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)	7	6'-8' ht	B4B	
(▲)	PINUS STROBUS (WHITE PINE)	10	6'-8' ht	B4B	
(⊙)	ILEX OPACA (AMERICAN HOLLY)	10	6'-8' ht	B4B	
(⊗)	NYSSA SYLVATICA (BLACK GUM) ALTERNATE: CRATAEGUS PHAENOPHYLLUM (WASHINGTON HAWTHORNE)	8	2' cal	B4B	

***General Landscaping Guidance for All Stormwater BMP's**

1. Trees, shrubs, and/or any type of woody vegetation are not allowed on the embankment.
2. Plant trees and shrubs at least 15ft away from the toe of slope of a dam.
3. Plant trees and shrubs at least 25ft away from perforated pipes.
4. Plant trees and shrubs at least 25ft away from a principal spillway structure.
5. Provide 15ft clearance from a non-clogging, low flow orifice.
6. Use erosion control mats and fabrics in channels to reduce the potential for erosion.
7. Divert flows temporarily from seeded areas until stabilized.
8. Do not block maintenance access to structures with trees or shrubs.
9. To reduce thermal warming, shade inflow and outflow channels as well as southern exposures of ponds.
10. For planting success, soils should be loosened to a depth of 3 - 5 inches.
11. Soils should be loosened regardless of plant type.
12. Whenever possible, topsoil should be spread to a depth of 4 - 8 inches and lightly compacted to a minimum thickness of 4 inches.
13. Be sure to provide a source of water, especially in dry periods.
14. Native plant species should be specified over exotic or foreign species.
15. Species layout should generally be random and natural.
16. A canopy should be established with an understory of shrubs and herbaceous material.
17. Existing and proposed utilities must be identified and considered.

*These guidelines were taken from the 2000 Maryland Stormwater Design Manual.

Wildflower Seed Mix

TYPE	Lbs. per Acre (kg/ha)
Wildflower Seed Mix:	
Black-Eyed Susan (Rudbeckia hirta)	2.0 lbs./Acre
Corn Poppy (Papaver rhoeas)	1.25 lbs./Acre
Gold Yarrow (Achillea filipendulina)	0.2 lbs./Acre
Ox-Eyed Daisy (Chrysanthemum leucanthemum)	1.0 lbs./Acre
Plains Coreopsis (Coreopsis tinctoria)	1.0 lbs./Acre
White Yarrow (Achillea millefolium)	0.2 lbs./Acre
Cornflower (Centaurea cyanus)	1.25 lbs./Acre
Cosmos (Cosmos bipinnatus)	1.5 lbs./Acre
Dane's Rocket (Hesperis matronalis)	1.5 lbs./Acre
Evening Primrose (Oenothera hookeri)	2.0 lbs./Acre
Lance-Leaved Coreopsis (Coreopsis lanceolata)	2.0 lbs./Acre
Purple Coneflower (Echinops purpureus)	2.0 lbs./Acre
Rocket Larkspur (Delphinium ajacis)	1.0 lbs./Acre
Gay Feather (Liatris spicata) with awns	2.0 lbs./Acre
Gallardia (Gallardia pulchella)	1.0 lbs./Acre
Meadow Grasses:	
Hard or Sheep Fescue (Companion Seed)	10 lbs./Acre

- Wildflower Mixtures:**
- Plant in spring or fall for best results. Spring seeding should be completed to take advantage of the spring rainfall.
 - Fall planting should be late enough so germination does not occur until the following spring or seedling will be lost to winter freeze.
 - Planting Rates: The seeding rate is about 16 to 20 lbs./acre. Minimum rate is 10 lbs./acre and maximum rates are 8 to 22 lbs./acre. Avoid using more than the recommended rates since poor perennial establishment may result.
 - A wildflower planting requires the same weed control as traditional landscaping. Before planting, remove existing weeds by tilling or by using a nonselective herbicide such as Roundup Pro or a combination of these methods.
 - Seed Application: For seeding large areas over one acre, use a drill seeder. Work to a depth of 1/4 inch and firm soil with a cultipacker. On small sites use a hand cyclone or drop seeder to apply the seed after the site has been tilled.
 - Supplemental Water: Soak the planted areas thoroughly and maintain moisture for 4 to 6 weeks then gradually reduce waterings.
 - Fertilizer: If the soil needs improvement, use a fertilizer with a 10-22-22 ratio at the rate of 450 lbs./acre immediately after seeding. Avoid over-fertilization.
- Management:**
- Mowing: Mow twice a year, once in early summer to remove spring flower seed heads and then again in the fall. Mow to a height of 6-8 inches, leave residue on ground.
 - Weed control: After the flowers have germinated, weeds should be controlled as soon as they can be recognized either by pulling, spot spraying with a selective herbicide or by cutting with a string trimmer. Annual and some perennial grasses can be controlled with herbicides such as Ornacem and Fusilade.
 - Reseeding: Sometimes it is necessary to reseed in the second and additional years if establishment of wildflowers is poor or spotty. The bare areas can be reseeded with original mixture either in the spring or fall.

Pond #1 - Herbaceous Plant Listing

	Zone 1 - Deep Water Pool - 1 to 6 foot deep permanent pool Nuphar lutea - Spatterdock (Yellow water-lily) Nymphaea odorata - White Water-lily Sagittaria latifolia - Duck Potato Potamogeton var. - Pondweed
	Zone 2 - Shallow Water Bench - 6 inches to 1 foot deep Aster spp. Carex vulpinoidea - Fox Sedge Iris versicolor - Blue Flag Iris Sagittaria latifolia - Duck Potato (Arrowhead) Scirpus spp. - Bulrush
	Zone 3 - Shoreline Fringe - Regularly Inundated Aster spp. Carex vulpinoidea - Fox Sedge Eupatorium perfoliatum - Joe Pye Weed Iris versicolor - Blue Flag Iris Typha latifolia - Broad Leaved Cattail
	Zone 4 - Riparian Fringe - Periodically Inundated Andropogon virginicus - Broomsedge Lobelia cardinalis - Cardinal Flower Panicum virgatum - Switch Grass Spirea virginiana - Meadow Sweet Spirea Viola papilionacea - Common Blue Violet
	Zone 5 - Floodplain Terrace - Infrequently Inundated Aster ericoides - White Heath Aster Cyperus filicinus - Slender Flatsedge Lolium perenne - Perennial Rye Grass Panicum virgatum - Switch Grass Phlox paniculata - Fall Phlox Rudbeckia fulgida goldstrum - Blackeyed Susan Wild Flower Mix
	Zone 6 - Upland Slopes - Seldom or Never Inundated Aster ericoides - White Heath Aster Cyperus filicinus - Slender Flatsedge Festuca pratensis - Meadow Fescue Rudbeckia fulgida goldstrum - Blackeyed Susan Viola papilionacea - Common Blue Violet Wild Flower Mix
	Open Channel & Grass Seed Mixture 15% - Agrostis palustris - Creeping Bentgrass 15% - Andropogon gerardii - Big Bluestem 20% - Festuca rubra - Red Fescue 5% - Lolium perenne - Perennial Rye Grass 15% - Panicum virgatum - Switch Grass 15% - Phalaris arundinacea - Red Canary Grass 15% - Poa pratensis - Kentucky Blue Grass
	Upland Slopes - Wildflower Seed Mix See Wildflower Chart

Notes For Plant Selection

- Within each hydrologic planting zone, there are several suggestions for herbaceous plantings. It is intended that 3 to 4 plants be selected within each planting zone from the above list. If a plant on the list is not readily available, it is the contractor's responsibility to either choose a replacement plant for that zone, with guidance from the Plant Nursery they are dealing with, or the contractor may eliminate the plant and simply redistribute the square footage among the available plants.
- The square footages provided are approximate areas for each planting zone.
- The plants, when planted from (plug, pot or root) are to be spaced at a rate of ONE (1) plant per TWO (2) square feet.
- Grass seed should be planted at a rate of 50 pounds per acre.
- Plants should be clustered by species within each zone. It is the responsibility of the contractor to locate the plants in the field.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A"; OPEN SPACE LOTS 120, 126, 194, AND NON-BUILDABLE BULK PARCELS "B" AND "C"

CALL "MISS UTILITY" AT 1-800-257-7777 48 Hours Before Start Of Construction



SWM POND 4 SWM LANDSCAPE PLAN

RODGERS CONSULTING
 Enhancing the value of land assets
 Rodgers Consulting, Inc.
 9260 Galtier Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

PHASES I, II & III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=30'

JOB No.	506V3
DATE:	12/17/02
INDEX No.	SWM-11
SHEET No.	36 of 50

SEE SHEET 35 FOR
POND 2 LANDSCAPING

TYPE C BUFFER TO BE
PROVIDED UNDER SFD
FINAL CONSTRUCTION PLAN

Legend

- S.V.B. — STORM DRAIN
- S.V.B. — STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- PHASING LINE
- PROPOSED LANDSCAPE MAINTENANCE EASEMENT
- PROPOSED LIGHT POLE LOCATION (PUBLIC STREETS)
- WETLAND
- FOREST CONSERVATION EASEMENT
- PROPOSED PERIMETER CREDIT FOR EXISTING TREES
- INTERNAL LANDSCAPE ISLAND

- TREE SYMBOL KEY**
SEE SHEET LS-3 FOR SCHEDULE 4 DETAILS
- ACER RUBUM (RED MAPLE)
 - TILIA CORDATA (LITTLELEAF LINDEN)
 - QUERCUS RUBRA (RED OAK)
 - FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)
 - PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)
 - PRUNUS CERASIFERA (THUNDERCLOUD PLUM)
 - CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)
 - PINUS STROBUS (WHITE PINE)

*THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.

SEE SHEET 28
FOR POND LANDSCAPING

MATCHLINE
SEE SHEET LS-2

PERIMETER #1
TYPE 'A'
823 L.F.

PERIMETER #2
TYPE 'B'
400 L.F.

PERIMETER #3
TYPE 'C'
800 L.F.

PERIMETER #5
TYPE 'C'
145 L.F.

PERIMETER #4
TYPE 'B'
245 L.F.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Mahan 9/21/03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Victor J. ... 9/11/03
CHIEF, DIVISION OF LAND DEVELOPMENT

... 9/19/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

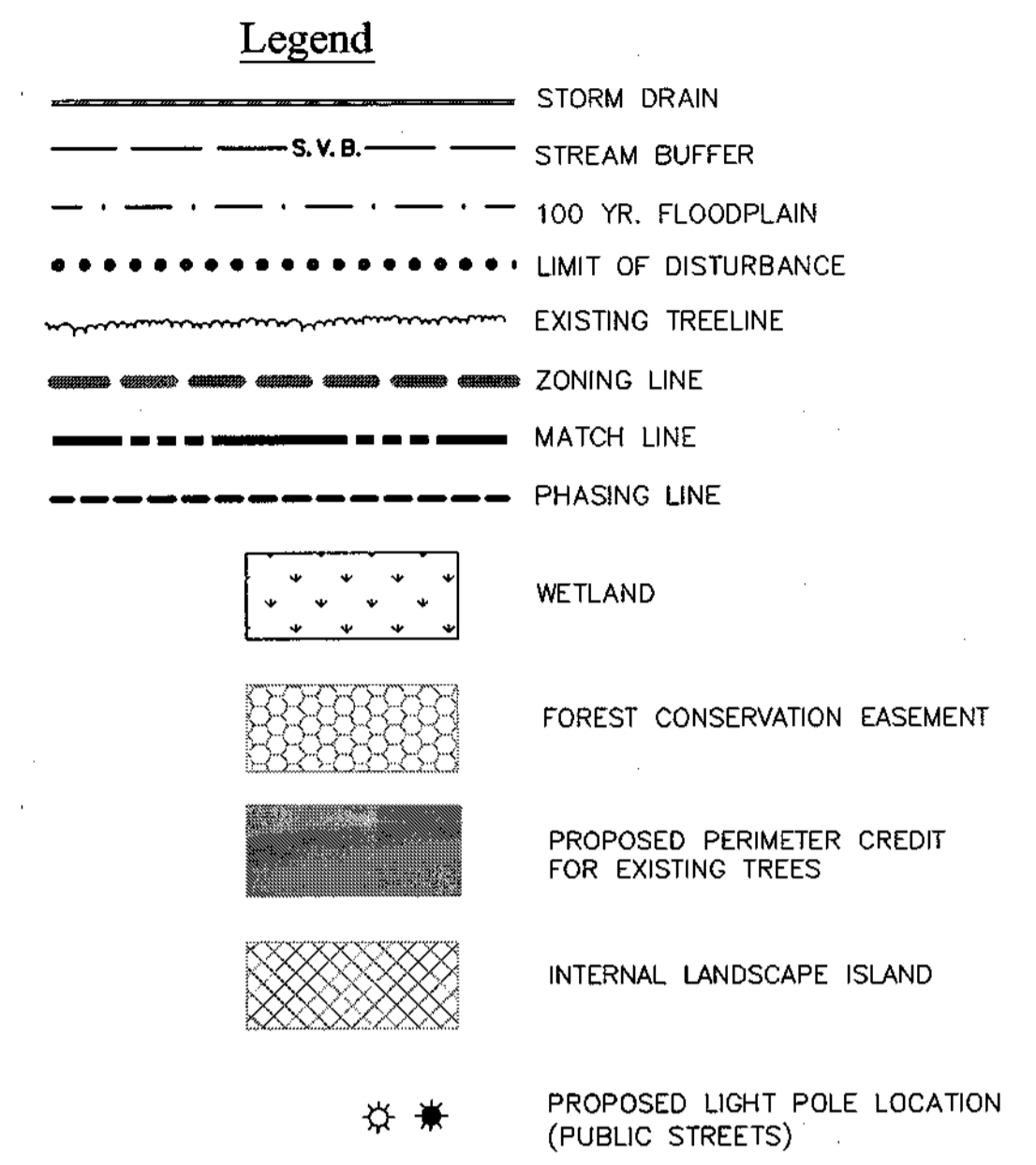
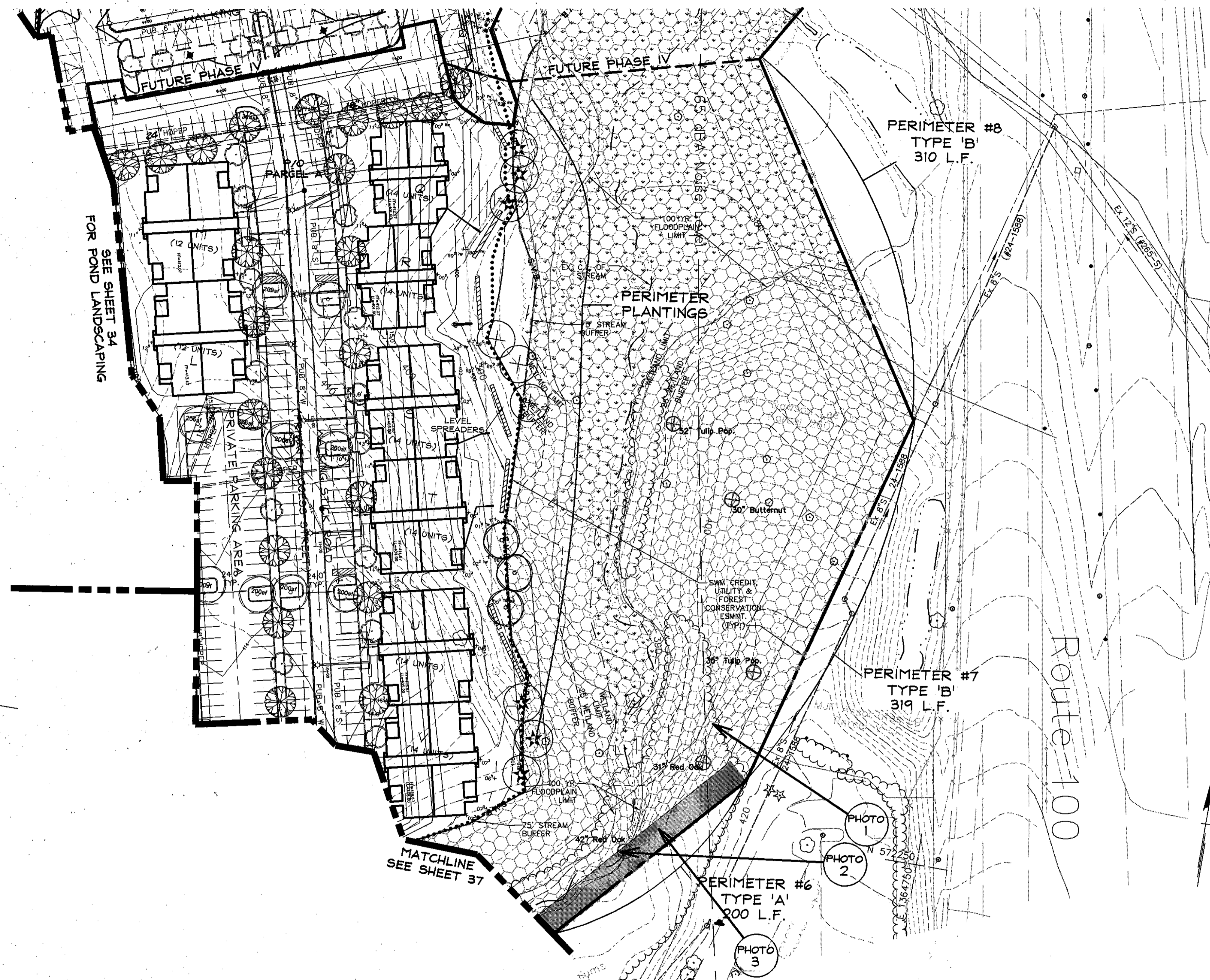
LANDSCAPE PLAN & STREET TREE PLAN



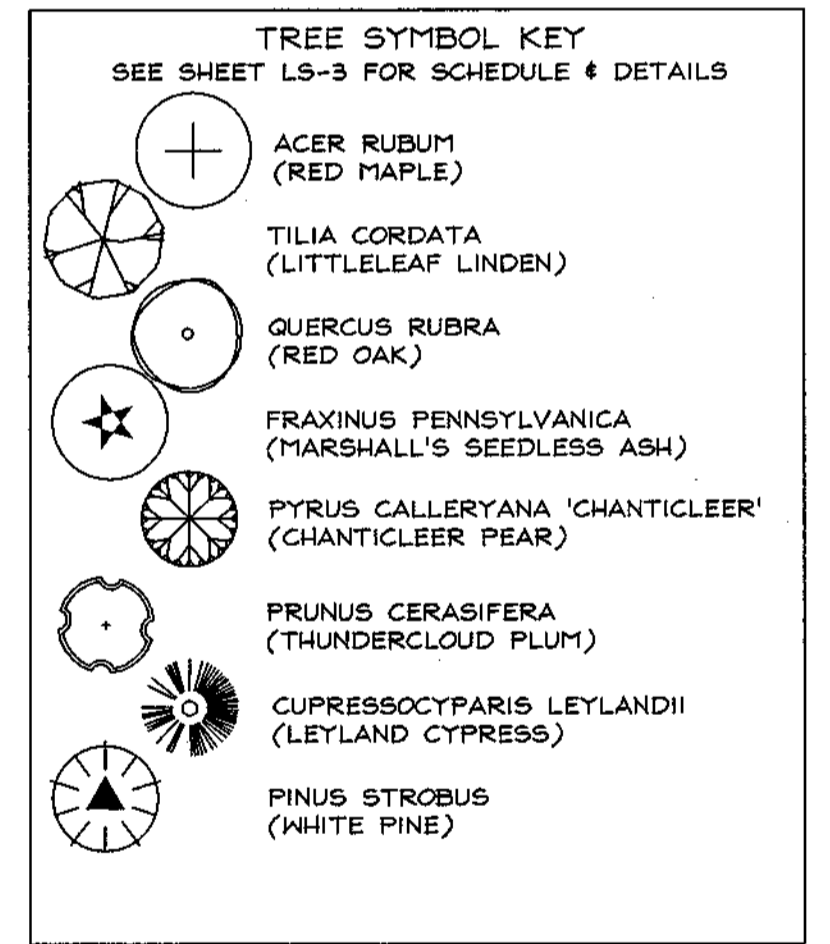
Rodgers Consulting, Inc.
9280 Galthier Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=50'
JOB No. 506v3
DATE: 12/20/02
INDEX No. LS-1
SHEET No. 37 OF 50



*THIS SITE DOES NOT CONTAIN SLOPES GREATER THAN 25% IN A CONTIGUOUS AREA 20,000 SQ. FT. OR MORE.



NOTE: PROPOSED PERIMETER LANDSCAPING FOR PERIMETERS #7 & #8 TO BE PLANTED ADJACENT TO STREAM VALLEY BUFFER AS SHOWN, RATHER THAN ALONG PROPERTY LINE, TO INCREASE EFFECTIVENESS AS A SCREEN FOR PROPOSED APARTMENTS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William T. White 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kathleen H. Smith 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT

Chris Damann 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PF, YSL	
	DRAWN		YSL	
	REVIEWED		PF, B	
	RELEASE FOR			
	TITLE BLOCK REVISION PER DEP	9/1/03		
	FINAL YEAR SUBMITTAL FOR SIGNATURE	08-05-03		
	2. REVISED PER DPZ COMMENTS OF 5/8/03	8/10/03		
	REVISED PER DPZ COMMENTS	03/28/03		

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

LANDSCAPE PLAN & STREET TREE PLAN

RODGERS CONSULTING
Enhancing the value of land assets

Rodgers Consulting, Inc.
5260 Gather Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260

DPZ FILES: S-01-20, WP-01-117, WP-03-76, P-02-10, P-02-17, P-03-03



SCALE: 1"=50'
JOB No. 506v3
DATE: 11/02/02
INDEX No. LS-2
SHEET No. 38 of 50

**SCHEDULE A
PERIMETER LANDSCAPE EDGES**

PERIMETER #	1	2	3	4	5	6	7	8
PROPOSED USE	SFA	SFA	PARKING	MFA	PARKING	MFA	MFA	MFA
ADJACENT USE	INDUSTRIAL	SFA	SFA	SFA	SFA	PARKING	ROAD	HIGHWAY
LANDSCAPE TYPE	A	B	C	B	C	A	A	A
LINEAR FEET OF PERIMETER	825'	400'	800'	245'	230'	145'	319'	310'
CREDIT FOR EX. VEGETATION	825'	0'	80'	245'	230'	145'	0'	0'
NET PERIMETER	0'	400'	720'	0'	0'	0'	319'	310'
NUMBER OF PLANTS REQ'D: ¹								
SHADE TREES	14 @ 1/60 I.F.	8 @ 1/50 I.F.	20 @ 1/40 I.F.	5 @ 1/50 I.F.	12 @ 1/40 I.F.	3 @ 1/60 I.F.	6 @ 1/60 I.F.	6 @ 1/60 I.F.
EVERGREEN TREES	0	10 @ 1/40 I.F.	40 @ 1/20 I.F.	7 @ 1/40 I.F.	0 @ 1/20 I.F.	0	0	0
SHRUBS	0	0	0	0	0	0	0	0
NUMBER OF PLANTS PROVIDED: ²								
SHADE TREES	0	8	16	0	0	0	6	6
EVERGREEN TREES	0	10	36	0	0	0	0	0
SHRUBS	0	0	0	0	0	0	0	0

¹ BASED ON PERIMETER BEFORE CREDIT FOR EXISTING TREES.
² TREES PROVIDED BASED ON NET PERIMETER AFTER CREDIT FOR EXISTING TREES.

**SCHEDULE B
PARKING LOT INTERNAL
LANDSCAPING-SFA ONLY**

NUMBER OF PARKING SPACES (Excludes townhouse garages & driveways)	35
NUMBER OF TREES REQUIRED	4*
REQ'D AREA OF ISLANDS (@ 200 sq. ft. per island)	800 SF
ISLAND AREA PROVIDED	1,240 SF

* THE 4 TREES REQUIRED ARE INCLUDED IN THE STREET TREE REQUIREMENT FULFILLMENT

**SCHEDULE D
STORMWATER MGMT AREA LANDSCAPING**

SEE SHEETS SWM 9-11 FOR POND PERIMETER LANDSCAPING

	POND 1	POND 2	POND 4
LINEAR FEET OF PERIMETER	1,540'	880'	1,098'
NUMBER OF TREES REQ'D:			
SHADE TREES @ 1/50 LF	31	18	22
EVERGREEN TREES @ 1/40 LF	39	22	27
CREDIT FOR EX. VEGETATION	0	0	0

PLANTING SCHEDULE - LANDSCAPE TREES

SYMBOL	BOTANICAL NAME (COMMON NAME)	Q'TY	SIZE	ROOT
(+)	ACER RUBUM (RED MAPLE)	19	2 1/2"-3" cal	B&B
(/)	TILIA CORDATA (LITTLELEAF LINDEN)	33	2 1/2"-3" cal	B&B
(o)	QUERCUS RUBRA (RED OAK)	37	2 1/2"-3" cal	B&B
(*)	FRAXINUS PENNSYLVANICA (MARSHALL'S SEEDLESS ASH)	12	2 1/2"-3" cal	B&B
(/)	PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)	56	2"-2 1/2" cal	B&B
(/)	PRUNUS CERASIFERA (THUNDERCLOUD PLUM)	31	1 1/2"-2" cal	B&B
(/)	CUPRESSOCYPARIS LEYLANDII (LEYLAND CYPRESS)	22	6'-8' ht	B&B
(/)	PINUS STROBUS (WHITE PINE)	24	6'-8' ht	B&B

SURETY CALCULATION-LANDSCAPE TREES:

(INCLUDES REQUIRED SWM AREA PLANTING)
SHADE TREES 230 @ \$300 ea \$ 69,000
ORNAMENTAL/EVERGREENS 165 @ \$150 ea \$ 24,750
TOTAL \$ 93,750

PLANTING SCHEDULE - STREET TREES

SYMBOL	BOTANICAL NAME (COMMON NAME)	Q'TY	SIZE	ROOT
(+)	ACER RUBUM (RED MAPLE)	30	2 1/2"-3" cal	B&B
(/)	TILIA CORDATA (LITTLELEAF LINDEN)	54	2 1/2"-3" cal	B&B
(o)	QUERCUS RUBRA (RED OAK)	16	2 1/2"-3" cal	B&B
(/)	PYRUS CALLERYANA 'CHANTICLEER' (CHANTICLEER PEAR)	26	2"-2 1/2" cal	B&B
(/)	PRUNUS CERASIFERA (THUNDERCLOUD PLUM)	7	1 1/2"-2" cal	B&B

SEE SHEETS SWM 9-11 FOR REQUIRED POND PERIMETER LANDSCAPING AND SUPPLEMENTAL INTERIOR POND PLANTING

SURETY CALCULATION-STREET TREES:

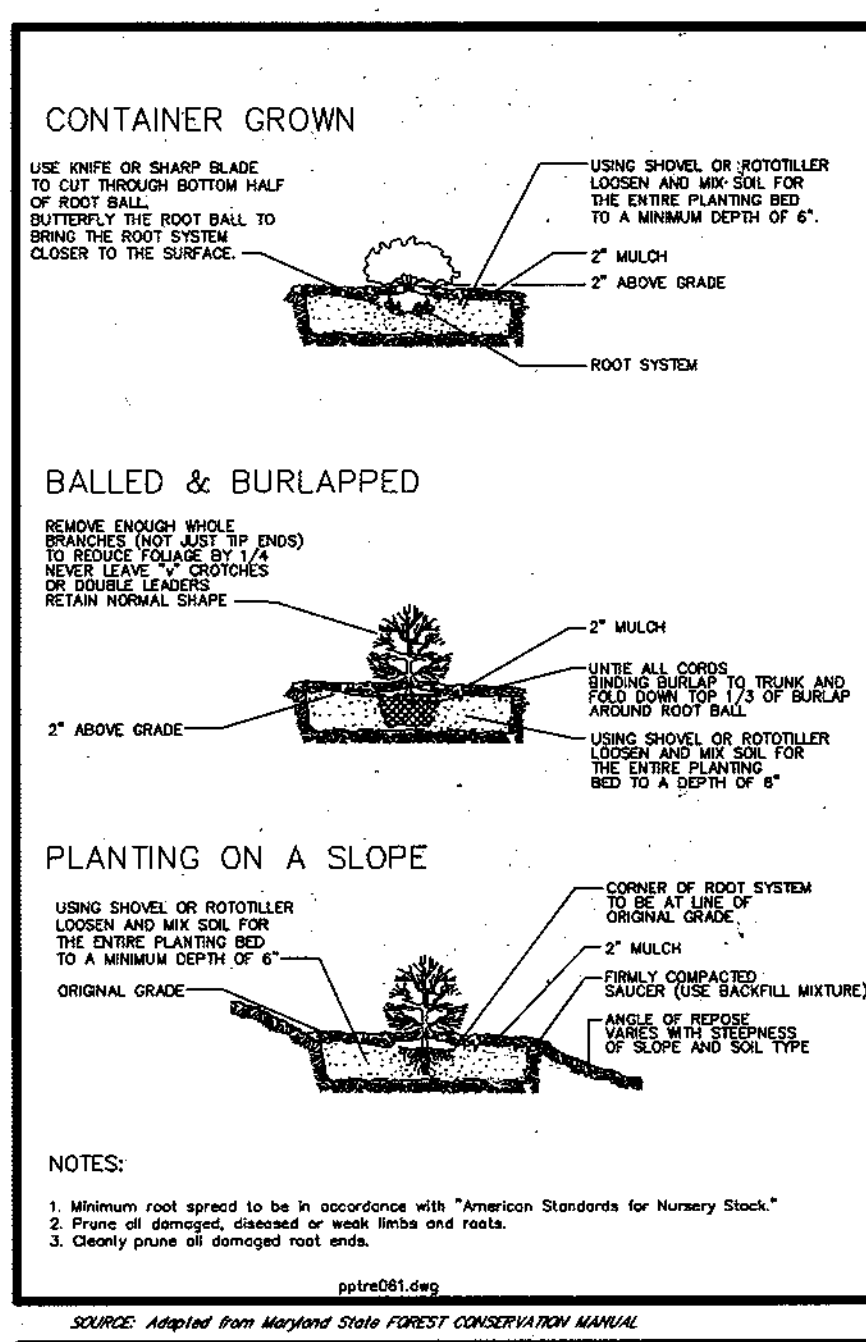
SHADE TREES 126 @ \$300 ea \$37,800
ORNAMENTAL/EVERGREENS 7 @ \$150 ea \$ 1,050
TOTAL \$38,850

Landscape Notes:

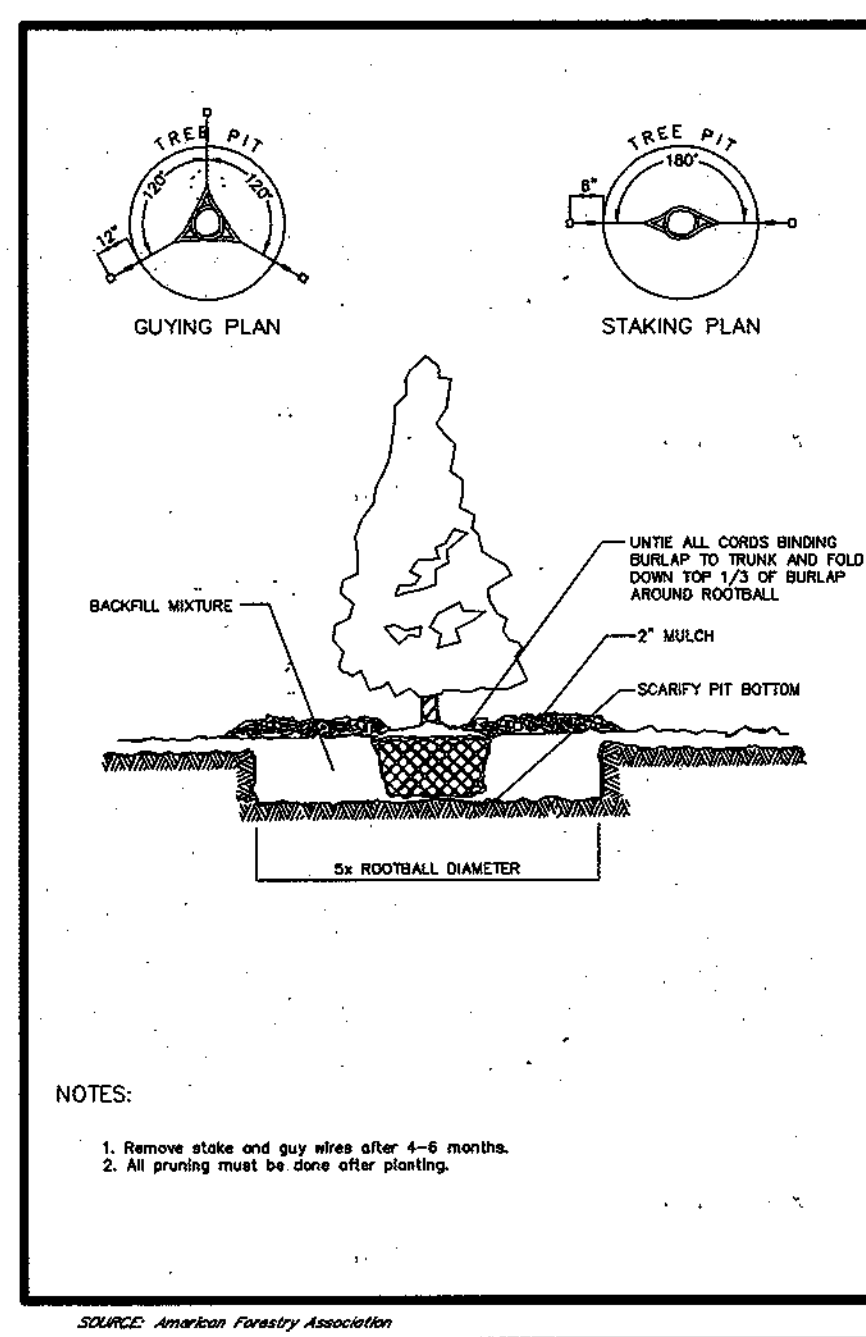
ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL AS ADOPTED 1/4/93 AND AMENDED 3/2/98.

- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regards to site, growth, and size of ball and density of branch structure. Contractor to insure conformance to national and local building codes and ordinances.
- All plants (B&B or container) shall be properly identified by weatherproof labels securely attached hereto before delivery to project site. Labels shall identify plants by name, species and size. Labels shall not be removed until the final inspection by the owners representative.
- Any material and/or work may be rejected by the owners representative if it does not meet the requirements of the specifications. The contractor shall remove all rejected materials from the site.
- The contractor shall furnish all plants in quantities and sizes to complete the work as specified in plant schedule. The landscape contractor shall be responsible to verify all plant quantities on the plans prior to commencement of work. Quantities in the plant schedule are for the contractors convenience only and do not constitute the final count.
- Substitutions in plant species or size shall not be permitted except with the written approval of the owners representative.
- Plants shall be located as shown on the drawings and by scaling or as designated in the field by the owners representative. All locations are to be approved by the owners representative before excavation.
- Contractor shall locate and mark all underground utility lines and irrigation systems prior to excavating plant beds or pits. All utility assessment areas where no planting shall take place shall also be marked on the site, prior to locating and digging the tree pits. If utility lines are encountered in excavation of tree pits, other locations for the trees shall be selected by the owners representative. Such changes shall be made by the contractor without additional compensation. No changes of location shall be made without the approval of the owners representative.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow.
- During planting operations, excess and waste materials shall be promptly and frequently removed from the site.
- All plant shrub beds are to be dug to a minimum of 24" deep and all existing soil, construction debris, roots and other foreign material are to be removed and discarded offsite. All plant shrub beds are to be excavated to the width shown on the plans.
- All tree pits are to be excavated to a minimum depth to allow the tree root ball to be a minimum of 4" higher than finish grade. The tree root ball is to rest on undisturbed soil, or a compacted bed must be prepared for the tree root ball to rest on and which will not subside causing the tree to sink below finish grade. All tree pits are to be a minimum of 12" larger on every side of the trees root ball.
- The planter beds are to be entirely cleaned out to the undisturbed soil level. All existing soil, construction debris, roots and other foreign material are to be removed and discarded offsite.
- The topsoil to be used to fill the tree pits, shrub beds and planters is to be plant specific. The topsoil for the trees, shrubs and planter shall consist of a maximum 2/3 existing topsoil from the site, which is cleaned and free of clay, a minimum of 1/3 peat moss, or other approved organic material or imported new loamy topsoil and 10% cow manure. All of these materials are to be mixed prior to placing in the planter or backfilling when planting.
- The contractor is responsible to ensure that all tree pits, shrub beds and planter are well drained. No landscape contractor without coat to the owner will replace all plant material, which is affected by poor drainage.
- All lawn areas are to be seeded with grass seed appropriate for each of the sunlight conditions, which exist on the site.
- All lawn areas are to be tilled to a depth of 6" and all foreign material removed which will inhibit the healthy growth of the lawn. All old grass and grass roots are to be removed from the site. New topsoil of a minimum 4" is to be placed over the areas to be sodded. The grass areas are to be fine graded to ensure that no undulations occur in the lawn. The lawns are to be graded in such a way as to appear perfectly well tailored and even. The lawn topsoil is to be rolled and lightly irrigated prior to placing of the seed. The seed is not to be laid on frozen or soaked soil.
- The existing trees are to be protected during the preparation of the lawn areas. The roots of the trees are to be undisturbed during the cleaning of the topsoil.
- The trees and shrubs are to be handled with the best care and attention to ensure that the plants are not bruised, broken, torn, damaged in any way which will affect the plants general appearance and well being.
- The trees and shrubs are to be planted with the accepted standards of the American Association of Nurserymen. The plants are to be properly watered and backfilled during the planting. All care must be taken to ensure that the plants are upright, a plant's best side is exposed to the point of the plants greatest visibility.
- The trees must be staked in accordance with acceptable nursery practice to ensure that they are secure in the ground and will grow straight and uniform. The trees are to be wrapped if the contractor deems it necessary to protect the trees from sun scald or insect attack.
- The Landscape Contractor is to provide a 1-year guarantee for all plant material and other work done on site.
- Large growing plants are not to be planted in front of windows, under building overhangs, or in drainage swales. Shrubs planted near H.V.A.C units to be located so that shrubs at maturity will maintain 1 foot airspace between unit and plant.
- Contractor to slightly adjust plant locations in the field as necessary to be clear of drainage swales and utilities. Finished planting beds shall be graded so as not to impede drainage away from buildings.
- Trees in public rights of way shall be located at least 3 feet from sidewalks. When the distance between the curb and the sidewalk is less than 6 feet, trees shall be planted 3 feet from sidewalk in the direction away from the road. (See road sections, below)
- Quantities as shown on the plan shall govern over plant list quantities. Contractor to verify plant list totals with quantities shown on plan.
- Groups of shrubs shall be placed in a continuous raised mulch bed with smooth continuous lines. All mulched bed edges shall be curvilinear in shape following the contour of the plant mass. Trees located within 4 feet of shrub beds shall share same mulch bed.

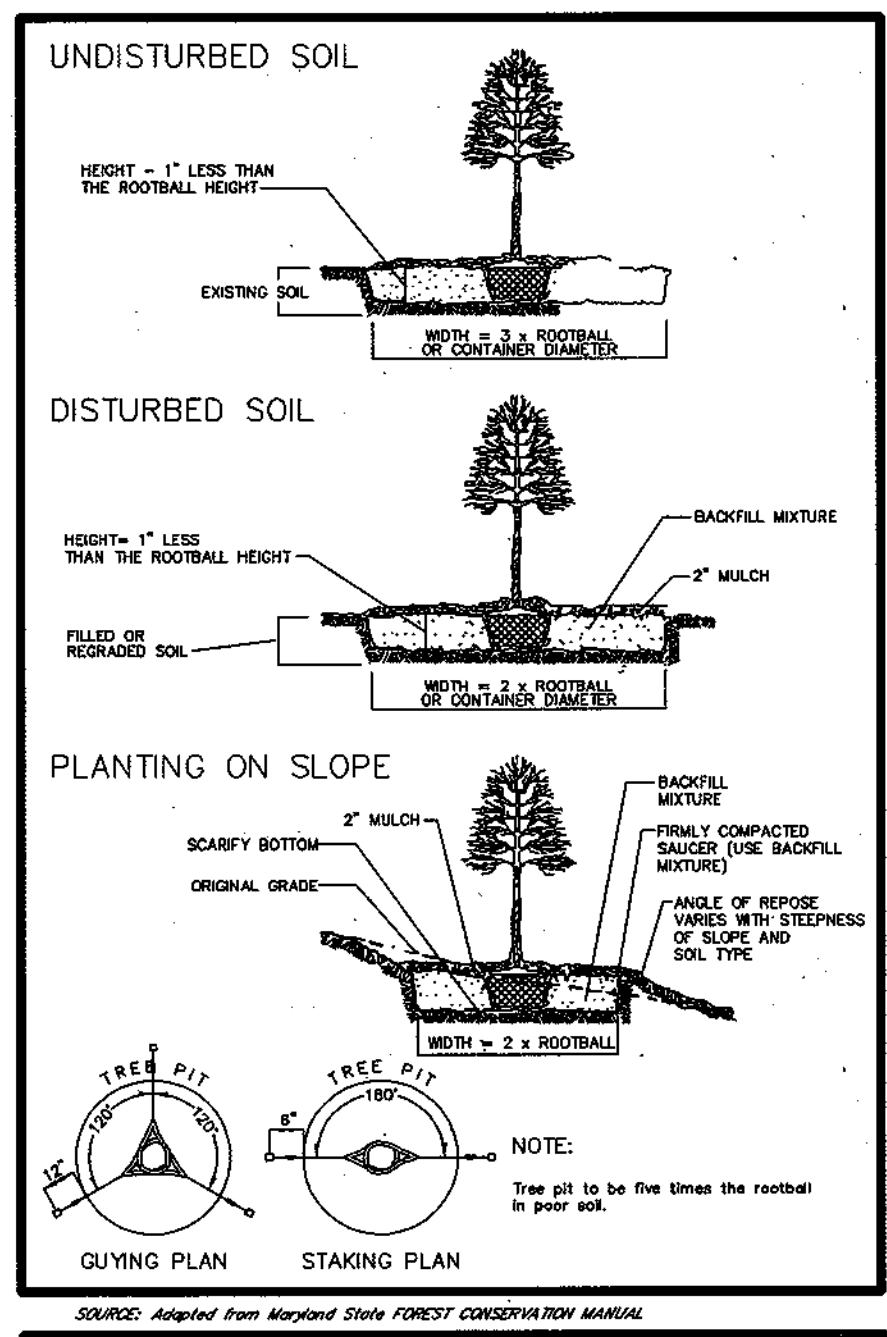
SHRUB PLANTING



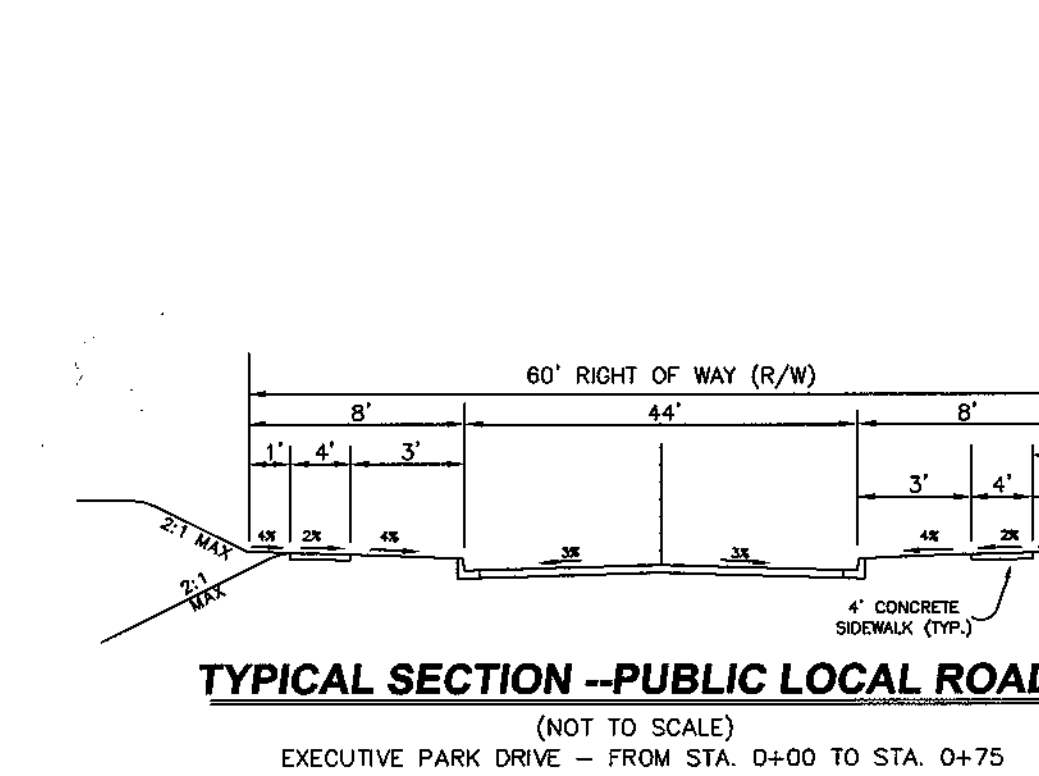
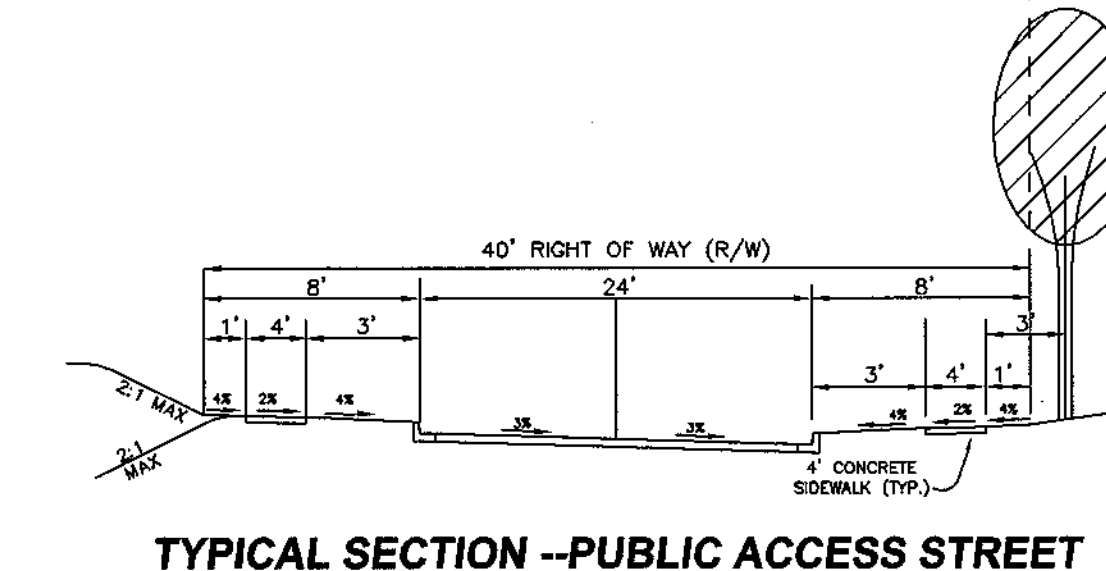
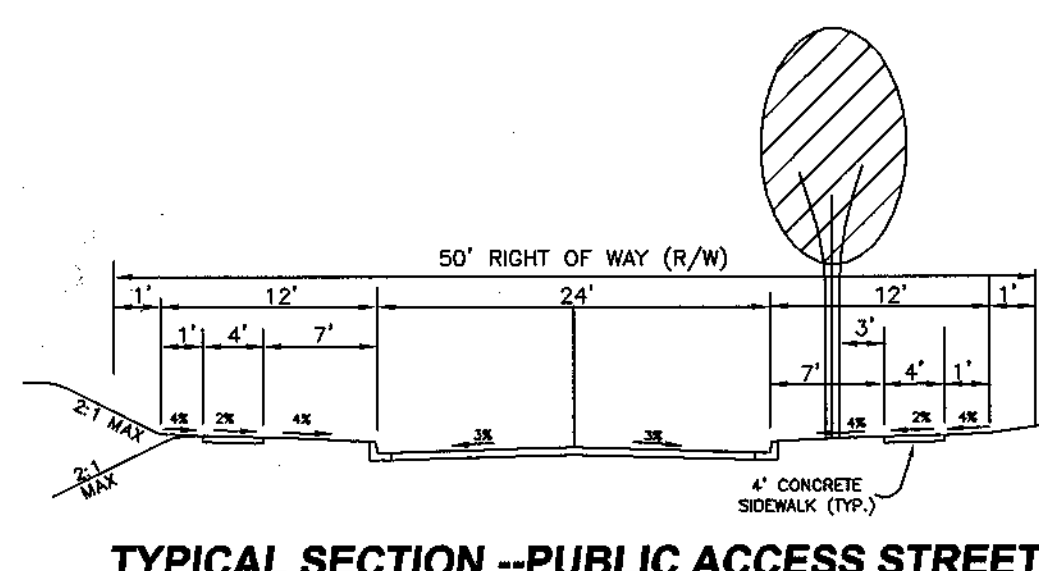
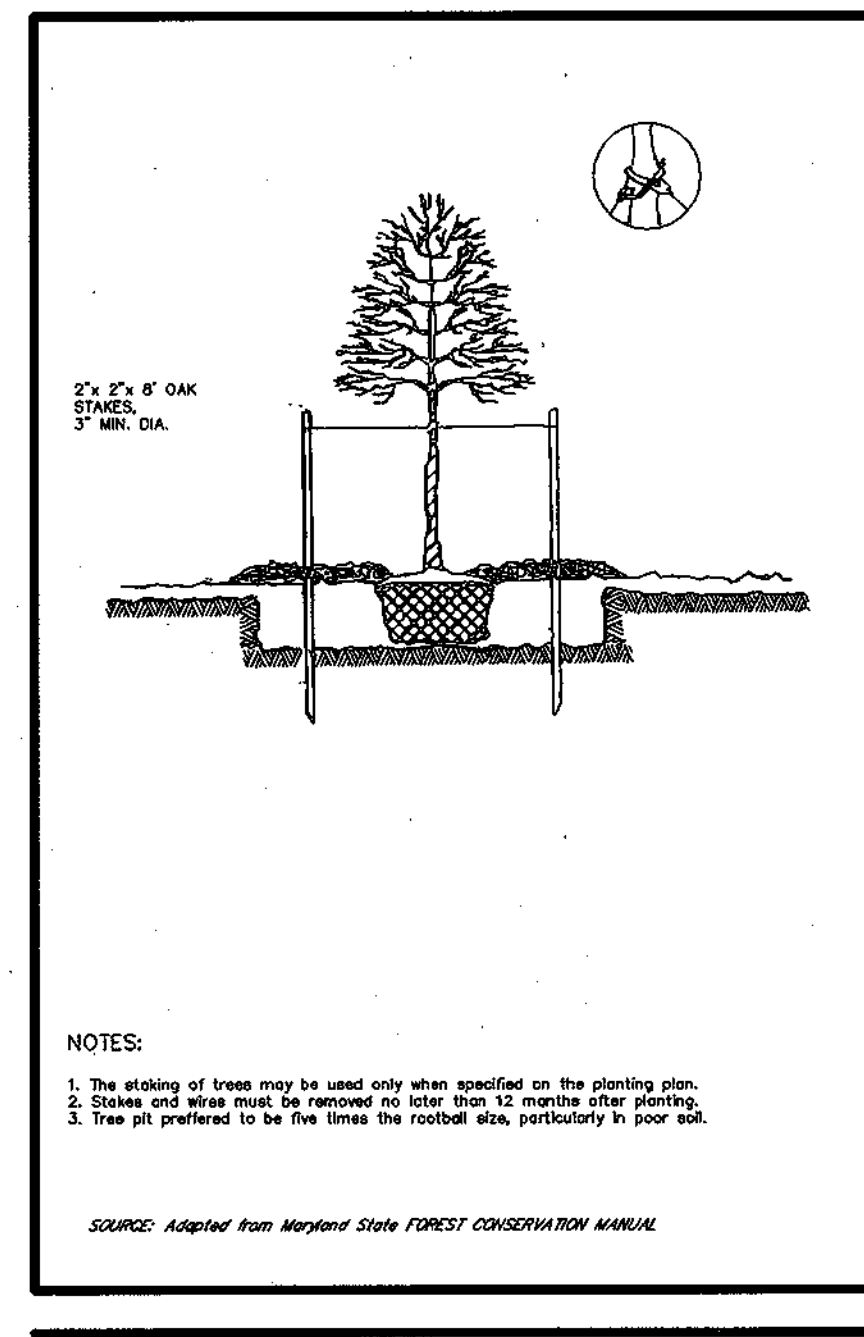
EVERGREEN TREE PLANTING



**DECIDUOUS TREE PLANTING
CONTAINER GROWN AND BALLED & BURLAPPED STOCK**



STAKED TREE SPECIFICATION (2)



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Whelan 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kate Schmitt 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT

Chris Damann 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
1/6/03	RELEASE FOR			
08-22-03				
3/28/03				
2/28/03				

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive, Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

LANDSCAPE PLAN & STREET TREE PLAN
Details

RODGERS CONSULTING
Enhancing the value of land assets
Rodgers Consulting, Inc.
9260 Gaither Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DP2 FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: AS SHOWN
JOB No. 506v3
DATE: 12/02/02
INDEX No. LS-3
SHEET No. 39 OF 50



- Legend**
- EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - TREE PROTECTION FENCE*
 - WETLANDS
 - PROPOSED FOREST CONSERVATION EASEMENT
 - FOREST STAND REMOVAL
 - PROPOSED AFFORESTATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Walker 8-21-03
 CHIEF, BUREAU OF HIGHWAY MS DATE

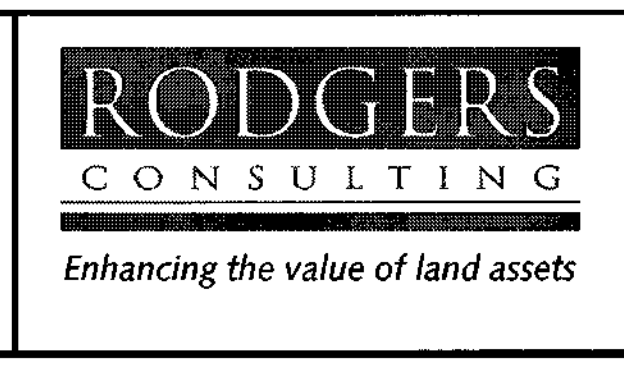
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kat Rhoads 9/1/03
 CHIEF, DIVISION OF LAND DEVELOPMENT JA DATE

Bill Deane 9/1/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION Q2 DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

FOREST CONSERVATION COMPOSITE PLAN



Rodgers Consulting, Inc.
 9260 Galther Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 301.253.6609
 www.rodgers.com

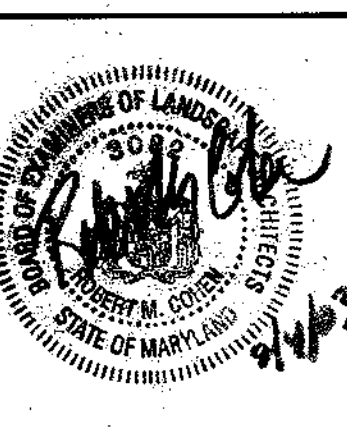
BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A",
 OPEN SPACE LOTS 120-126, 128 AND
 NON-BUILDABLE BULK PARCELS "B" AND "C"

* ALL PHASES I, II, III

Montjoy

ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260

DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03



SCALE: 1"=100'
 JOB No. 506v3
 DATE: 12/20/02
 INDEX No. FCP-1
 SHEET No. 40 of 50

MATCHLINE SEE SHEET FCP-3

MATCHLINE SEE SHEET FCP-3

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

Legend

- S.V.B. --- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- PHASING LINE
- X-X-X TREE PROTECTION FENCE*
- SF SSF SILT FENCE / SUPER SILT FENCE
- X-SSX COMBINED SILT/TREE PROTECTION FENCE
- > PROPOSED EARTH DIKE
- ▲ CONSERVATION SIGNAGE
- [Pattern] PROPOSED FOREST CONSERVATION EASEMENT
- [Pattern] FOREST STAND REMOVAL
- [Pattern] PROPOSED AFFORESTATION
- [Pattern] WETLANDS

*WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.

0.14 AC WOODED FLOODPLAIN REMOVED FROM TREE CREDIT

FCE #2
0.89 AC RETENTION (EXCL 0.37 AC IN FLOODPLAIN)

0.23 AC WOODED FLOODPLAIN REMOVED FROM TREE CREDIT

FCE #1
0.31 AC AFFORESTATION

FOREST STAND REMOVAL 1.00 AC

FCE #3
1.22 AC AFFORESTATION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS,
William F. Walker 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kent Shelton 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT

John Dammann 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	1. SUBMITTED FOR APPROVAL	12/02		
	2. REVISED PER DPZ COMMENTS	3/28/03		
	3. REVISED PER DPZ COMMENTS	6/10/03		
	FINAL M&R SUBMITTAL FOR SIGNATURE	08-05-03		
	TIME BACK REVISION PER DPZ	9/1/03		

Developer/Owner:
Winchester Homes, Inc. &
Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

FOREST CONSERVATION PLAN



Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL 'A'; OPEN SPACE LOTS 120-126, 194, AND NON-BUILDABLE BULK PARCELS 'B' AND 'C'

SCALE: 1"=50'
* ALL PHASES I, II + III
Montjoy
ELECTION DISTRICT No. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-11, WP-03-78, P-02-10, P-03-03



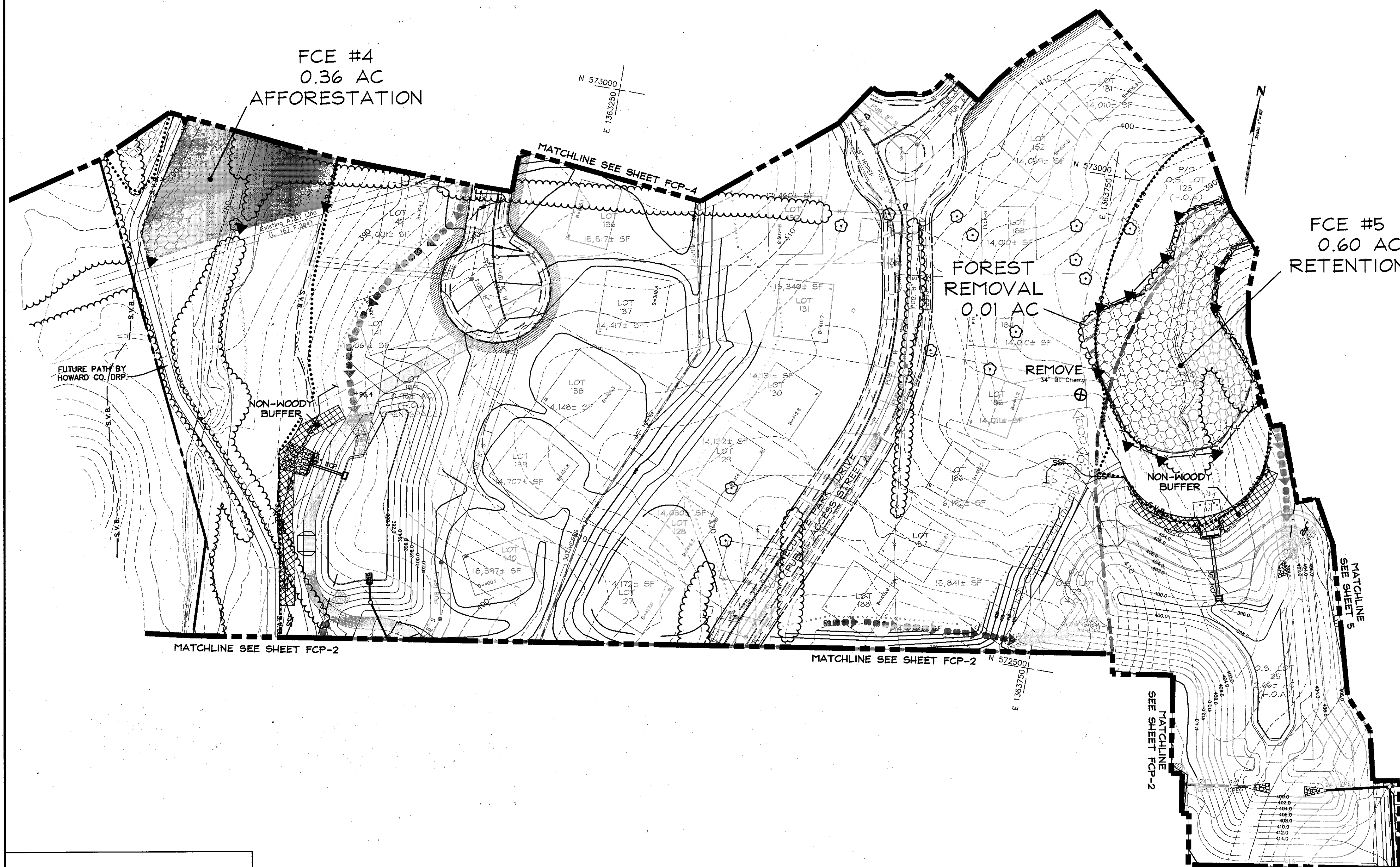
JOB No. 506v3
DATE: 12/20/02
INDEX No. FCP-2
SHEET No. 41 of 50

FCE #4
0.36 AC
AFFORESTATION

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

FCE #5
0.60 AC
RETENTION

FOREST
REMOVAL
0.01 AC



- Legend**
- S.V.B. --- STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE--ULTIMATE
 - LIMIT OF DISTURBANCE--PHASE I
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - PHASING LINE
 - X X X TREE PROTECTION FENCE*
 - SF SSF SILT FENCE / SUPER SILT FENCE
 - X SSF X COMBINED SILT/TREE PROTECTION FENCE
 - PROPOSED EARTH DIKE
 - ▲ CONSERVATION SIGNAGE
 - PROPOSED FOREST CONSERVATION EASEMENT
 - FOREST STAND REMOVAL
 - PROPOSED AFFORESTATION
 - WETLANDS

*WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William F. ... 8-21-03
CHIEF, BUREAU OF HIGHWAY MS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

K. ... 9-11-03
CHIEF, DIVISION OF LAND DEVELOPMENT JK DATE

... 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION QMS DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

FOREST CONSERVATION PLAN

RODGERS CONSULTING
Enhancing the value of land assets

Rodgers Consulting, Inc.
9260 Gather Road
Calhoun, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A"; OPEN SPACE LOTS 120-126, 134 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

* ALL PHASES I, II, & III

Montjoy

ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID-12 PARCEL 260

DPZ FILES: S-01-20, WP-01-117, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-09

SCALE: 1"=50'
JOB No. 506v3
DATE: 12/20/02
INDEX No. FCP-3
SHEET No. 42 OF 50



- Legend**
- S.V.B. --- STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE-ULTIMATE
 - LIMIT OF DISTURBANCE-PHASE I
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - PHASING LINE
 - X X X --- TREE PROTECTION FENCE*
 - SF --- SSF --- SILT FENCE / SUPER SILT FENCE
 - X SSF X --- COMBINED SILT/TREE PROTECTION FENCE
 - PROPOSED EARTH DIKE
 - CONSERVATION SIGNAGE
 - PROPOSED FOREST CONSERVATION EASEMENT
 - FOREST STAND REMOVAL
 - PROPOSED AFFORESTATION
 - WETLANDS

*WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Wilson 8-21-03
CHIEF, BUREAU OF HIGHWAY MS DATE

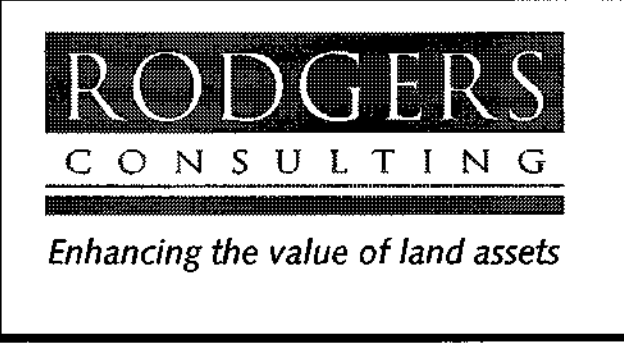
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kevin J. Helms 9-4-03
CHIEF, DIVISION OF LAND DEVELOPMENT JA DATE

John J. O'Donnell 9-4-03
CHIEF, DEVELOPMENT ENGINEERING DIVISION 973 DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

FOREST CONSERVATION PLAN



Rodgers Consulting, Inc.
9260 Gailher Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

* ALL PHASES I, II, & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=50'
JOB No. 506v3
DATE: 12/20/02
INDEX No. FCP-4
SHEET No. 43 OF 50

FCE #8
0.39 AC
RETENTION

FCE #9
4.20 AC
AFFORESTATION

CALL "MISS UTILITY" AT
1-800-257-7777
48 Hours Before Start Of Construction

Legend

- S.V.B. --- STREAM BUFFER
- 100 YR. FLOODPLAIN
- LIMIT OF DISTURBANCE-ULTIMATE
- LIMIT OF DISTURBANCE-PHASE I
- EXISTING TREELINE
- ZONING LINE
- MATCH LINE
- PHASING LINE
- X-X-X TREE PROTECTION FENCE*
- SF-SSF SILT FENCE / SUPER SILT FENCE
- X-SSX COMBINED SILT/TREE PROTECTION FENCE
- PROPOSED EARTH DIKE
- CONSERVATION SIGNAGE
- PROPOSED FOREST CONSERVATION EASEMENT
- FOREST STAND REMOVAL
- PROPOSED AFFORESTATION
- WETLANDS

*WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. White, Jr. 8-21-03
CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Pat Stearns 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT

Chris Damann 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			
	BY			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803-4800

FOREST CONSERVATION PLAN

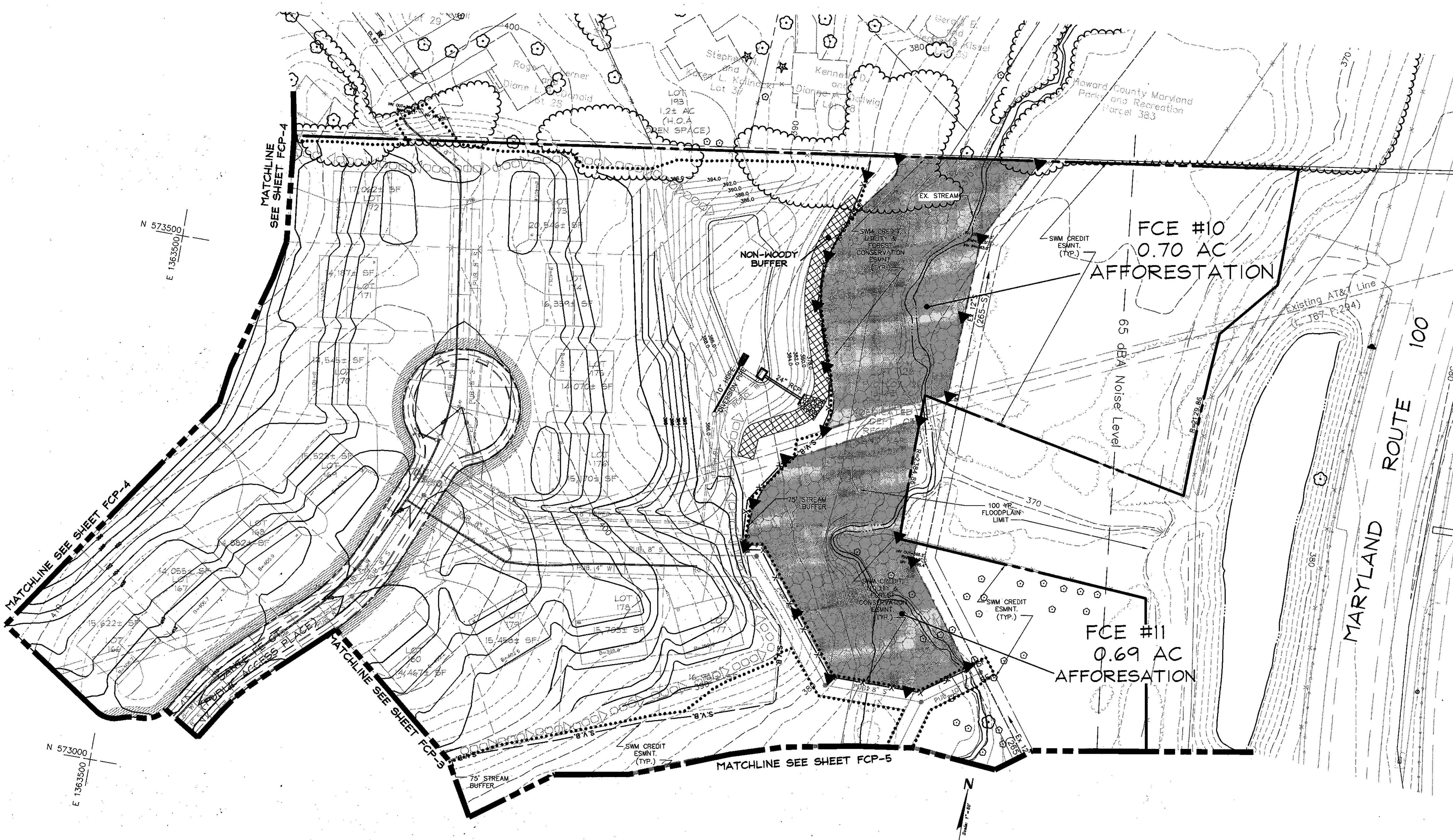


Rodgers Consulting, Inc.
9260 Galther Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
381.253.6609
www.rodgers.com

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120-126, 194 AND "C", NON-BUILDABLE BULK PARCELS "B" AND "C"

* ALL PHASES I, II & III
Montjoy
ELECTION DISTRICT NO. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=50'
JOB No. 506v3
DATE: 12/20/02
INDEX No. FCP-5
SHEET No. 44 OF 50



- Legend**
- S.V.B. --- STREAM BUFFER
 - 100 YR. FLOODPLAIN
 - LIMIT OF DISTURBANCE-ULTIMATE
 - LIMIT OF DISTURBANCE-PHASE I
 - EXISTING TREELINE
 - ZONING LINE
 - MATCH LINE
 - PHASING LINE
 - X-X-X- TREE PROTECTION FENCE*
 - SF SSF SILT FENCE / SUPER SILT FENCE
 - X-SSF-X- COMBINED SILT/TREE PROTECTION FENCE
 - PROPOSED EARTH DIKE
 - ▲ CONSERVATION SIGNAGE
 - PROPOSED FOREST CONSERVATION EASEMENT
 - FOREST STAND REMOVAL
 - PROPOSED AFFORESTATION
 - WETLANDS

*WHERE TREE PROTECTION DEVICES COINCIDE WITH LIMIT OF DISTURBANCE OR CONSERVATION EASEMENT BOUNDARY SYMBOL IS SHOWN OFFSET FOR GRAPHIC CLARITY.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Mahan, Jr. 8-21-03
CHIEF, BUREAU OF HIGHWAY MS DATE

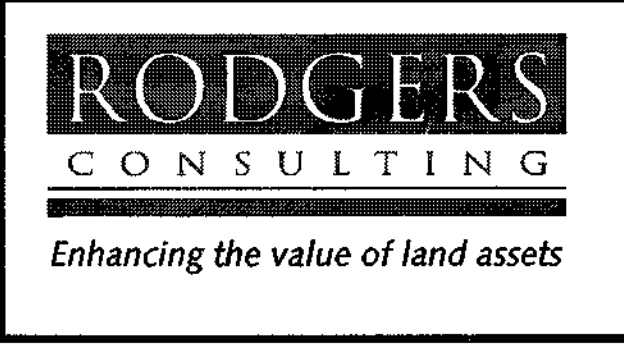
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Kurt Shankovich 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT JA DATE

David Dammann 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION qms DATE

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PF, YSL	
	DRAWN		YSL	
	REVIEWED		PF, B	
	RELEASE FOR			
	BY			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
6905 Rockledge Drive
Suite 800
Bethesda, Maryland 20817
Stephen J. Nardella, Vice President
(301) 803 - 4800

FOREST CONSERVATION PLAN



Rodgers Consulting, Inc.
9260 Gather Road
Gaithersburg, MD 20877
301.948.4700
301.948.6256 (fax)
301.253.6609
www.rodgers.com

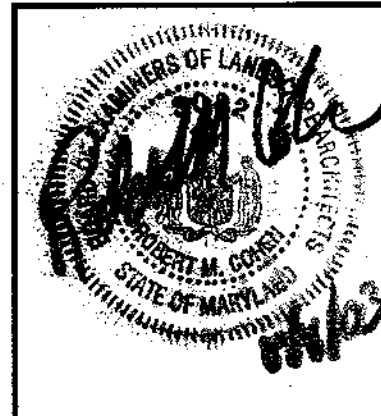
* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120-126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C"

* ALL PHASES I, II & III

Montjoy

ELECTION DISTRICT No. #2
HOWARD COUNTY, MARYLAND
TAX MAP: 30 GRID:12 PARCEL 260
DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03

SCALE: 1"=50'
JOB No. 506V3
DATE: 12/20/02
INDEX No. FCP-6
SHEET No. 45 of 50



GENERAL NOTES

- This forest conservation plan is provided in accordance with the Howard County Forest Conservation Manual (the Manual).
- Afforestation/reforestation planting and related work must be performed by a contractor that is knowledgeable and experienced in afforestation/reforestation techniques and planting practices per Chapter VI of the Manual.
- Existing forest information per the approved Forest Stand Delineation, prepared by McCarthy and Associates, Inc., dated November 2000.

QUALITY ASSURANCE

- All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen.
- Hardwood seedlings shall meet the following standards: 6" to 12" in height and tube grown. The tube grown seedlings shall have a solid root mass with the soil in place. The roots shall appear clean and white in coloration. If growing, the seedlings shall appear healthy with no foliage spots, discoloration, wilting, or other evidence of the presence of disease or insects.
- If specified material is not obtainable submit in writing to Rodgers Consulting, Inc. for the evaluation and approval of equivalent material. Only native material of Howard County will be acceptable for afforestation/reforestation plantings.
- Planting must occur before June 30th to be credited to the growing season for that year.

CONSTRUCTION PERIOD PRACTICES

- The developer shall designate a qualified individual or firm to be responsible for implementing the approved forest conservation plan.
- Forest retention areas shall be protected per requirements of Chapter V and Appendix G of the Manual.
- The limit of forest retention and reforestation shall be staked and flagged prior to construction. Field adjustments of the edge of surviving forest stand shall be done per detail labeled "Field Edge Determination".
- A pre-construction meeting should be held to verify the limits of clearing specified. The meeting should include the owner or owner representative, the on-site foreman in charge of land disturbance, the environmental consultant and the appropriate Howard County inspectors.
- Forest protection devices and signs shall be installed prior to any clearing or grading. The protection devices and signs shall be maintained during the entire construction period. None of the devices shall be in any way anchored or attached to the trees to be saved.
- The following shall not be allowed within the forest conservation easements: Storage of equipment and materials, disposal of construction debris, parking of employee vehicles, temporary structures such as trailers, sanitary facilities and sheds, wastewater form construction related operations such as concrete preparation and equipment cleaning shall not encroach into forest conservation areas.
- Activities strictly to implement any reforestation planting and maintenance (i.e. watering, fertilizing, thinning, pruning, removal of dead and diseased trees, etc.) of the conservation area are permitted within the forest conservation areas.
- At the end of the construction period, the designated qualified professional shall convey to the administrator of the Howard County Forest Conservation Program certification that all forest retention areas have been preserved, all reforestation and/or afforestation plantings (where required) have been installed as required by the forest conservation plan, and that all protection measures required for the post-construction period have been put in place. Upon review of the final certification document for completeness and accuracy, the program administrator will notify the developer of the beginning of the post-construction management period.

POST-CONSTRUCTION MANAGEMENT PROGRAM

- The post-construction management period shall be continued of at least two growing seasons. A longer period may be required for specific strategies such as natural regeneration.
- Implementation of the post-construction management program must be supervised by a qualified professional who should inspect the status of all forest retention, reforestation and afforestation areas at specified times during the life of the post-construction agreement and who must certify that the required survival rates have been achieved in accordance with the agreement prior to release of bonds.
- Inspections should be carried out at the beginning and end of the growing season to pinpoint any problems, monitor survival rates, and specify remedial actions needed to correct existing problems.
- Developer or qualified designee shall be responsible for maintenance of all fences, signs and other protection devices during this program.
- Developer or qualified designee shall be responsible for necessary watering, fertilizing and pest control to ensure survival of new and existing plant material. Pruning, removal of dead or damaged material, control of invasive species shall also be the responsibility of the developer/designee during this period.
- An inspection shall take place after one year. If at that time, the possibility exists that the original planting will not meet survival standards, the developer may choose to establish reinforcement plantings. If plant mortality exceeds 10% of planted material at the end of the first growing season, such material should be replaced to bring the total number of trees to 90% of the original total. Such material shall be installed by the beginning of the second growing season. If at the end of the second growing season, survival rate drops below 75%, such material as needed to guarantee a 75% survival rate by the end of the third growing season shall be installed.
- The developer shall inform all new residents of the project of the proper use of forest conservation area; provide maps showing the location of conservation areas, an explanation of restricted activities within such areas, and steps to transfer the long-term management responsibilities to the Homeowners Association or responsible entity.
- At the end of the post-construction management and protection period, the designated and responsible professional shall convey to the Department of Planning and Zoning certification that all forest conservation areas have remained intact or have been restored to the appropriate condition, that the stipulated survival rates have been achieved, and that any permanent protection measures required by the plan are in place. Upon review of the final certification document for completeness and accuracy, the County will notify the developer of release of surety and all future obligation. The developer's last official responsibility will be to transmit a copy of this notification to the owner(s) of the property(ies). Such notice will serve as official notice to the owners of their assumption of full responsibility for all future forest conservation obligations.

JUSTIFICATION STATEMENT

- This Forest Conservation Plan proposes to remove 1.13 acres of trees from forest stands as identified in the Forest Stand Delineation Report of November 2000 by McCarthy and Associates, Inc. The proposed forest removal is in an uplands area and is necessary to provide reasonable vehicular circulation within the single-family attached portion of the proposed project.
- There is no proposed disturbance to forest stands in priority areas such as wetlands, floodplains, stream valley buffers and steep slopes.
- Proposed afforestation occurs mostly within floodplains, stream valley buffer, wetland and wetland buffers or other priority afforestation locations as identified in the Forest Conservation Manual. Where reasonable, afforestation areas extend beyond priority locations to the project boundary or other proposed or existing easement boundary or lot line.
- No off-site afforestation is proposed.
- No fee-in-lieu of afforestation is requested.

SHEET	TREE	STATUS
41	36" BUTTERNUT	SAVE
41	36" ELM	REMOVE
41	36" ELM	REMOVE
41	44" ELM	REMOVE
41	35" HORSECHESTNUT	REMOVE
41	36" BLACK LOCUST	REMOVE
41	33" BLACK CHERRY	REMOVE
42	34" BLACK CHERRY	REMOVE
43	30" BUTTERNUT	REMOVE
43	31" BUTTERNUT	REMOVE
43	34" BUTTERNUT	REMOVE
43	32" BUTTERNUT	REMOVE
44	52" TULIP POPLAR	SAVE
44	30" BUTTERNUT	SAVE
44	35" TULIP POPLAR	SAVE
44	31" RED OAK	SAVE
44	42" RED OAK	SAVE

REFORESTATION & BACK-UP PLANTING SCHEDULE

Common Name	Botanical Name	Qty.	Rate/ac.	Size	Comments
Black Cherry	Prunus serotina	376	40	Seedlings	Pioneer species
Black Locust	Robinia pseudo-acacia	376	40	"	Pioneer species/Dominant tree
Flowering Dogwood	Cornus florida	471	50	"	Understory
Red Maple	Acer rubra	376	40	"	Pioneer species/Dominant tree
Sugar Maple	Acer saccharum	612	65	"	Dominant tree
White Oak	Quercus alba	612	65	"	Dominant tree
Serviceberry	Amelanchier x grandiflora	471	50	"	Understory

Reforestation areas to be planted at 350 plants per acre. Use 11'x11' spacing. Total area to be reforested = 9.41 acres. Total plants required = 3,294.

Notes:

- Forest association is Sugar Maple - Basswood
- Tree shelters to be provided for all seedlings
- Credit for regeneration to be determined in field and may reduce total quantities of seedlings required.

Alternate Species:

- White Ash (Fraxinus americana)
- Red Oak (Quercus rubra)
- Washington Hawthorn (Crataegus phaenopyrum)

FOREST CONSERVATION WORKSHEET

I. BASIC SITE DATA	
Gross Site Area	76.40 ac.
Area within 100 year floodplain	7.61 ac.
Net tract area	68.79 ac.
Land use category	Resid.-suburban
II. INFORMATION FOR CALCULATIONS	
A. Net Tract Area	68.79 ac.
B. Reforestation threshold @ 20 %	13.76 ac.
C. Afforestation minimum @ 15 %	10.32 ac.
D. Existing forest on net tract	2.89 ac.
E. Forest areas to be cleared	1.01 ac.
F. Forest areas to be retained	1.88 ac.
III. AFFORESTATION CALCULATIONS	
(Clearing is proposed AND existing forests are less than the afforestation minimum)	
Afforestation for unafforested areas below minimum (C-D):	7.43 ac.
Afforestation for clearing below minimum (2xE):	2.02 ac.
Total afforestation required	9.45 ac.
Credit for proposed perimeter buffer trees	0.06 ac.
Net afforestation proposed	9.41 ac.

SURETY CALCULATIONS

FOREST RETENTION	1.88 AC/81,893 S.F. @ \$0.20/S.F.	= \$16,379
AFFORESTATION	9.41 AC/409,900 S.F. @ \$0.50/S.F.	= \$204,950
*CREDIT FOR LANDSCAPE TREES	2,400 S.F. @ \$0.50/S.F.	= \$1,200 (-)
TOTAL		\$220,129

* CREDIT FOR THE 12 LANDSCAPE TREES FOR PERIMETER # 7 AS SHOWN ON SHEET 38 (L9-2)

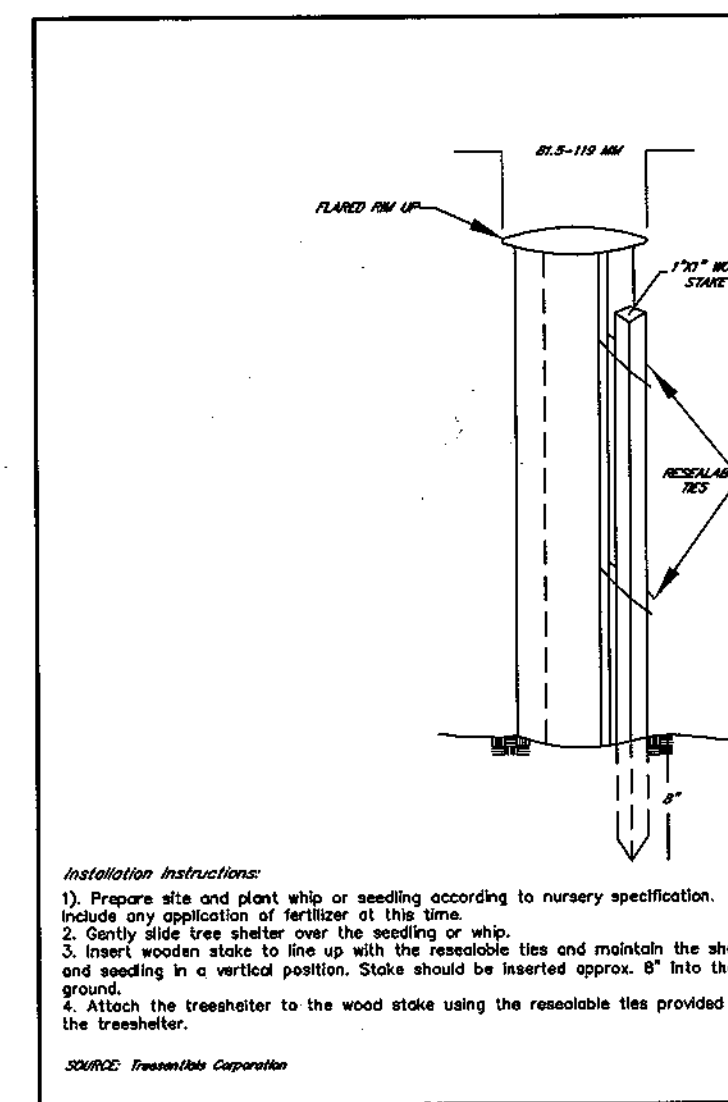
Tree Planting and Maintenance Calendar General Guidelines

	J	F	M	A	M	J	J	A	S	O	N	D
Transplant of 2" DBH or Greater	NOT RECOMMENDED											
Planting of Seedlings, Whips	NOT RECOMMENDED											
Inspection	X						X				X	
Fertilizer * (if needed)	NOT RECOMMENDED											
Water *	NOT RECOMMENDED											

Key:
 [Hatched Box] - greatly recommended
 [Dotted Box] - recommended with additional care
 [White Box] - depending upon site conditions

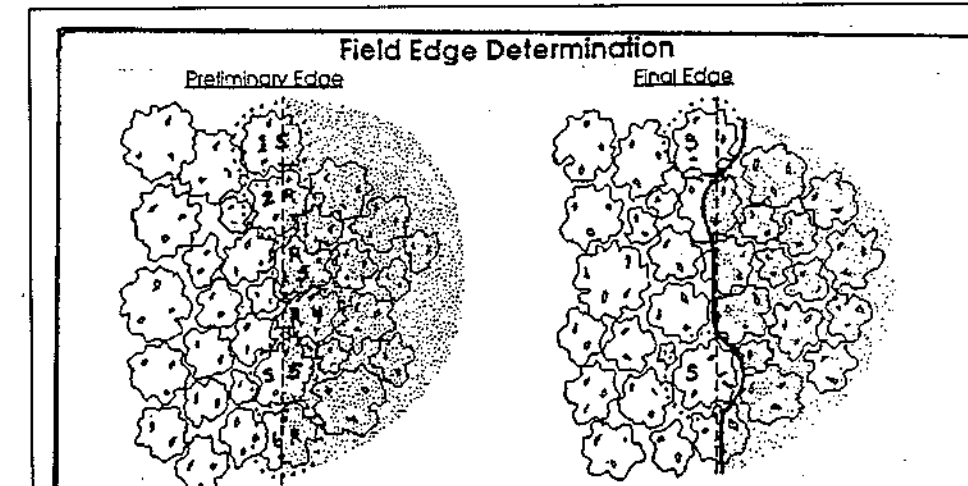
Note: Activities during November through February are dependent upon ground conditions.

STANDARD TREESHELTER



SUMMARY OF FOREST CONSERVATION EASEMENTS

PG#	AFFORESTATION	RETENTION
1	0.31	
2		0.89
3	1.22	
4	0.36	
5		0.60
6	1.28	
7	0.65	
8	4.20	0.39
9	0.70	
10	0.69	
11		
TOTAL	9.41	1.88

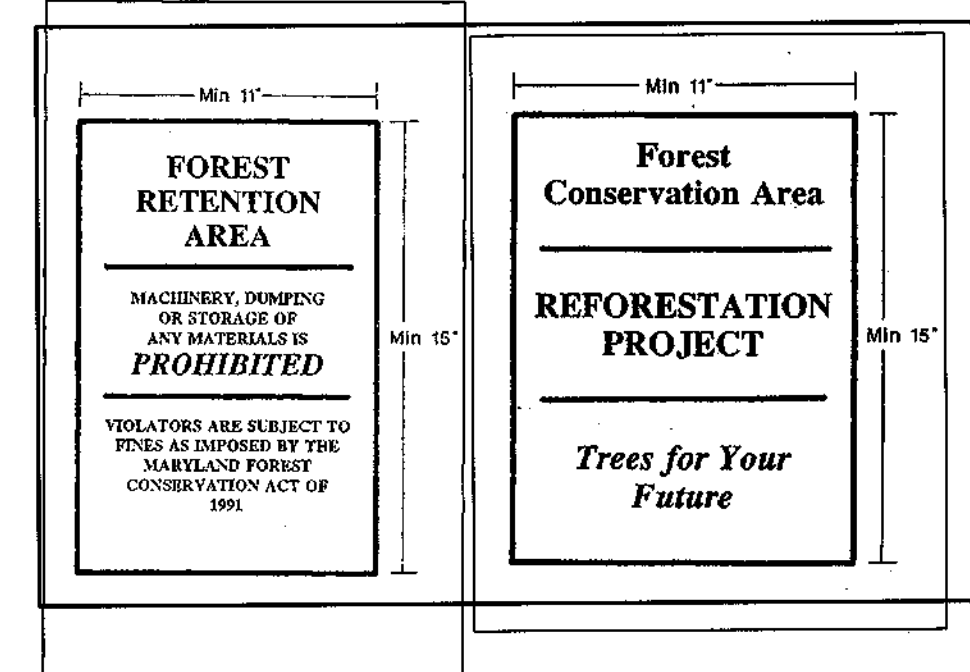


Tree #	Status	Notes
1	Save	Preliminary retention edge (PRE) impacting approximately 40% of Critical Root Zone (CRZ). Warm moving line slightly to accommodate.
2	Remove	PRE impact nearing 50% of CRZ, species: tulip poplar (cannot withstand distance well); trunk shows sign of decay; adjust line to remove.
3	Remove	PRE over trunk
4	Remove	Tree is completely within disturbance zone.
5	Save	Approximately 40% impact of CRZ healthy tree, move edge to accommodate.
6	Remove	Retention edge runs through trunk.

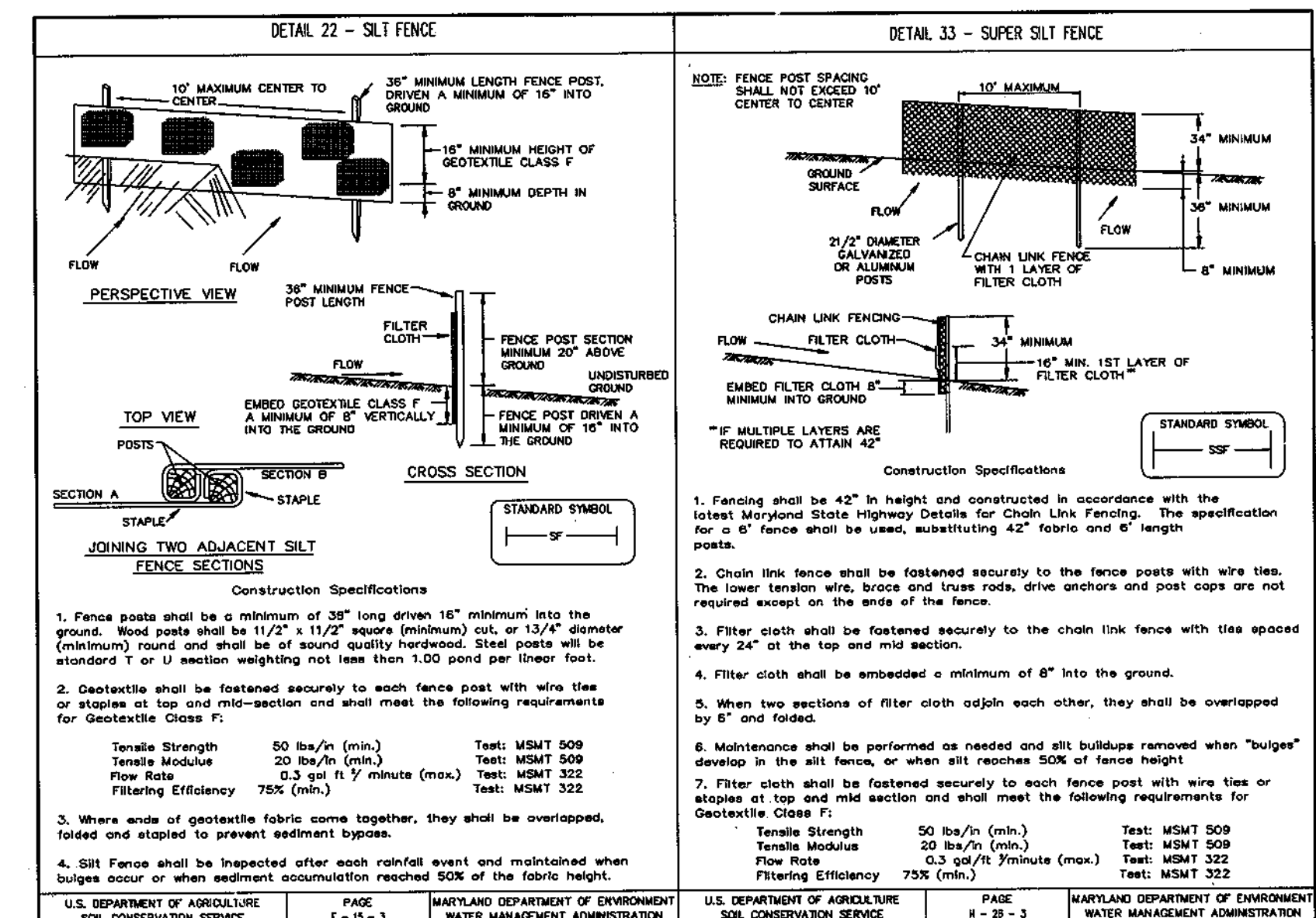
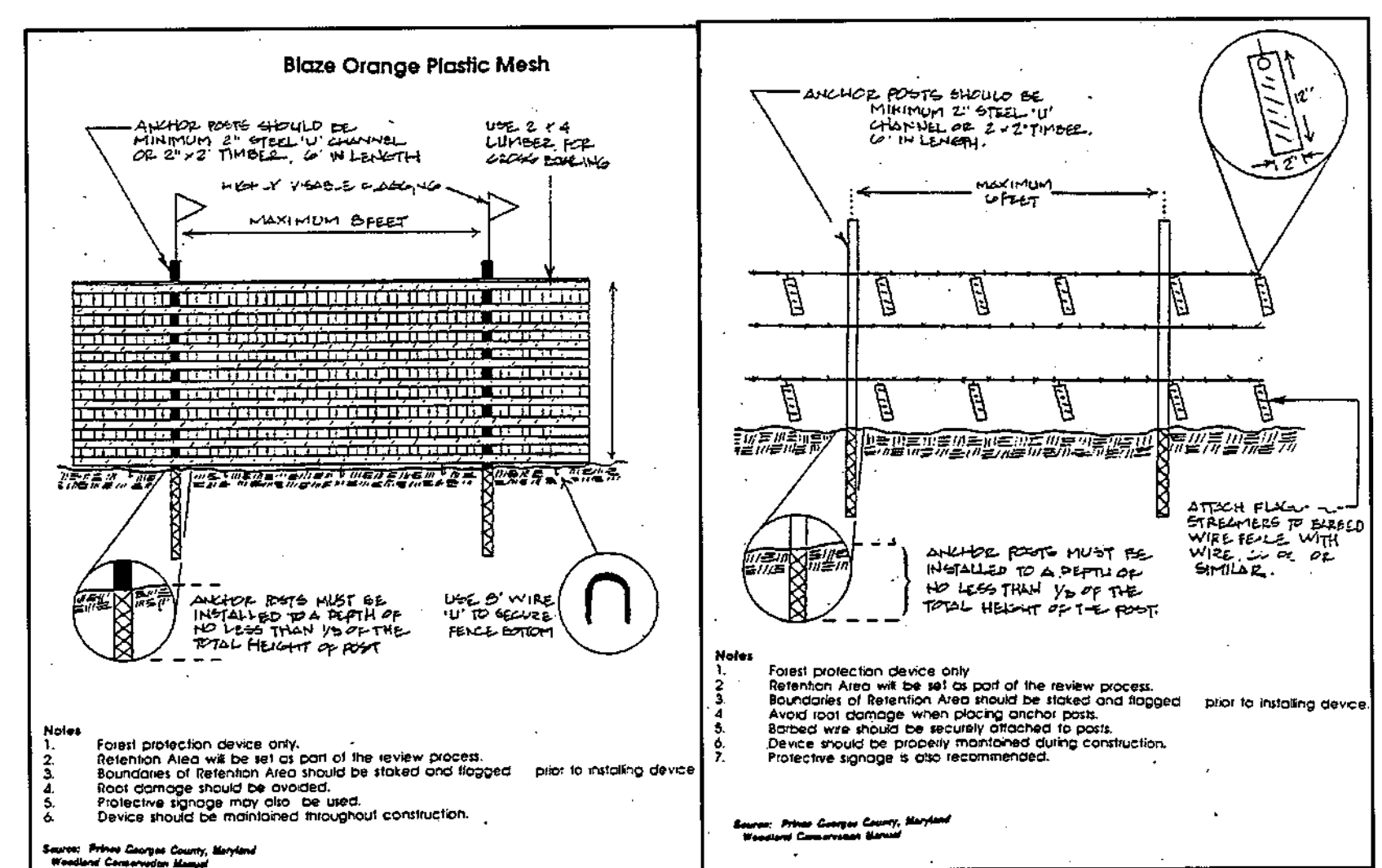
As a result of this process:
NO ACRES LOST FROM BUILDABLE AREA...TWO TREES SAVED

Staking Retention Edges in the field requires tree-by-tree decisions. The above example demonstrates the use of the Critical Root Zone, tree health, and tree species in laying out a final healthy retention line.

STANDARD SIGNAGE



TREE PROTECTION DEVICES



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 8-21-03
 CHIEF, BUREAU OF HIGHWAY

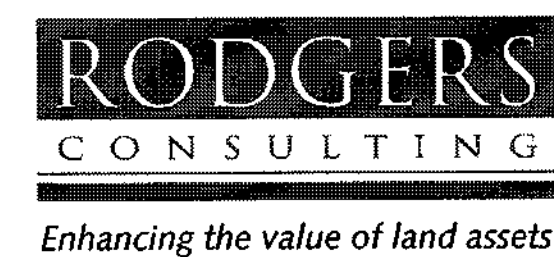
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 9/16/03
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: [Signature] 9/16/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE	REVISION	DATE	BY	DATE
	BASE DATA		CADD	
	DESIGNED		PFB, YSL	
	DRAWN		YSL	
	REVIEWED		PFB	
	RELEASE FOR			

Developer/Owner:
Winchester Homes, Inc. & Winchester Homes, Inc., as nominee for Stringtown Investments, LLC
 6905 Rockledge Drive
 Suite 800
 Bethesda, Maryland 20817
 Stephen J. Nardella, Vice President
 (301) 803-4800

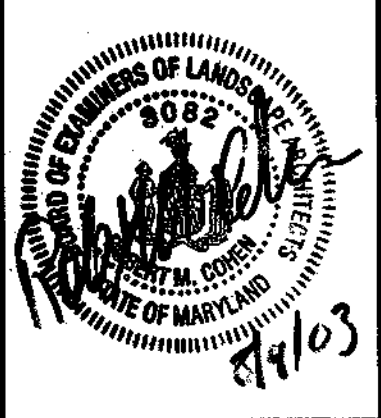
FOREST CONSERVATION PLAN



Rodgers Consulting, Inc.
 9260 Galthor Road
 Gaithersburg, MD 20877
 301.948.4700
 301.948.6256 (fax)
 381.253.6609
 www.rodgers.com

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL 'A', OPEN SPACE LOTS 120 - 126, 134 AND NON-BUILDABLE BULK PARCELS 'B' AND 'C'

* PHASES I, II, III
Montjoy
 ELECTION DISTRICT NO. #2
 HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID:12 PARCEL 260
 DPZ FILES: S-01-20, WP-01-117, WP-03-78, P-02-10, P-02-17, P-03-03



SCALE:	SHOWN
JOB No.	506V3
DATE:	12/20/02
INDEX No.	FCP-7
SHEET No.	46 OF 50

SEGMENTAL RETAINING WALL SPECIFICATIONS

PART 1 - GENERAL

- 1.1 Work includes furnishing and installing segmental retaining wall units, geogrid reinforcement, wall fill, and backfill to the lines and grades shown on the construction drawings and as specified herein. The contract also includes the furnishing and installing of appropriate materials, equipment, and labor required for construction of the geogrid reinforced, segmental retaining wall. All existing and proposed construction and site grading information was referenced from the overall site plans prepared by Rodgers Consulting, original scale: 1"=50'.
- 1.2 REFERENCE STANDARDS
 - A. ASTM C80-75 (1981 rev) - Hollow Load Bearing Masonry Units
 - B. ASTM C140-75 (1981 rev) - Sampling and Testing Concrete Masonry Units
 - C. ASTM C145-75 (1981 rev) - Solid Load Bearing Concrete Masonry Units
 - D. Geosynthetic Research Institute (GRI), GRI-CG4 - Determination of Long Term Design Strength of Geogrids
 - E. ASTM D 638 - Test Method for Tensile Properties of Plastic
 - F. ASTM D 1248 - Specification of Polyethylene Plastics Molding and Extrusion Materials
 - G. ASTM D 4218 - Test Method for Carbon Black Content in Polyethylene Compounds by the Muffle Furnace Technique
 - H. ASTM D 3034 - Specification for Polyvinyl Chloride (PVC) Pipe
 - I. ASTM C 1372 - Specifications for Segmental Retaining Wall Units

1.3 DELIVERY, STORAGE AND HANDLING

- A. Contractor should check the materials upon delivery to assure that proper material has been received.
- B. Contractor should prevent excessive mud, wet cement, epoxy, and like materials which may offset themselves, from coming in contact with the materials.
- C. Geogrids should be stored above +20 degrees F.
- D. Contractor should protect the materials from damage. Damaged material should not be incorporated into the reinforced retaining wall.

1.4 SUBMITTALS/CERTIFICATION

The contractor shall submit a manufacturer's certification, prior to the start of the work, that the retaining wall system components meet the requirements of ASTM C 1372 and the structure design. This certification should be provided to the geotechnical engineer for review and approval prior to wall construction.

PART 2 - PRODUCTS

2.1 DEFINITIONS

- A. Geogrid is a high density polyethylene grid, specifically fabricated for use as a soil reinforcement.
- B. Concrete retaining wall units are as detailed on the drawings and as specified herein.
- C. Geosynthetic Drainage Composites are polyethylene net structure with non-woven geotextiles bonded to both sides.
- D. Erosion Control Blankets consist of a web of polypropylene fibers securely bounded by polyolefin threads between two high strength polyolefin mats.
- E. Backfill is the soil which is used as fill for the reinforced soil mass.
- F. Foundation soil is the in-situ soil or controlled compacted fill placed below the bottom of the retaining wall and geogrid zone.

2.2 MATERIALS

The contractor should submit manufacturer's catalog and samples of the proposed materials for approval by the project geotechnical engineer a minimum of seven days before the start of construction. Materials should be transported to the site only after approval of the proposed materials by the project geotechnical engineer.

A. Concrete Units

- 1. Masonry units should be Keystone Standard Retaining Wall Units. Substitution of other concrete units including Keystone Standard II Units may be allowed with the prior approval of the Geotechnical Engineer.
- 2. Concrete wall units should have a minimum 28 day compressive strength of 3000 psi, in accordance with ASTM C 39. The concrete should have adequate freeze/thaw protection with a maximum moisture absorption of 6 percent.
- 3. Modular concrete materials shall conform to the requirements of ASTM C 1372 - Standard Specifications for Segmental Retaining Wall Units.
- 4. The units shall pass 100 freeze/thaw cycles in water with less than 1% weight loss in accordance with ASTM C 1372.
- 5. Exterior dimensions may vary. Units are required to have a minimum of one square foot of face area each.
- 6. Units should have angled sides and be capable of attaining concave and convex alignment curves in accordance with manufacturer's recommendations.
- 7. Units should be interlocked with non-corrosive reinforced fiberglass pins.
- 8. Units should be interlocked as to provide a maximum of 1 inch of setback per block, where required.

B. Leveling Pad

Material for leveling pad/footing should consist of compacted free-draining coarse aggregates meeting the requirements of ASTM #57 Stone or Graded Aggregate Base (GAB) per Maryland State Highway Administration Standard Specifications for Construction and Materials. A minimum of 6 inches deep and 36 inches wide compacted leveling pad is required.

C. Fiberglass Connecting Pins

- 1. Thermoset isophthalic polyester resin pultruded fiberglass reinforcement rods, a minimum one-half inch in diameter.
- 2. Pins should have a minimum flexural strength of 128,000 psi and short beam shear of 6400 psi.
- 3. For substitute concrete units, use of other compatible connector systems may be allowed with the prior approval of the geotechnical engineer.

D. Geogrid

Geogrid should be Syntex SF 55 or equivalent as approved by the geotechnical engineer. The geogrid should have an allowable strength of 1,532 pounds per foot for SF 55 geogrid. The allowable strength is defined as the ultimate strength divided by reduction factors for creep, durability, installation damage and an overall factor of safety.

E. Reinforced Backfill

Reinforced backfill for Wall #1 should consist of #57 Stone. Reinforced backfill soils for the remaining walls should be non-plastic, controlled fill meeting the requirements of AASHTO A-4, A-2.4 or more granular, unless noted otherwise. The geotechnical report for the project indicates that A-4 and A-2.4 material is present on site. However, the material may not be readily available and also may be wet of optimum moisture. The contractor should be prepared to dry the on-site soils or import suitable AASHTO A-2.4 materials if these materials are not available from on-site sources at the time of construction.

F. Controlled Fill

Controlled fill soils to be placed outside the Reinforced Backfill area and where specified should be soils meeting the requirements of AASHTO A-4 or more granular.

G. Drainage Pipe

The drainage pipes should be perforated or slotted PVC pipe manufactured in accordance with ASTM D-3034.

H. Filter Fabric

Filter Fabric should be non-woven, polypropylene geotextile, 140 N manufactured by Nicolon Mirafri Group or approved equivalent.

PART 3 - EXECUTION

A. Sequence of Construction (Buffer Protection)

- 1. The contractor should install the sill fence to establish the limit of disturbance (LOD) as shown on the construction plans. The L.O.D. and all buffers must be maintained throughout wall construction.
- 2. The wall can likely be constructed from the backside using relatively compact equipment. At no time should any materials or construction equipment be stored outside the L.O.D. Equipment traffic should be confined to areas such that buffers are not disturbed.
- 3. Penetration testing should be performed on the leveling pad subgrade prior to the placement of stone and compaction testing should be performed on each lift of reinforced and controlled backfill as specified below.

B. Excavation

- 1. The contractor should excavate to the lines and grades shown on the construction drawings. Under no circumstances should the excavation lines and grades be exceeded, except with owner's approval. The contractor should protect the excavation from sloughing by placing a membrane over the face of the excavation.
- 2. Excavations should be sloped or otherwise supported in accordance with Occupational Safety and Health Administration (OSHA) and other local and state regulations.

C. Foundation Subgrade Preparation

- 1. Foundation soil should be excavated as required for installation of leveling pad, geogrid and other elements and as shown on the construction drawings.
- 2. Foundation soil should be examined by the Engineer to assure that the actual foundation soil strength meets or exceeds assumed design strength. Soils not meeting required strength should be removed and replaced with controlled, compacted material.
- 3. Over-excavated areas should be filled with select and approved material and compacted to 95 percent of maximum dry density in accordance with the Standard Proctor, ASTM D-698.
- 4. Allowable bearing pressure for natural and controlled, compacted fill soils should be as specified in Part 5.
- 5. The exposed foundation subgrade should be proofrolled with a loaded dump truck. Any soft or unstable areas identified during proofrolling should be overexcavated and backfilled with controlled fill.
- 6. Any fill required to establish sloping surfaces in front of the walls should consist of Controlled Fill and should be placed, compacted and field tested in accordance with the requirements specified herein.

D. Leveling Pad

- 1. The leveling pad should be placed as shown on the construction drawings with a minimum thickness of 6 inches.
- 2. Leveling pad materials should be installed upon undisturbed in-situ soils or controlled, compacted backfill.
- 3. Leveling Pad should be prepared to insure complete contact of retaining wall unit with base. Caps should not be allowed.

E. Unit Installation

- 1. First course of concrete wall units should be placed on the leveling pad. The units should be checked for level and alignment. The first course is the most important to insure accurate and acceptable results.
- 2. Insure that units are in full contact with base.
- 3. Units are placed side by side for full length of wall alignment. Alignment may be done by means of a string line or offset from base line.
- 4. Install fiberglass connecting pin.
- 5. Lay up each course insuring that the connecting pins are inserted through front slot of the unit and into the receiving slot in the course beneath. Repeat procedure to the extent of wall height.
- 6. At the end of each course where the wall changes elevation, units should be turned into the backfill. Units should be laid as to create the minimum radius possible. Unless otherwise shown on the drawings, a minimum of one unit should be installed into the grade. Only the front face of the unit be visible from the side of the wall.
- 7. Standard Units should be used to make convex and concave curves in accordance with manufacturer's recommendations.
- 8. Cap units should be installed and bonded with construction adhesive or epoxy cement as required by manufacturer.
- 9. Contractor should provide positive drainage for the back of the retaining wall during construction.

F. Geogrid Installation

- 1. All utilities in the vicinity of any retaining wall or geogrid reinforcement must be installed and properly backfilled prior to placing the geogrid soil reinforcement or constructing the wall.
- 2. The geogrid soil reinforcement should be laid horizontally on compacted backfill, connected to the concrete wall units. Back grid over the fiberglass connecting pin, pull taut, and anchor before backfill is placed on the geogrid.
- 3. Slack in the geogrid at the wall unit connections should be removed in a manner, and to such a degree, as approved by the Engineer.
- 4. Geogrid should be laid of the proper elevation and orientation as shown on the construction drawings or as directed by the Engineer.
- 5. Correct orientation (roll direction) of the geogrid should be verified by the Contractor.
- 6. Geogrid should be secured in-place with staples, pins, sand bags, or backfill as required by fill properties, fill placement procedures, or weather conditions, or as directed by the Engineer.
- 7. Overlaps
 - a. Uniaxial geogrid does not need to be overlapped in the across the roll direction, except to contain the fill at the slope face when wrap-around facing is used. Uniaxial grid should be overlapped 48" in the rolled direction.
 - b. A layer of soil a minimum of 4 inches in thickness should be spread between uniaxial geogrid layers in the area to be overlapped, or as directed.

G. Fill Placement

- 1. Wall backfill material should be placed in no more than 8-inch lifts and compacted to 95 percent of the Standard Proctor (ASTM D-698).
- 2. Backfill should be placed, spread, and compacted in such a manner that minimizes the development of voids in and/or movement of the geogrid.
- 3. Only hand-operated compaction equipment should be allowed within 4 feet of the wall face.
- 4. Backfill should be placed from the wall outward to insure that the geogrid remains taut.
- 5. Tracked construction equipment should not be operated behind or above the wall.
- 6. Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and sharp turning should be avoided.
- 7. Place filter fabric between the unit, core fill and the reinforced backfill as shown on plans. The filter fabric should be embedded a minimum of two feet into the reinforced fill.
- 8. The finished sloping surface on the toe side of retaining walls should be protected by installing the permanent erosion control blanket and seeding in accordance with project requirements.

H. DRAINAGE

- 1. Drainage fill should be placed behind the wall to the limits shown. The drainage fill should be a minimum of 12-inches thick. The drainage fill should be ASTM #57 stone. The drainage fill should be wrapped in filter fabric (width 140N or equal) as shown on the drawings.
- 2. Positive drainage should be maintained during and after construction. Soils within the reinforced zone that become wet during construction should be dried to optimum moisture or removed.
- 3. Install the perforated drainage pipes and lateral drainage pipes incrementally along with the installation of concrete units and placement of fill. Install backdrainage where shown on plans.

PART 4 - CONSTRUCTION OBSERVATION AND TESTING

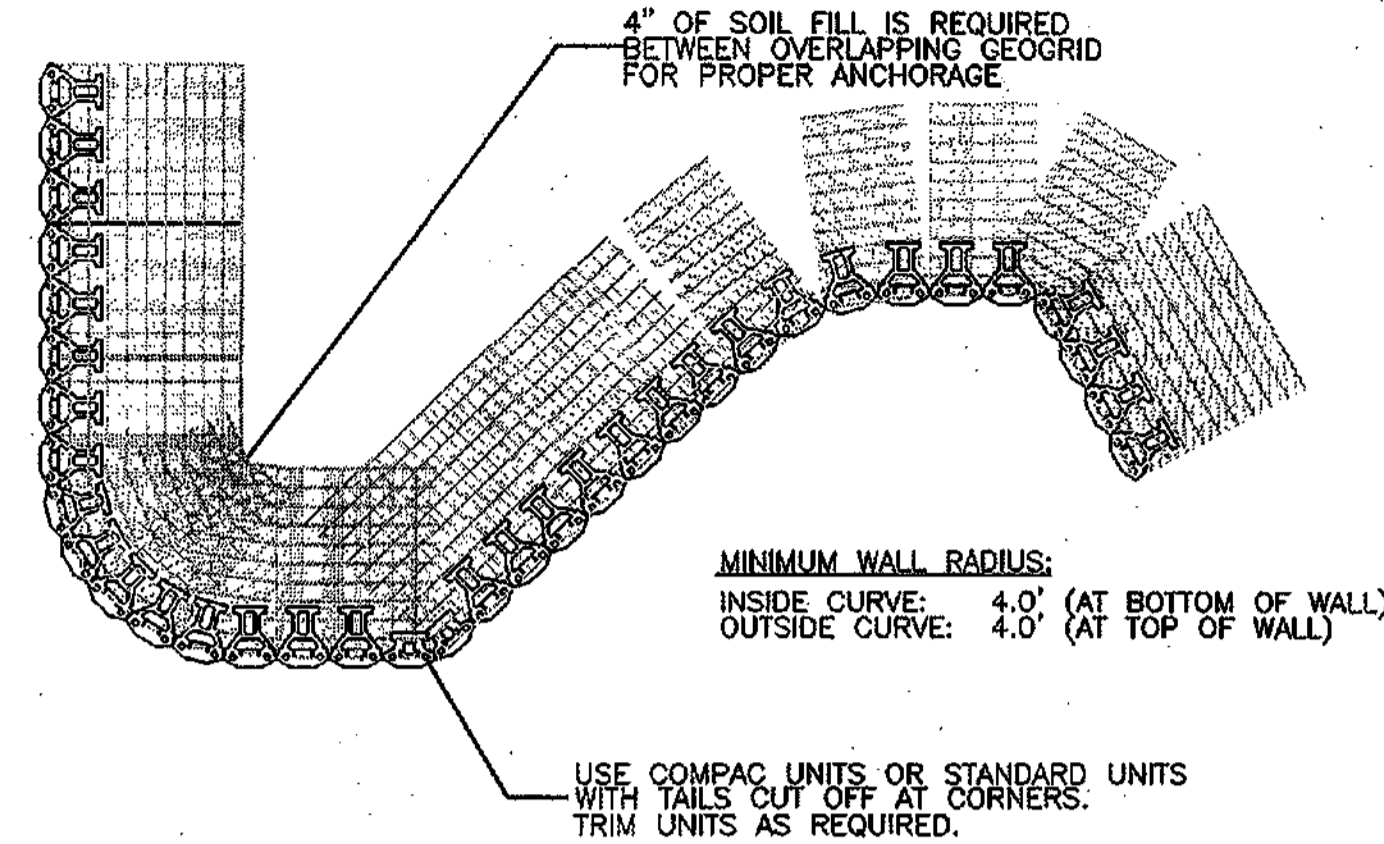
- A. Retaining walls shall only be constructed under the observation of a Registered Professional Engineer and a (NCEI, WACEL, or equivalent) certified soils technician.
- B. The required bearing pressure beneath the footing of the wall shall be verified in the field by a certified soils technician. Testing documentation must be provided to the county inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer (DCP) Test ASTM SIP-399.
- C. The suitability of fill material shall be confirmed by the on-site soils technician. Each 8-inch lift must be compacted to a minimum of 95% of the Standard Proctor Density and the testing reports shall be made available to the county inspector upon completion of construction.
- D. For walls over ten feet in height, one soil boring is required every 100' along the length of the wall, copies of the boring reports shall be provided to the inspector prior to the start of construction.

PART 5 - DESIGN CRITERIA

- 1. Required minimum allowable foundation bearing pressure is 2,500 pcf.
- 2. Design internal friction angle = 30 degrees.
- 3. Design moist unit weight = 125 pcf.
- 4. Retaining walls are not designed to resist hydrostatic pressure.
- 5. Foundation soil internal friction angle = 30 degrees and cohesion = 0 psi.

NOTE:

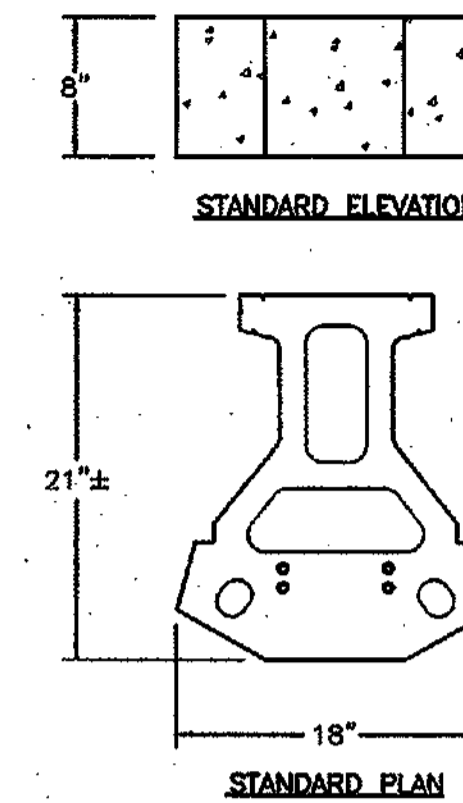
- 1. USE KEYSTONE KAPSEAL ADHESIVE TO JOIN THE TRIMMED KEYSTONE UNITS AT CORNERS.



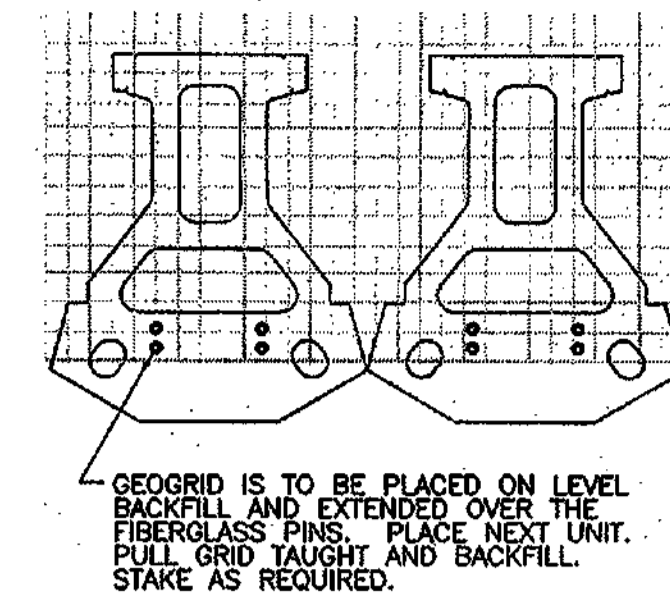
GEOGRID INSTALLATION ON CURVES/CORNERS
NOT TO SCALE

NOTE:

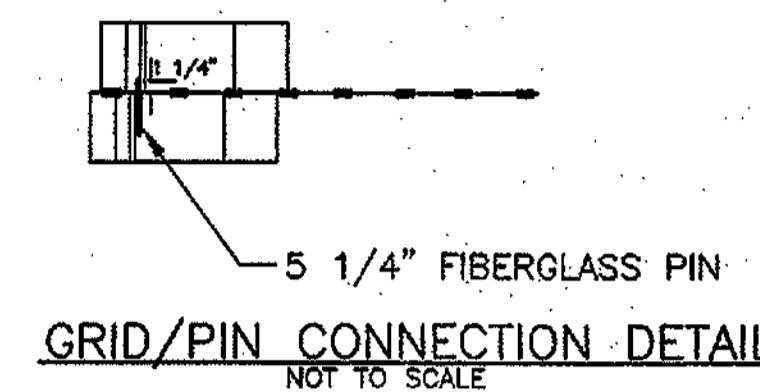
ALTERNATIVE UNITS, SUCH AS THE STRAIGHT FACE TYPE ARE AVAILABLE AND SHOULD BE USED IF PREFERRED BY THE CLIENT. THE UNIT TEXTURE, SHAPE AND COLOR SHOULD BE APPROVED BY THE OWNER.



STANDARD UNIT



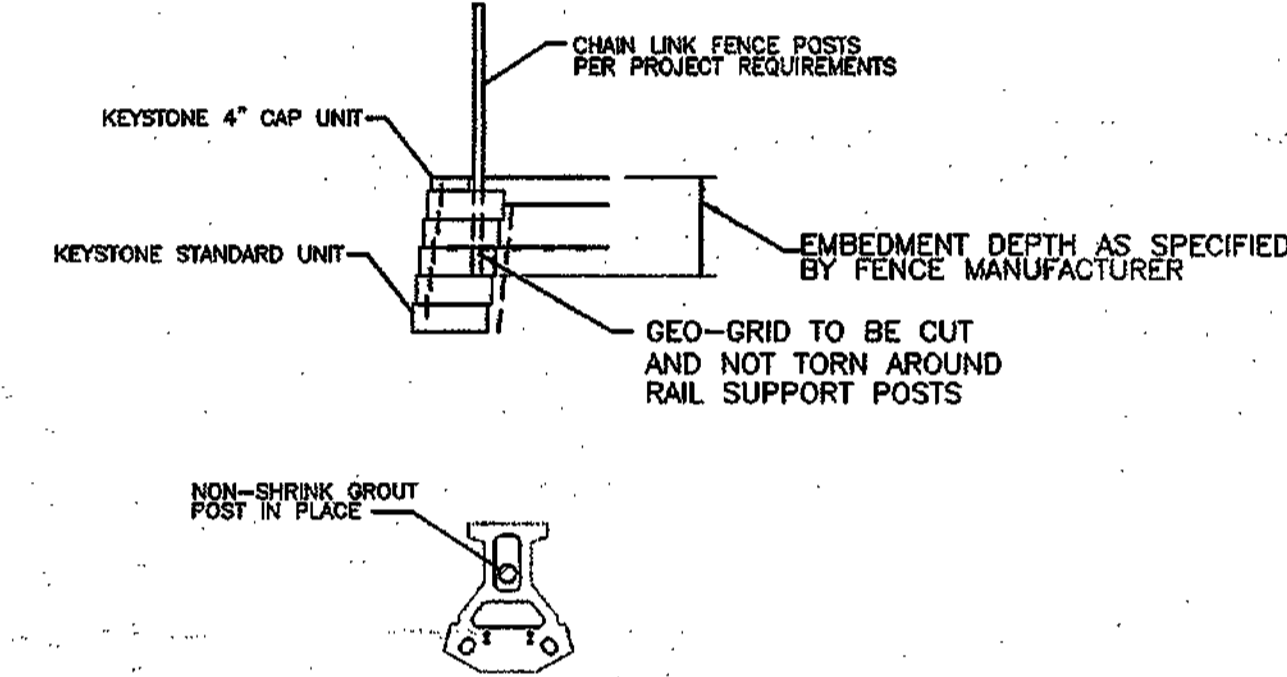
GRID & PIN CONNECTION
NOT TO SCALE



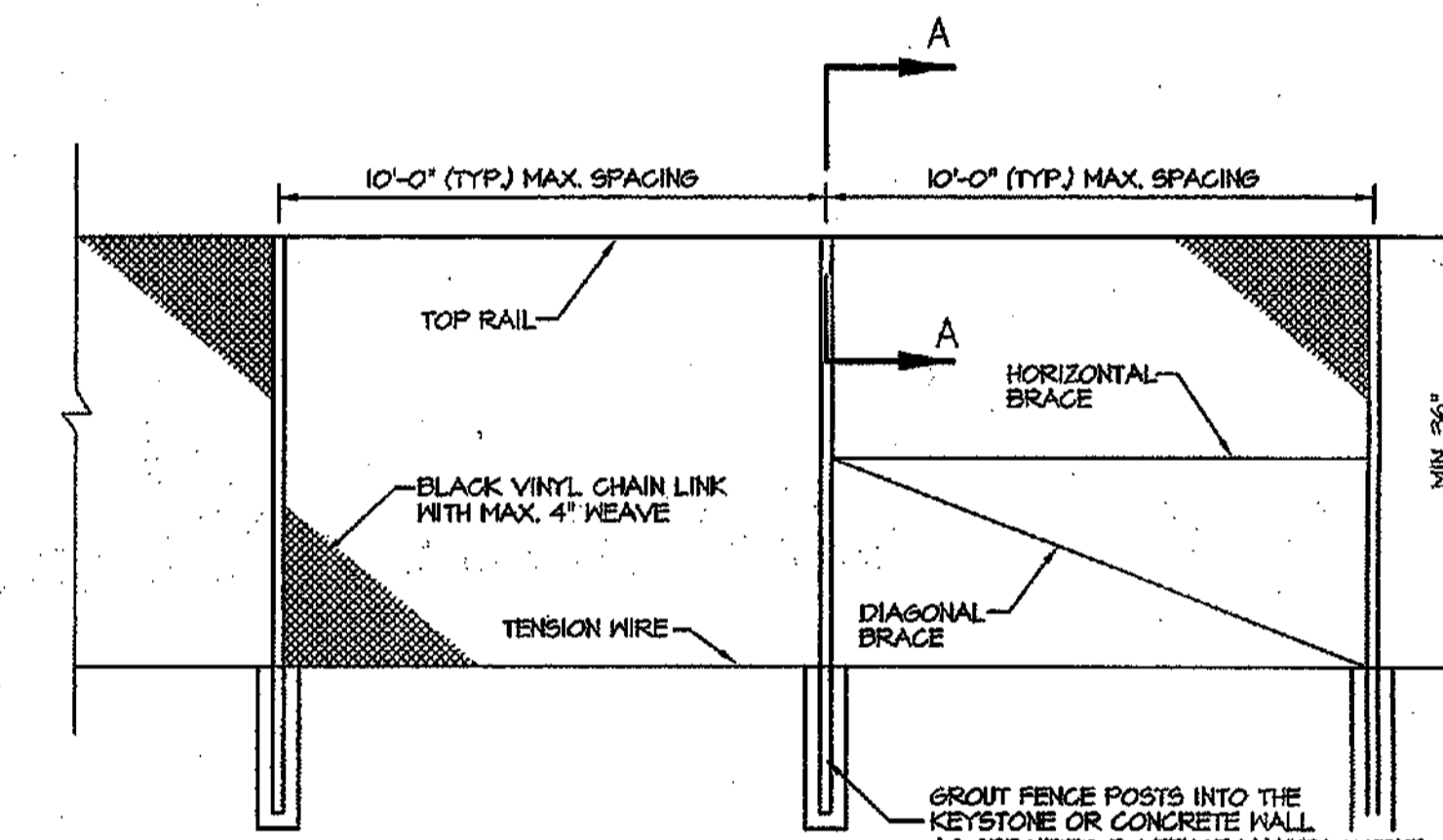
GRID/PIN CONNECTION DETAIL
NOT TO SCALE

NOTE:

- 1. AUGER THROUGH GEOGRID LAYERS.
- 2. BACKFILL OR CONCRETE RAILING POST IN PLACE

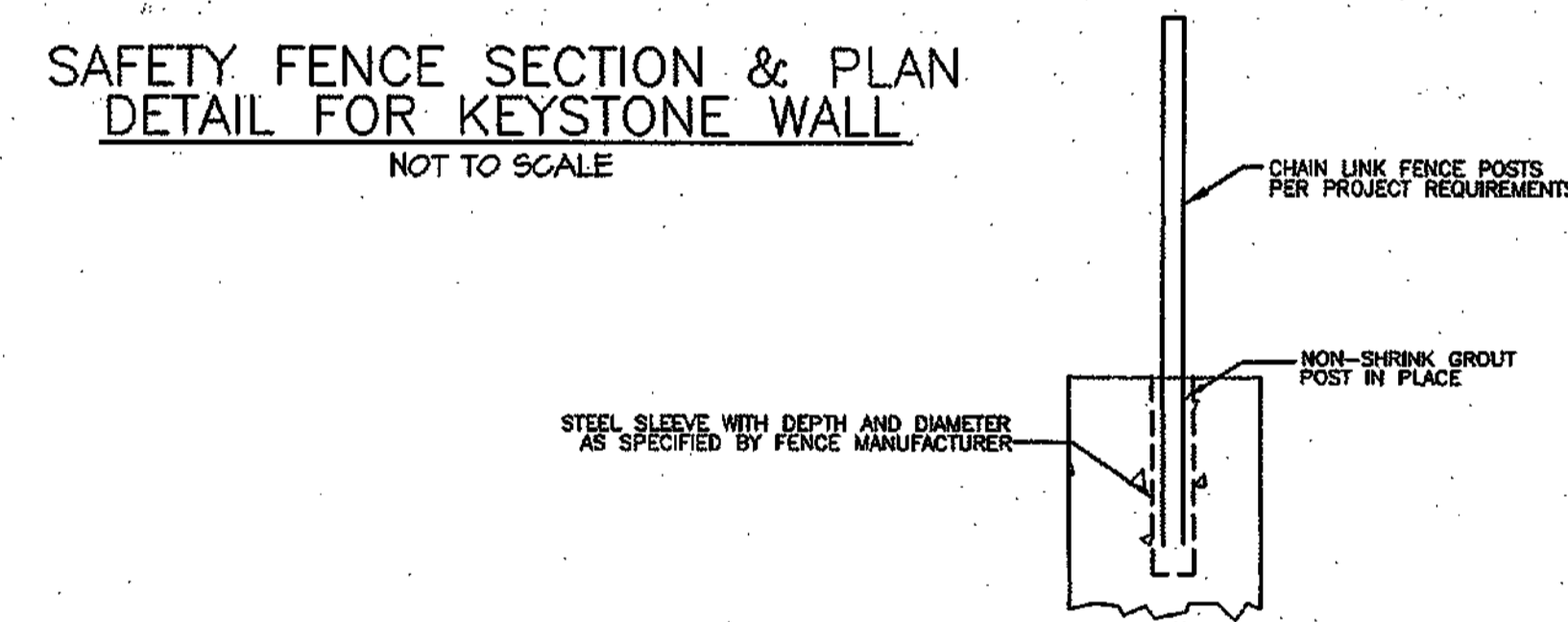


SAFETY FENCE SECTION & PLAN
DETAIL FOR KEYSTONE WALL
NOT TO SCALE

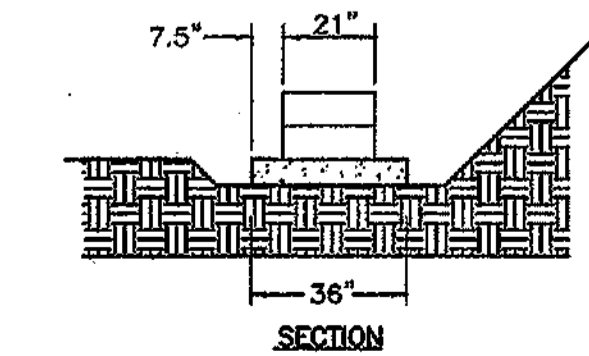
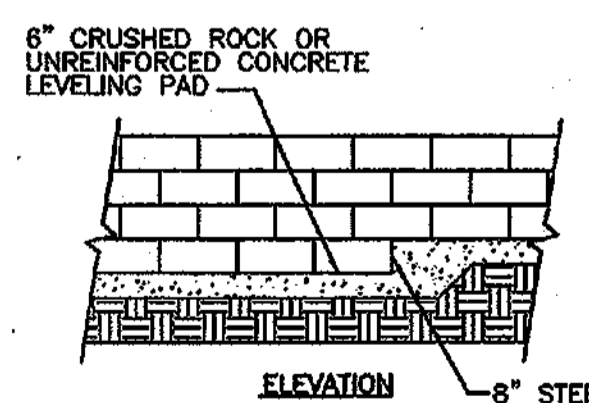


- 1. GROUT FENCE POSTS INTO THE RETAINING WALL UNITS PER THE SAFETY FENCE SECTION 4 PLAN DETAIL (THIS SHEET).
- 2. CORNER POST SHALL BE 5\"/>
- 3. LINE POST SHALL BE 2 1/2\"/>
- 4. ALTERNATIVE FENCE SPECIFICATIONS/DETAILS MAY BE USED WITH THE PRIOR APPROVAL OF WINCHESTER HOMES.

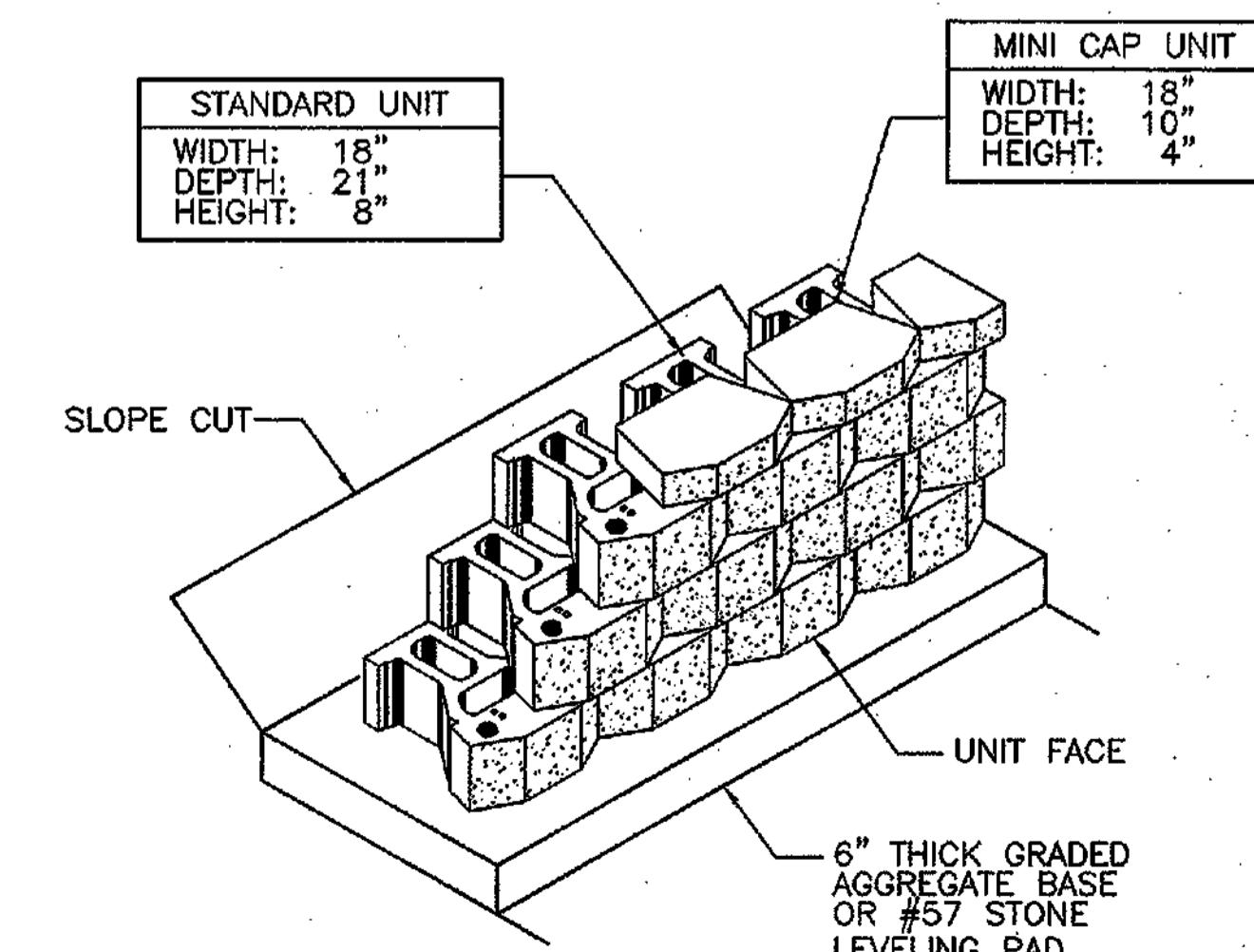
36\"/>



SAFETY FENCE POST CONNECTION
DETAIL FOR C.I.P. CONCRETE WALL
NOT TO SCALE



LEVELING PAD DETAIL



STANDARD UNIT/BASE PAD ISOMETRIC VIEW
NOT TO SCALE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Malen 8-21-03
 CHIEF, BUREAU OF HIGHWAY MS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Karl J. Johnson 9-11-03
 CHIEF, DIVISION OF LAND DEVELOPMENT JPA DATE

John J. ... 9/16/03
 CHIEF, DEVELOPING ENGINEERING DIVISION QM DATE

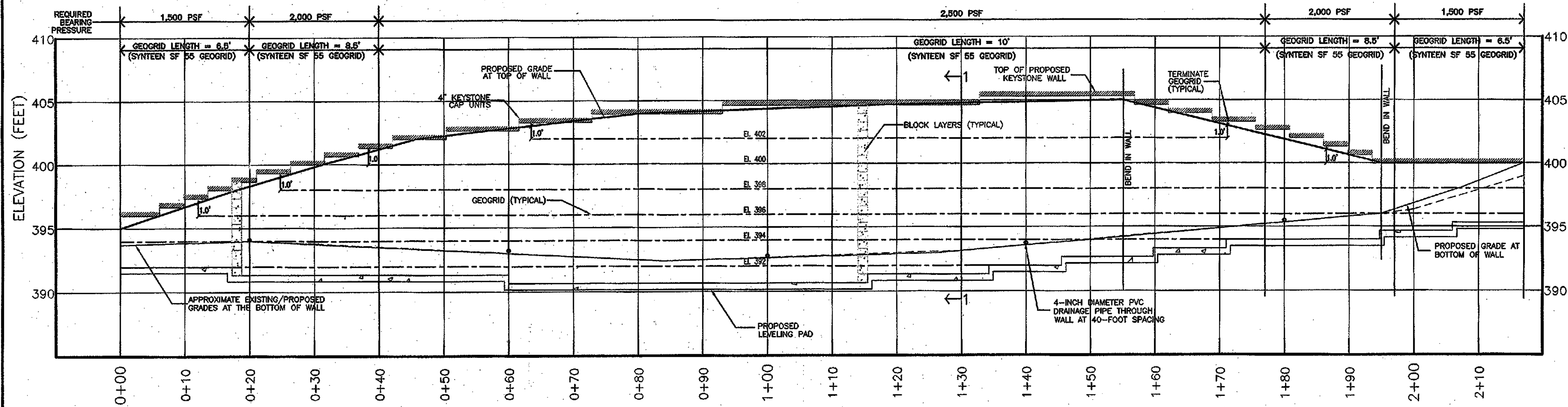
* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120 - 126, 194 AND NON-BUILDABLE BULK PARCELS "B" AND "C" WD-1

GTA GEO-TECHNOLOGY ASSOCIATES, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
MRA MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
 9090 Junction Drive, Suite 9
 Annapolis Junction, MD 20704
 (410) 782-9448 or (301) 470-4470 Fax (410) 782-7985

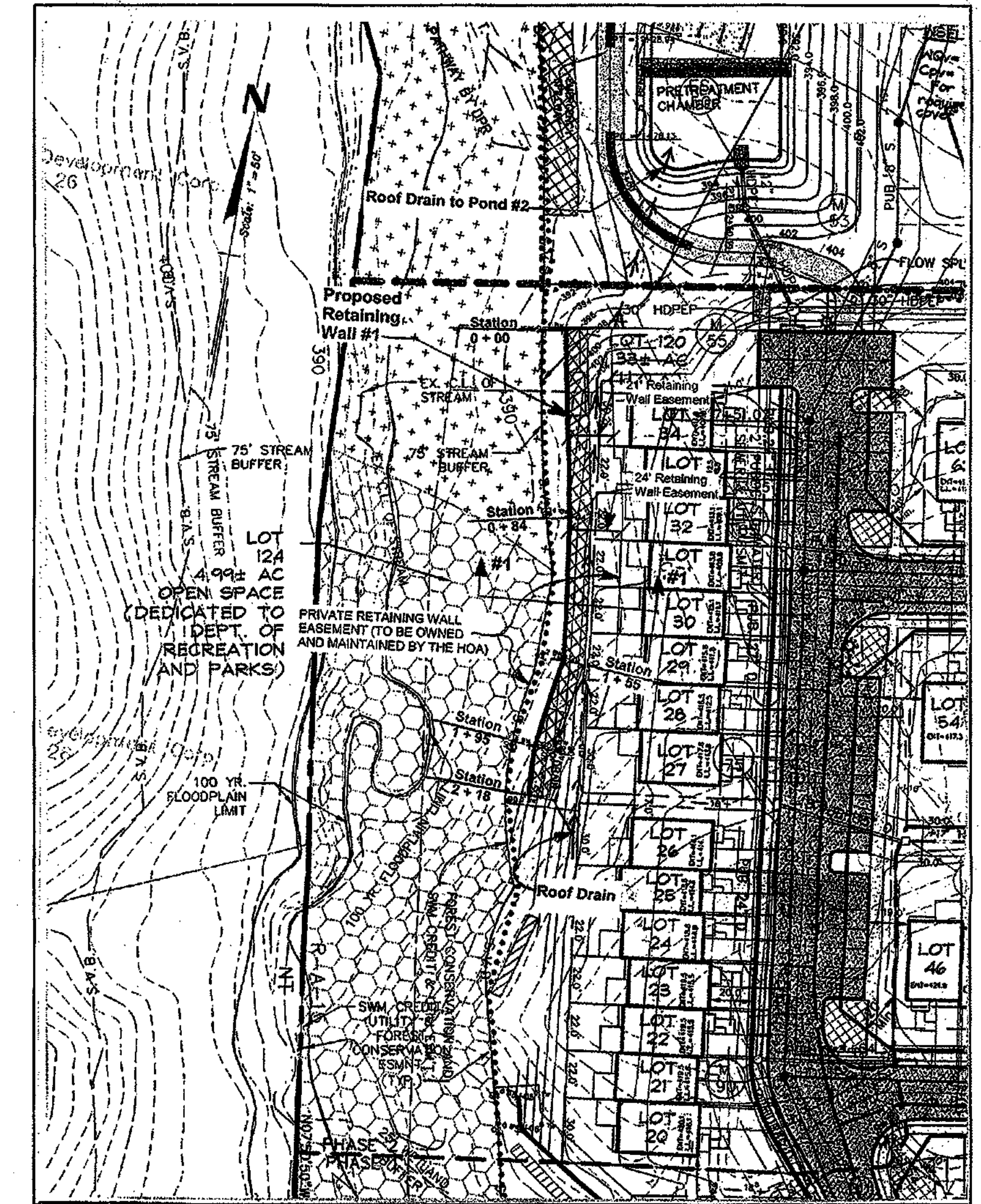
* PHASE I, II AND III
 MONTJOY ELECTION DISTRICT NO. #2
 COLUMBIA, HOWARD COUNTY, MARYLAND
 TAX MAP 130 GRID 12 PARCEL 260
 RETAINING WALL
 NOTES & DETAILS

DATE	REVISIONS	JOB NO.:
3/26/03	REVISED TO ADDRESS COUNTY COMMENTS	00372.1
6/9/03	REVISED TO ADDRESS COUNTY COMMENTS	SCALE: AS SHOWN
8/3/03	REVISED TO ADDRESS COUNTY COMMENTS	DATE: 12-18-02
9/16/03	TITLE BLOCK REVISION PER DED	DRAWN BY: BTD
		DESIGN BY: BTD/RPM
		REVIEW BY: JPK
		SHEET: 47 OF 50

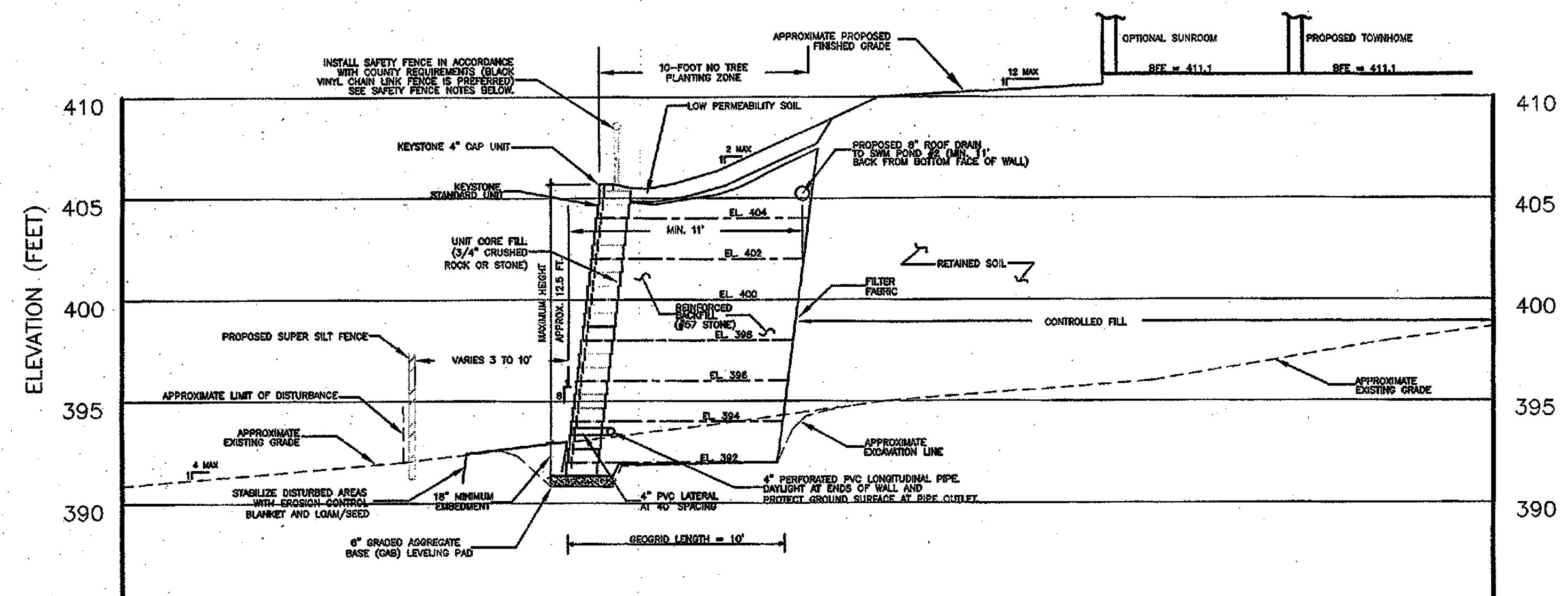
F-0387



RETAINING WALL #1 - PROFILE
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'



RETAINING WALL LOCATION PLAN
 SCALE: 1" = 50'



SECTION 1
 HORIZONTAL SCALE: 1" = 5'
 VERTICAL SCALE: 1" = 5'

SAFETY FENCE NOTES:
 1. The fence should be a minimum of 36 inches in height.
 2. The coverage in the fence must be sized enough to prevent the passage of a four-inch diameter sphere.
 3. The fence posts should be properly secured in concrete footings in accordance with the manufacturer's requirements.

Notes:
 1. This location plan was adopted from the overall site plan prepared by Rodgers Consulting.
 2. No trees should be planted within a zone of 10-foot width behind the retaining wall, measured from the face of the wall. No structures should be located within the retaining wall easement.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A",
 OPEN SPACE LOTS 120 - 126, 194 AND
 NON-BUILDABLE BULK PARCELS "B" AND "C" WD-2

GTA	GEO-TECHNOLOGY ASSOCIATES, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 9090 Junction Drive, Suite 9 Montgomery Junction, MD 20770 (410) 782-4440 or (301) 470-4470 Fax (410) 782-7395	MRA
------------	--	------------

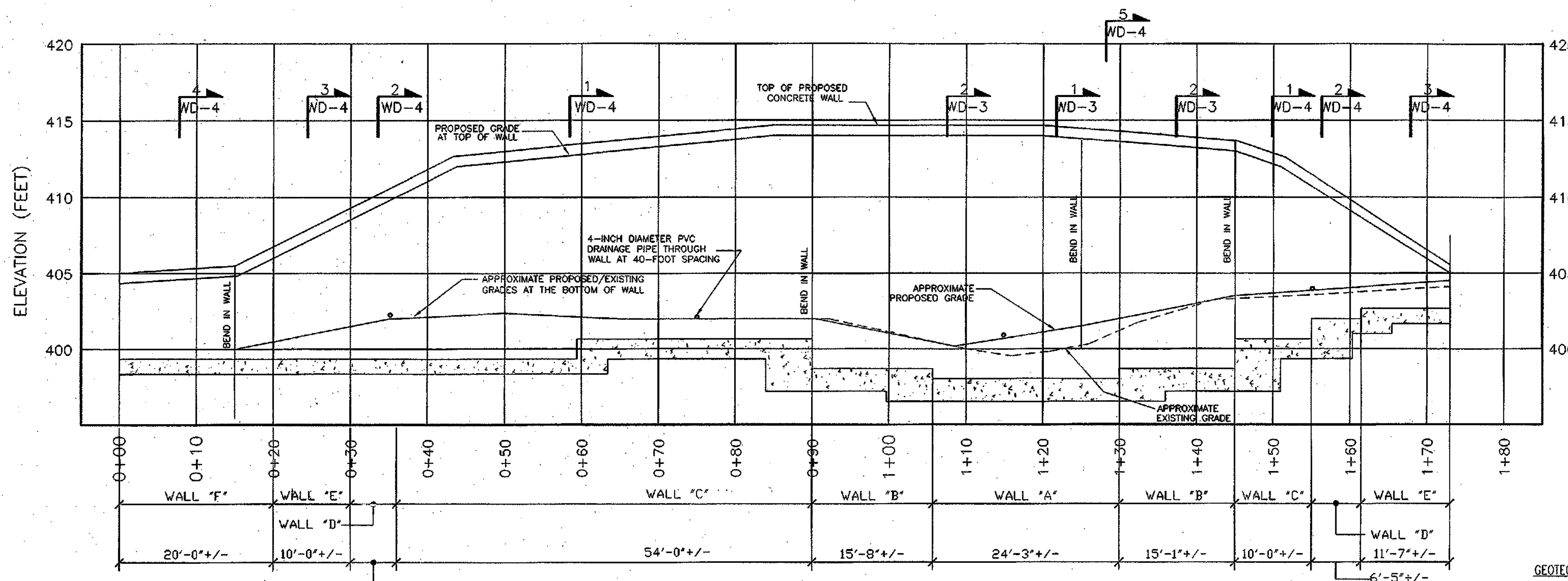
* PHASE I, II AND III
 ELECTION MONTJOY
 DISTRICT NO. #2
 COLUMBIA, HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GNO: 12 PARCEL 200
 RETAINING WALL PLANS
 PROFILES & CROSS SECTIONS

DATE	REVISIONS	JOB NO.:
3/26/03	REVISED TO ADDRESS COUNTY COMMENTS	00372.1
6/9/03	REVISED TO ADDRESS COUNTY COMMENTS	SCALE: AS SHOWN
8/3/03	REVISED TO ADDRESS COUNTY COMMENTS	DATE: 12-16-02
9/4/03	TITLE BLOCK REVISION TAKEN	DRAWN BY: BTD
		DESIGN BY: BTD/RPM
		REVIEW BY: JPK
		SHEET: 48 OF 50

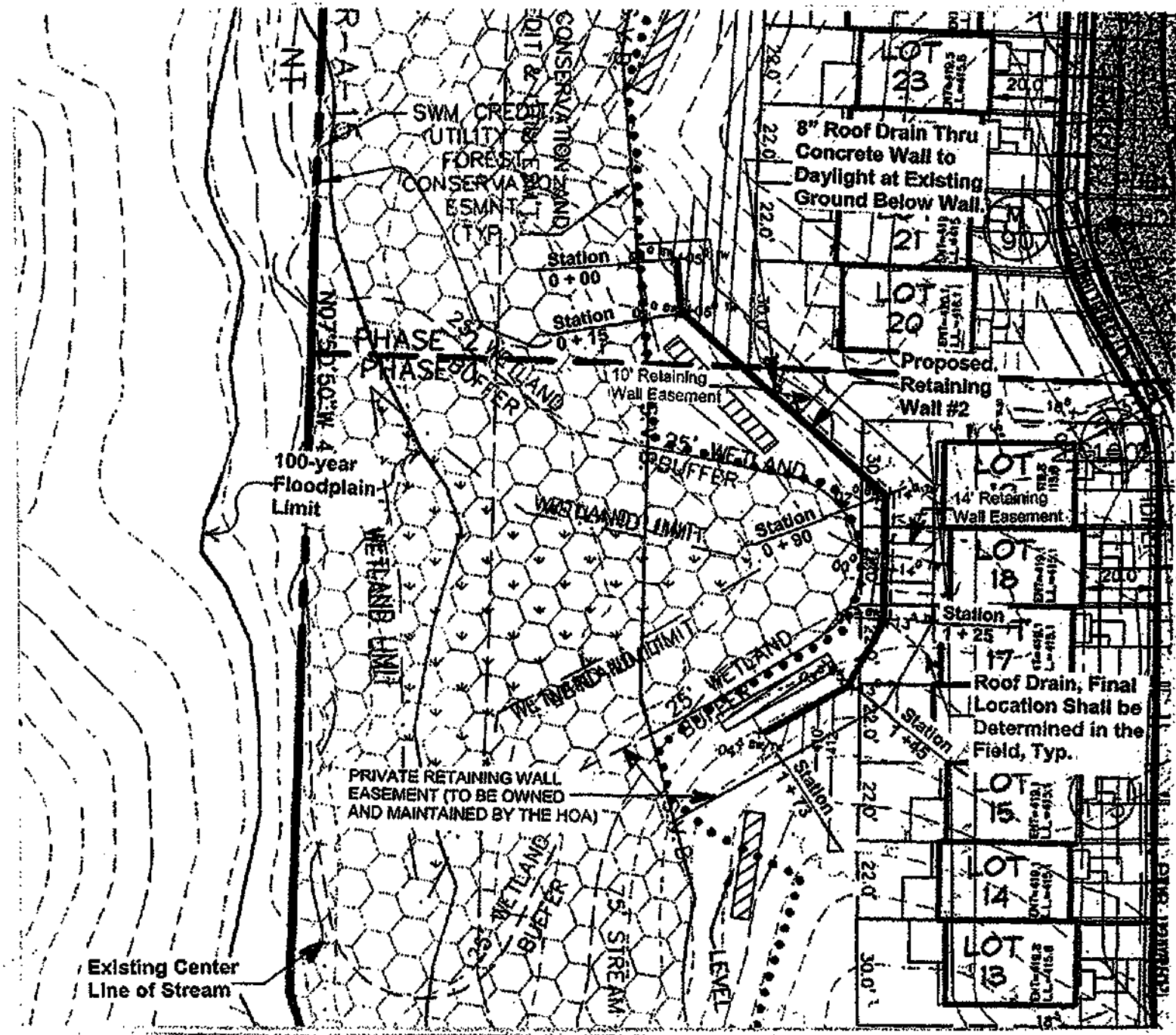
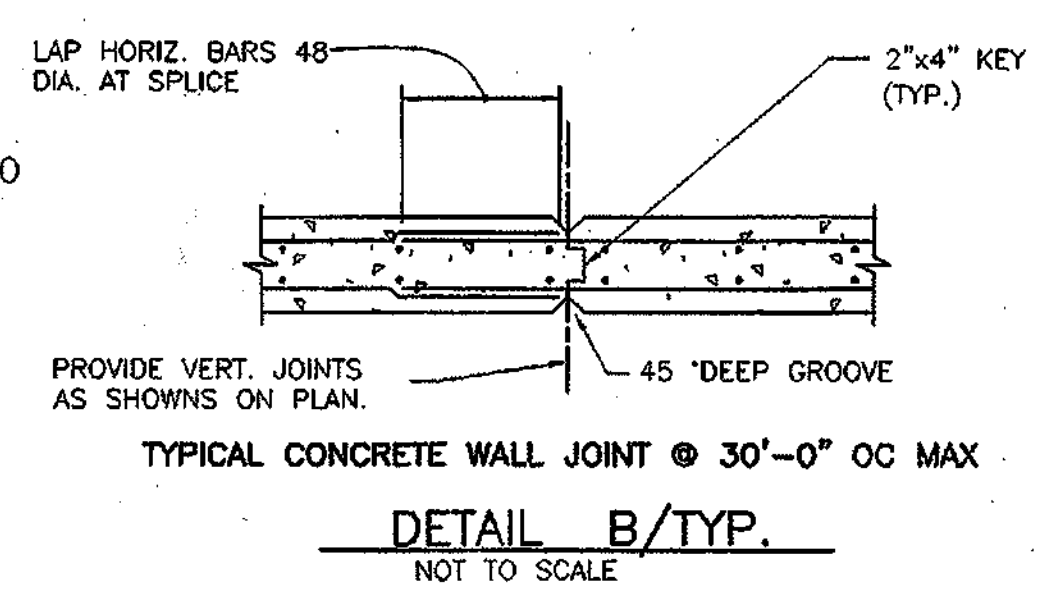
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 8-21-03
 CHIEF, BUREAU OF HIGHWAY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 9-11-03
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 9/9/03
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

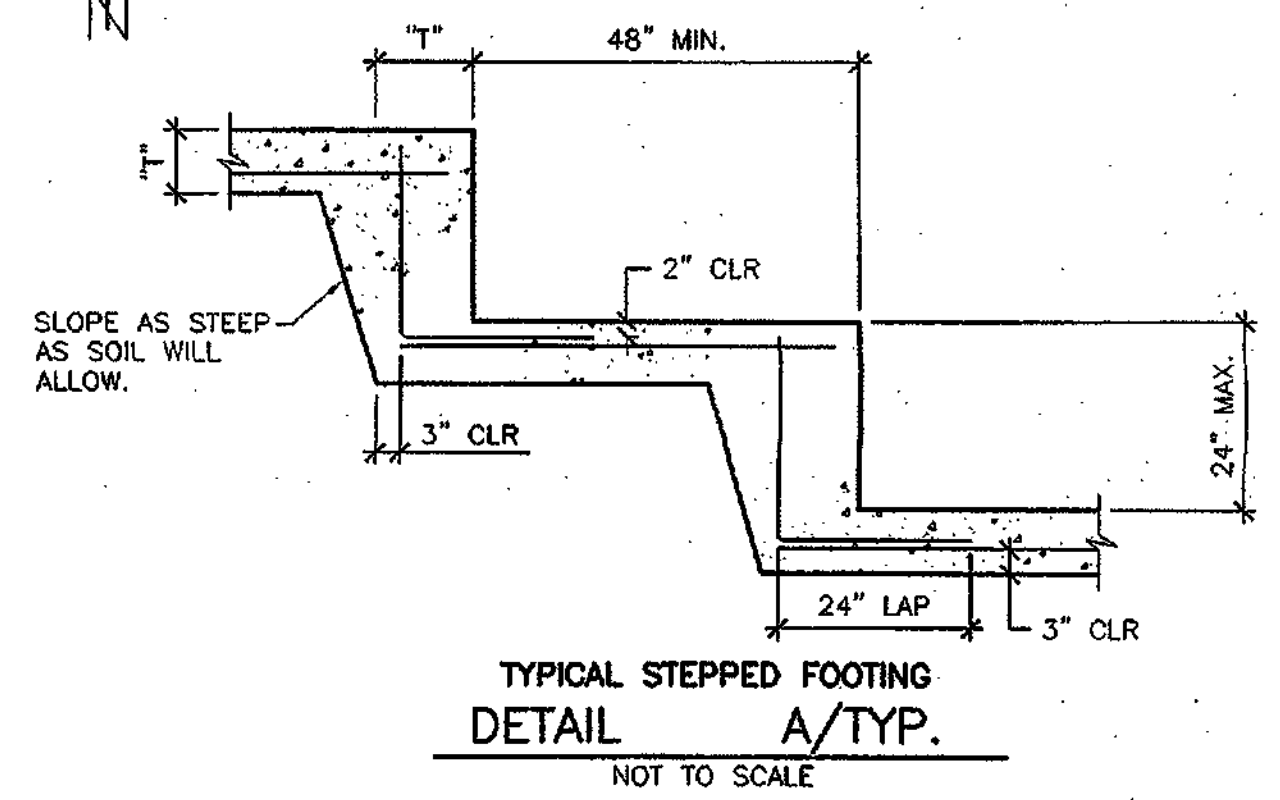


RETAINING WALL #2 - PROFILE
 HORIZONTAL SCALE: 1" = 10'
 VERTICAL SCALE: 1" = 5'



RETAINING WALL LOCATION PLAN
SCALE: 1" = 40'

- Notes:
- This location plan was adopted from the overall site plan prepared by Rodgers Consulting (Sheet 12 of 50).
 - No structures or trees are to be located within the retaining wall easement.



GEO TECHNICAL AND SUBSURFACE GENERAL NOTES

- MATERIALS**
- Controlled Fill**
Controlled fill soils to be placed behind the stone drainage layer in the concrete walls should be soils meeting the requirements of ASTM A-4 or more granular.
 - Filter Fabric**
Filter Fabric should be non-woven, polypropylene geotextile, 140 N manufactured by Nicolon Mirafi Group or approved equivalent.

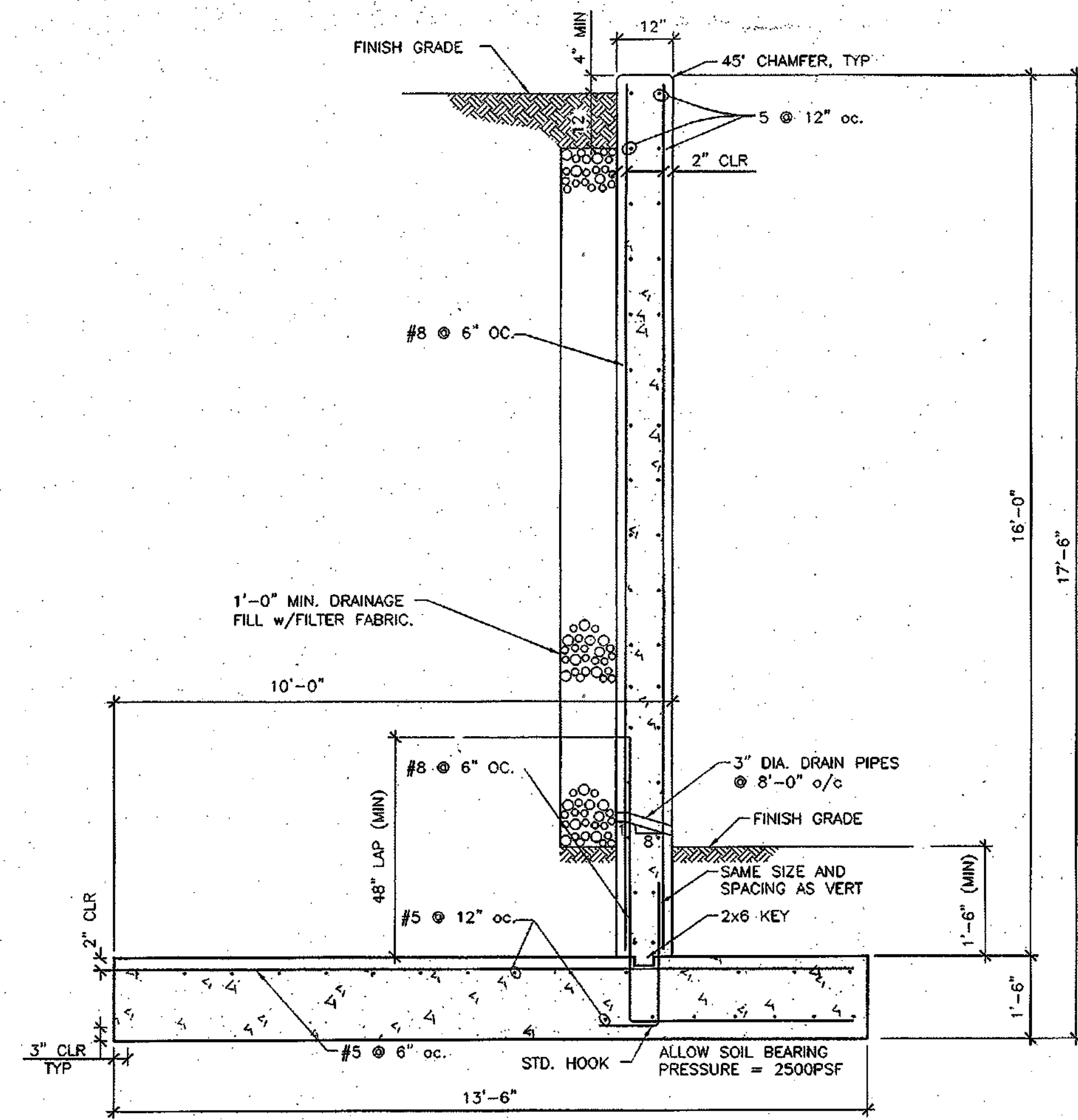
- EXECUTION**
- Sequence of Construction (Buffer Protection)**
 - The contractor should install the silt fence to establish the limit of disturbance (L.O.D.) as shown on the construction plans. The L.O.D. and all buffers must be maintained throughout wall construction.
 - The wall can likely be constructed from the backside using relatively compact equipment. At no time should any materials or construction equipment be stored outside the L.O.D. Equipment traffic should be confined to areas such that buffers are not disturbed.
 - Penetration testing should be performed on the leveling pad subgrade prior to the placement of stone and compaction testing should be performed on each lift of reinforced and controlled backfill as specified below.
 - Excavation**
 - The contractor should excavate to the lines and grades shown on the construction drawings. Under no circumstances should the excavation lines and grades be exceeded, except with owner's approval. The contractor should protect the excavation from sloughing by placing a membrane over the face of the excavation.
 - Excavations should be sloped or otherwise supported in accordance with Occupational Safety and Health Administration (OSHA) and other local and state regulations.
 - Foundation Subgrade Preparation**
 - Foundation soil should be excavated as required for installation of leveling pad, geogrid and other elements and as shown on the construction drawings.
 - Foundation soil should be examined by the Engineer to assure that the actual foundation soil strength meets or exceeds assumed design strength. Soils not meeting required strength should be removed and replaced with controlled, compacted material.
 - Over-excavated areas should be filled with select and approved material and compacted to 95 percent of maximum dry density in accordance with the Standard Proctor, ASTM D-998.
 - Allowable bearing pressure for natural and controlled, compacted fill soils should be as specified in Part 5.
 - The exposed foundation subgrade should be proofrolled with a loaded dump truck. Any soft or unstable areas identified during proofrolling should be overexcavated and backfilled with Controlled Fill.
 - Any fills required to establish sloping surfaces in front of the walls should consist of Controlled Fill and should be placed, compacted and field tested in accordance with the requirements specified herein.

- Fill Placement**
 - Wall backfill material should be placed in no more than 8-inch lifts and compacted to 95 percent of the Standard Proctor (ASTM D-998).
 - Backfill should be placed, spread, and compacted in such a manner that minimizes the development of wrinkles in and/or movement of the geogrid.
 - Only hand-operated compaction equipment should be allowed within 4 feet of the wall face.
 - Backfill should be placed from the wall outward to insure that the geogrid remains taut.
 - Tracked construction equipment should not be operated behind or above the wall.
 - Rubber-tired equipment may pass over the geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and sharp turning should be avoided.
 - Place filter fabric between the wall core fill and the reinforced backfill as shown on plans. The filter fabric should be embedded a minimum of two feet into the reinforced fill.
 - The finished sloping surface on the toe side of retaining walls should be protected by installing the permanent erosion control blanket and seeding in accordance with project requirements.

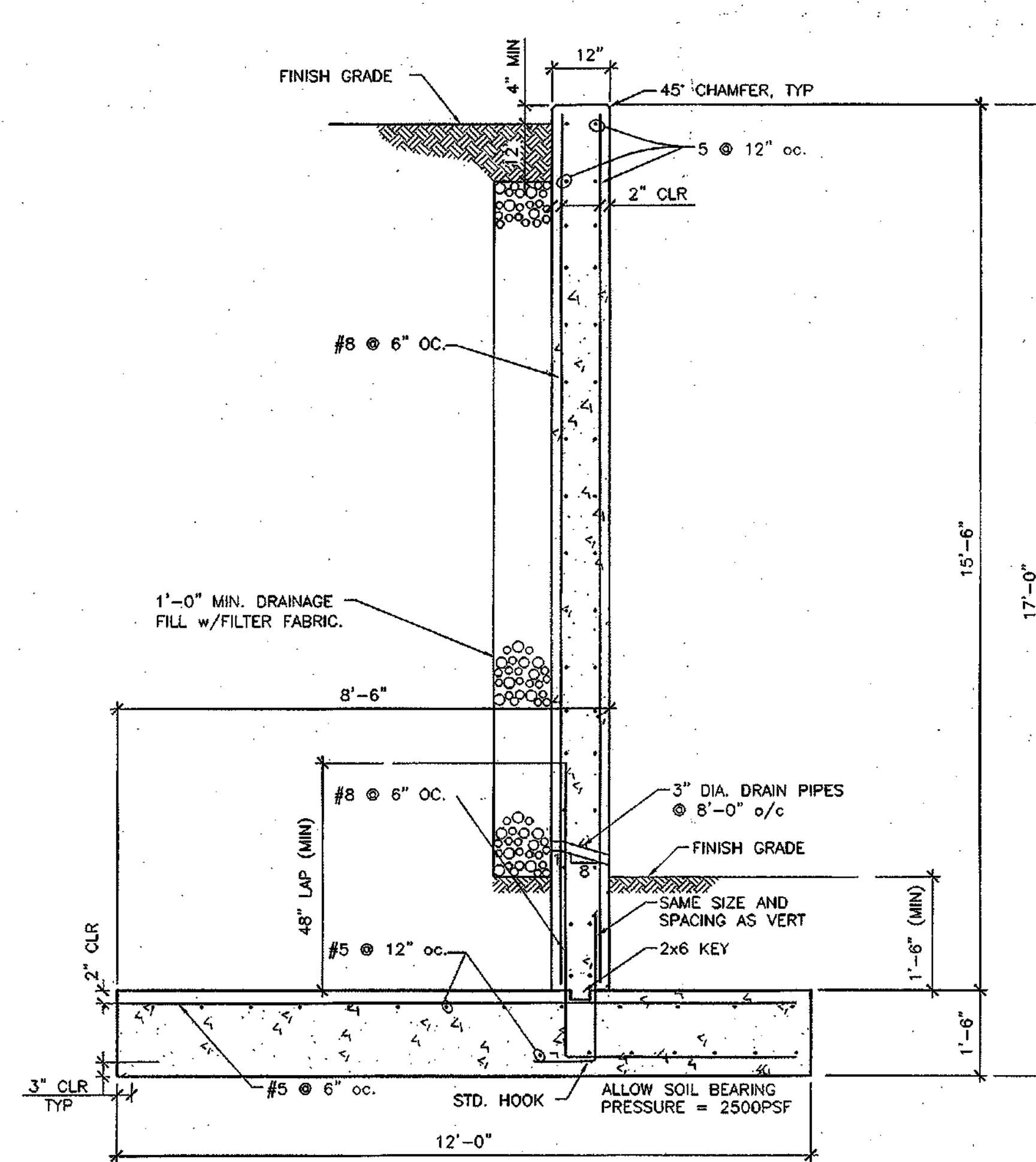
- DRAINAGE**
 - Drainage fill should be placed behind the wall to the limits shown. The drainage fill should be a minimum of 12-inches thick. The drainage fill should be ASTM #57 stone. The drainage fill should be wrapped in filter fabric (Minimum 140lb or equal) as shown on the drawings.
 - Positive drainage should be maintained during and after construction. Wall backfill soils that become wet during construction should be dried to optimum moisture content or removed.

- CONSTRUCTION OBSERVATION AND TESTING**
- 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. Test documentation must be provided to the county inspector prior to the start of construction. The required test procedure shall be the Dynamic Cone Penetrometer (DCP) Test ASTM S1P-399.
 - The suitability of fill material shall be confirmed by the on-site soils technician. Each 8-inch lift must be compacted to a minimum of 95% of the Standard Proctor Density and the testing reports shall be made available to the county inspector upon completion of construction.
 - For walls over 10'-0" in height, one (1) soil boring is required every 100' along the length of the wall, copies of the boring reports shall be provided to the inspector prior to the start of construction.

- DESIGN CRITERIA**
- Required minimum allowable foundation bearing pressure is 2,500 psf.
 - Design internal friction angle = 30 degrees.
 - Design moist unit weight = 125 pcf.
 - Retaining walls are not designed to resist hydrostatic pressure.
 - Foundation soil internal friction angle = 30 degrees and cohesion = 0 pcf.



WALL TYPE "A"



WALL TYPE "B"

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL "A", OPEN SPACE LOTS 120, 126, 194, AND NON-BUILDABLE BULK PARCELS "B" AND "C"

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. Miller 8-21-03
CHIEF, BUREAU OF HIGHWAY MS DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Kent Anderson 9/1/03
CHIEF, DIVISION OF LAND DEVELOPMENT JA DATE

Bob Damman 9/1/03
CHIEF, DEVELOPMENT ENGINEERING DIVISION PD DATE

GTA GEO-TECHNOLOGY ASSOCIATES, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
MRA MORRIS & RITCHE ASSOCIATES, INC. ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS

9090 Junction Drive, Suite 8
Annapolis Junction, MD 20704
(410) 782-8448 or (301) 470-4470
Fax (410) 782-7395

PHASE I, II AND III
 MONTJOY
 ELECTION DISTRICT NO. 2
 COLUMBIA, HOWARD COUNTY, MARYLAND
 TAX MAP: 30 GRID: 12 TRACER 260
 RETAINING WALL PLANS
 PROFILES & CROSS SECTIONS

DATE	REVISIONS	JOB NO.:
6/9/03	REVISED TO ADDRESS COUNTY COMMENTS	12233.03
8/3/03	REVISED TO ADDRESS COUNTY COMMENTS	SCALE: AS SHOWN
9/1/03	TITLE BLOCK REVISION PML DED	DATE: 12-17-02
		DRAWN BY: POP
		DESIGN BY: POP
		REVIEW BY: BES
		SHEET: 49 OF 50

STRUCTURAL NOTES

1. BUILDING CODES
 - A. ALL CONSTRUCTION SHALL CONFORM WITH THE IBC 2000 BUILDING CODE AND ALL SUBSEQUENT SUPPLEMENTS.
 - B. IN ADDITION, ALL CONSTRUCTION SHALL CONFORM WITH THE GOVERNING LOCAL BUILDING CODE.
2. MISCELLANEOUS
 - A. SHOP DRAWINGS FOR ALL STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DOCUMENTS MUST BE SUBMITTED BY THE CONTRACTOR OR OWNER FOR REVIEW BY THE ENGINEER. IF THE CONTRACTOR OR OWNER FAILS TO SUBMIT THE SHOP DRAWINGS, THE ENGINEER WILL NOT BE RESPONSIBLE FOR STRUCTURAL CERTIFICATION AND DESIGN OF THE PROJECT. THE SHOP DRAWINGS SHALL INDICATE ANY DEVIATIONS OR OMISSIONS FROM THE CONTRACT DOCUMENTS. THE GENERAL CONTRACTOR SHALL REVIEW ALL SHOP DRAWINGS PRIOR TO SUBMISSION AND MAKE ALL CORRECTIONS DEEMED NECESSARY.
 - B. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS SHOWN ON THE CONTRACT DRAWINGS BEFORE PROCEEDING WITH CONSTRUCTION. ALL DISCREPANCIES AND OMISSIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.
 - C. THE CONTRACTOR SHALL NOT SUBMIT REPRODUCTIONS OF THE STRUCTURAL CONTRACT DOCUMENTS AS SHOP DRAWINGS.
 - D. SCALES SHOWN ON THE STRUCTURAL CONTRACT DRAWINGS ARE FOR GENERAL INFORMATION ONLY. DIMENSIONAL INFORMATION SHALL NOT BE OBTAINED BY SCALING THE DRAWINGS.

RETAINING WALLS

- A. FOOTINGS FOR ALL RETAINING WALLS HAVE BEEN DESIGNED FOR AN ASSUMED NET ALLOWABLE SOIL BEARING PRESSURE OF 2500 PSF. THE ALLOWABLE SOIL BEARING PRESSURE SHALL BE FIELD VERIFIED BY A REGISTERED GEOTECHNICAL ENGINEER AND APPROVED PRIOR TO PLACING FOOTINGS. SHOULD THE ACTUAL SOIL BEARING PRESSURE BE LESS THAN 2500 PSF, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- B. RETAINING WALLS HAVE BEEN DESIGNED WITH BACKFILL MATERIAL HAVING THE FOLLOWING CHARACTERISTICS:

Gamma	=	125 PCF
Phi _L	=	30 DEGREES
K _a	=	.33
COHESION	=	0

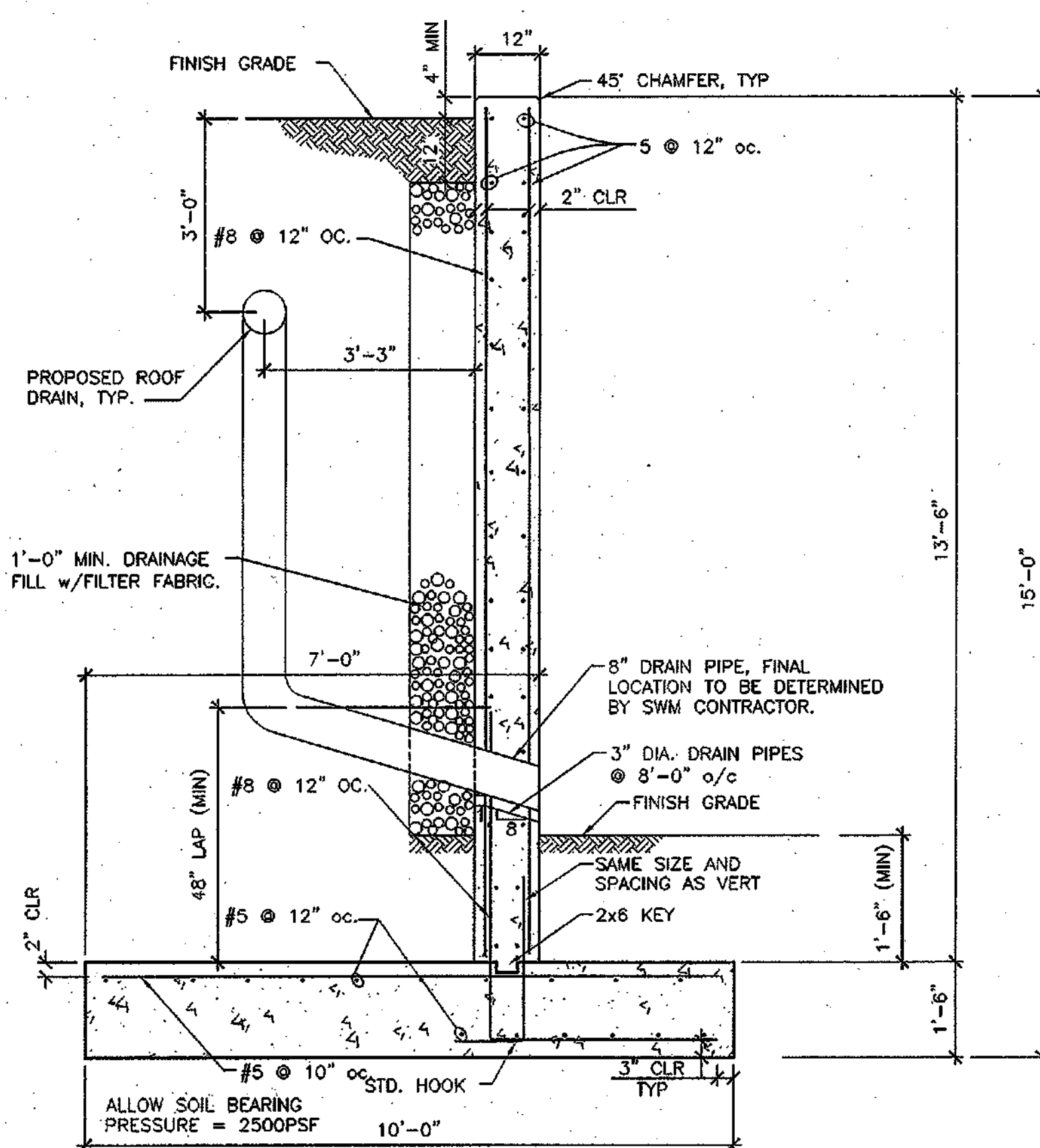
IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INSURE THE BACK FILL MATERIAL MEETS THESE CHARACTERISTICS.
- C. RETAINING WALLS HAVE BEEN DESIGNED FOR THE FOLLOWING MINIMUM FACTORS OF SAFETY:

SLIDING	1.5
OVERTURNING	2.0
- D. CONSTRUCTION OF ALL RETAINING WALLS SHALL BE PERFORMED UNDER THE SUPERVISION OF A REGISTERED GEOTECHNICAL ENGINEER. SEE GEOTECHNICAL AND SUBSURFACE GENERAL NOTES ON WD-3 FOR ADDITIONAL INFORMATION.

4. CAST IN PLACE CONCRETE

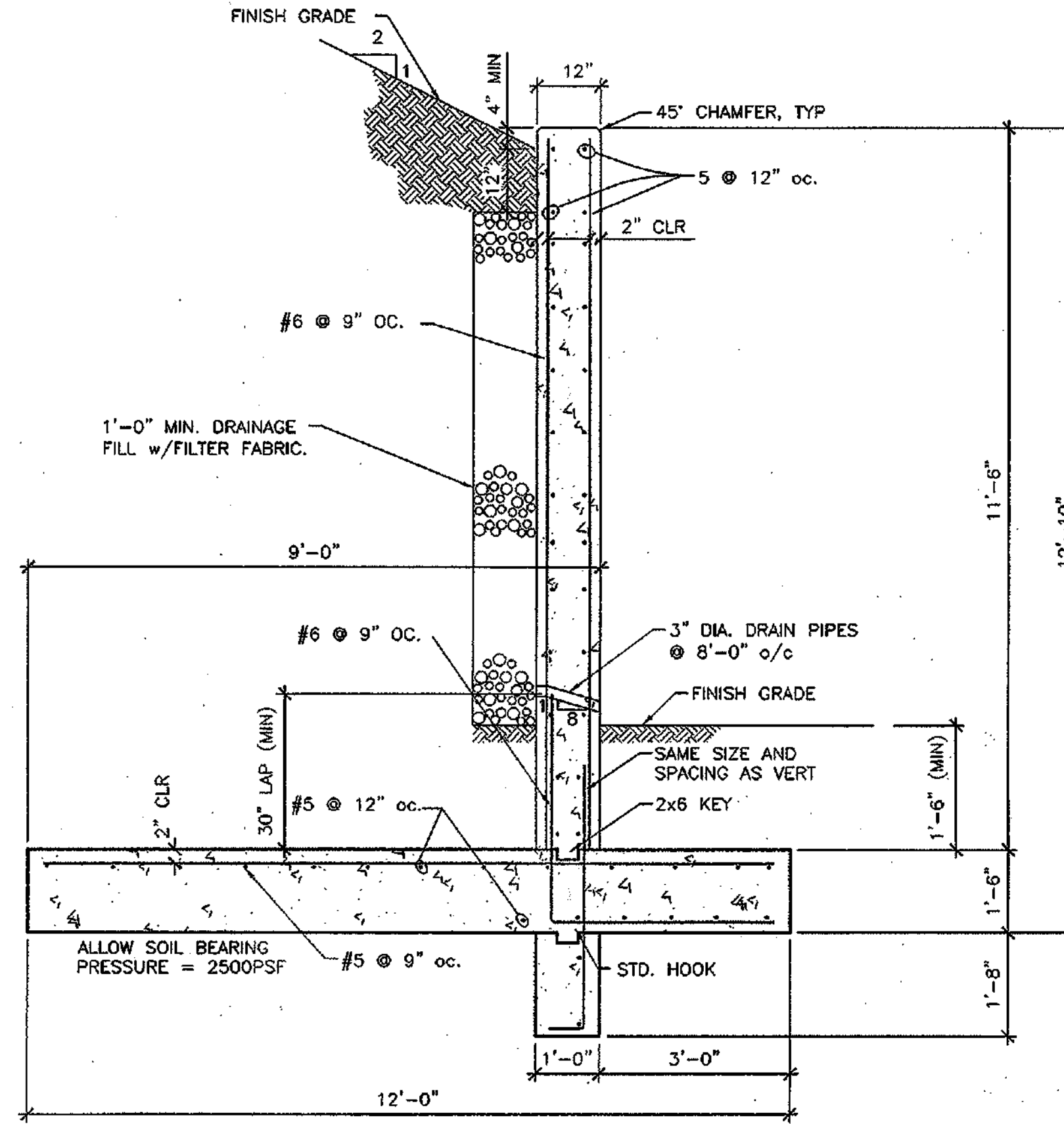
- A. ALL CONCRETE CONSTRUCTION SHALL CONFORM TO THE "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301)"; AND TO THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318)".
- B. IN ADDITION TO THE ABOVE, ALL CONCRETE WORK SHALL CONFORM TO THE FOLLOWING:
 1. RECOMMENDED PRACTICE FOR HOT WEATHER CONCRETING (ACI 305).
 2. RECOMMENDED PRACTICE FOR COLD WEATHER CONCRETING (ACI 308).
 3. RECOMMENDED PRACTICE FOR CONCRETE FORMWORK (ACI 347).
- C. ALL CONCRETE EXPOSED TO PUBLIC VIEW SHALL CONFORM TO THE REQUIREMENTS FOR ARCHITECTURAL CONCRETE CONTAINED IN ACI 301.
- D. ALL CONCRETE, UNLESS NOTED OTHERWISE, SHALL BE STONE AGGREGATE CONCRETE HAVING A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. ALL CONCRETE EXPOSED TO WEATHER SHALL HAVE AN AIR ENTRAINMENT OF 5% +/- 1%. NO ADMIXTURES CONTAINING CALCIUM CHLORIDE SHALL BE PERMITTED. MAXIMUM AGGREGATE SIZE SHALL BE 1", AND MAXIMUM SLUMP SHALL BE 4". 3" FOR SLABS ON GRADE. ALL CONCRETE, EXCEPT FOOTINGS, SHALL CONTAIN A WATER REDUCING ADMIXTURE. PORTLAND CEMENT SHALL CONFORM TO ASTM C 150 AND NORMAL WEIGHT AGGREGATES SHALL CONFORM TO ASTM C 33.
- E. ALL REINFORCING BARS SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A 615 GRADE 60. LAP ALL REINFORCING BARS A MINIMUM OF 36 BAR DIAMETERS, UNLESS OTHERWISE INDICATED.
- F. ALL REINFORCING SHALL BE DETAILED, FABRICATED AND PLACED IN ACCORDANCE WITH THE CRSI "MANUAL OF STANDARD PRACTICE", ACI 315' DETAILS AND DETAILING OF CONCRETE REINFORCEMENT", ACI SP 66 "DETAILING MANUAL".
- G. ALL CONCRETE MIX DESIGNS, INCLUDING CEMENT CONTENT, WATER CEMENT RATIO, FINE AND COARSE AGGREGATE CONTENT AND ALL ADMIXTURES, SHALL BE REVIEWED BY ENGINEER PRIOR TO PLACING FIRST CONCRETE.
- H. ALL CONCRETE SHALL BE SAMPLED AND TESTED BY THE TESTING AGENCY. THE CONTRACTOR SHALL NOTIFY THE TESTING AGENCY 48 HOURS PRIOR TO THE PLACING OF ANY CONCRETE.
- I. MINIMUM COVER FOR ALL REINFORCING SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:

FOUNDATIONS	3 INCHES
WALLS BELOW GRADE	2 INCHES



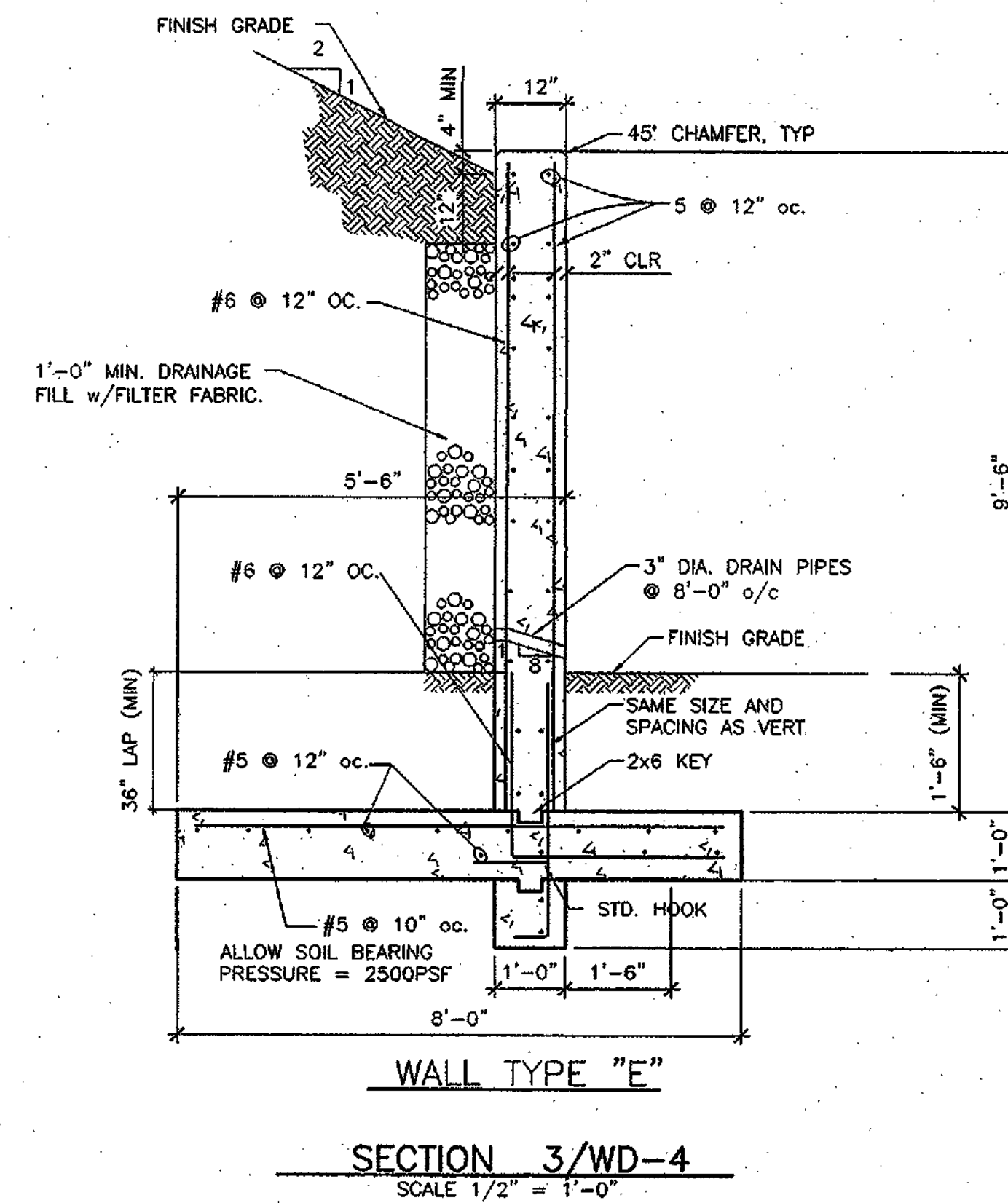
WALL TYPE "C"

SECTION 1/WD-4
SCALE 1/2" = 1'-0"



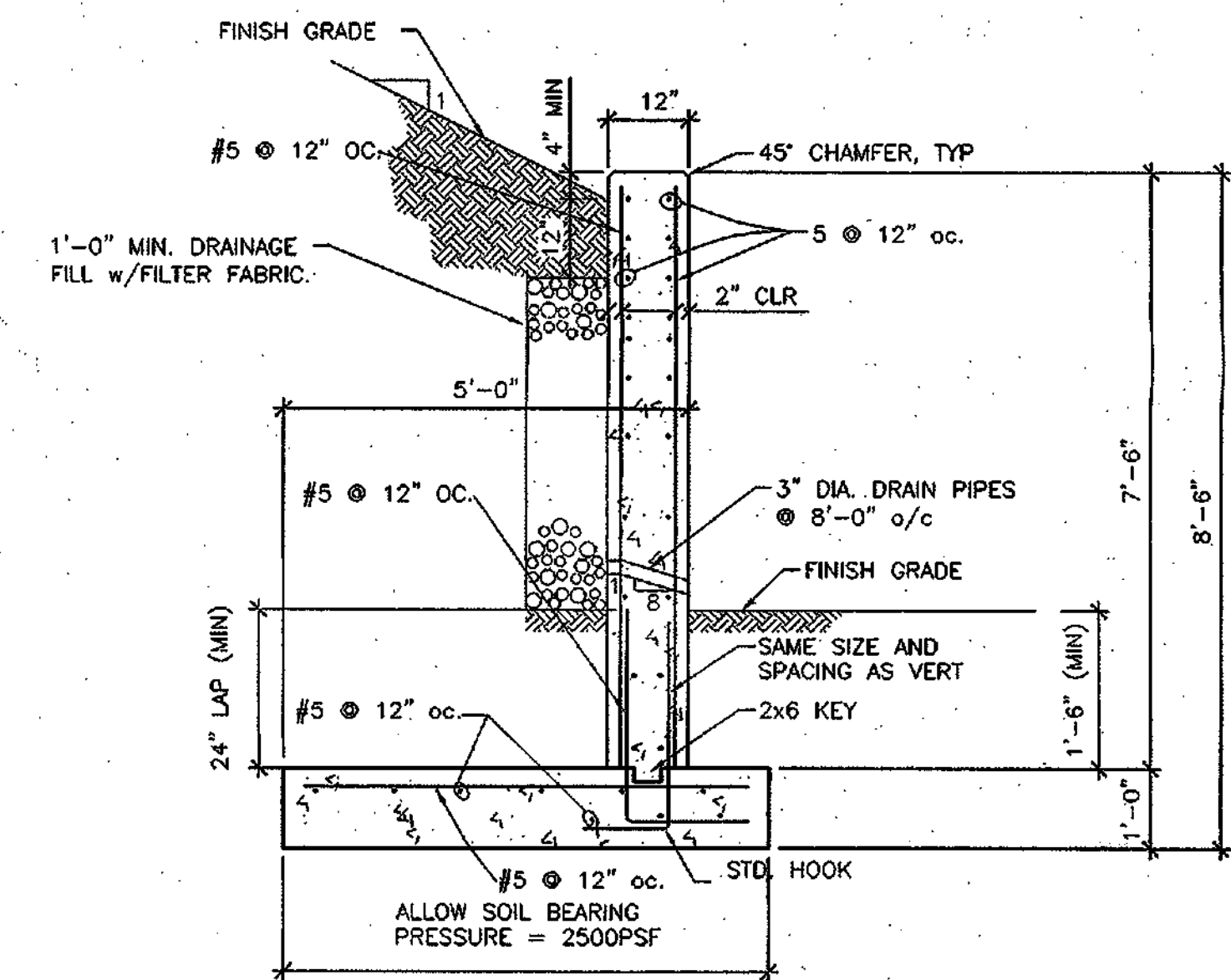
WALL TYPE "D"

SECTION 2/WD-4
SCALE 1/2" = 1'-0"



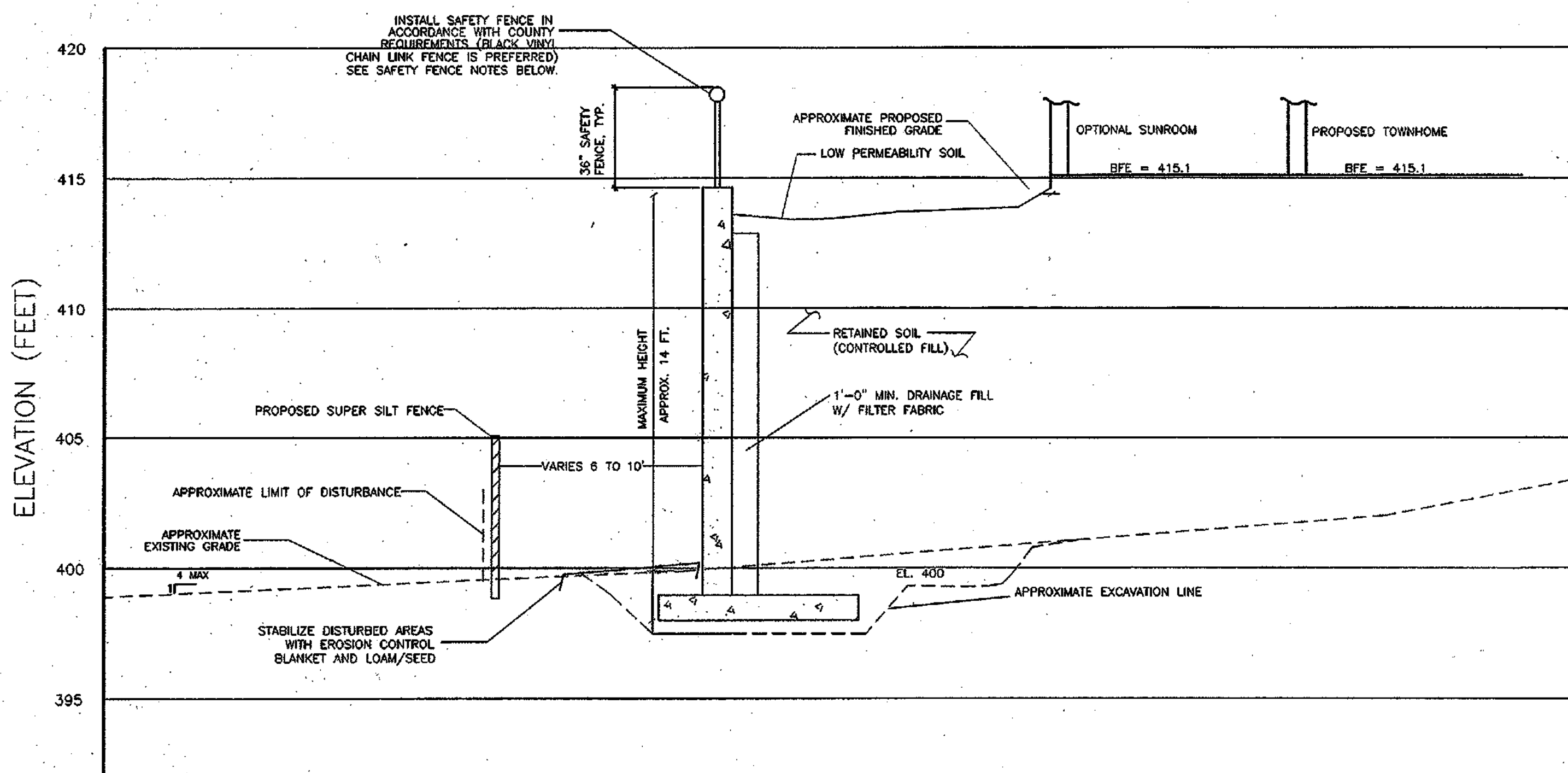
WALL TYPE "E"

SECTION 3/WD-4
SCALE 1/2" = 1'-0"



WALL TYPE "F"

SECTION 4/WD-4
SCALE 1/2" = 1'-0"



TYPICAL CROSS SECTION 5/WD-4

HORIZONTAL SCALE: 1/4" = 1'-0"
VERTICAL SCALE: 1/4" = 1'-0"

SAFETY FENCE NOTES:
1. The fence should be a minimum of 36 inches in height.
2. The openings in the fence must be small enough to prevent the passage of a four-inch diameter sphere.
3. The fence posts should be properly secured in concrete footings in accordance with the manufacturer's requirements.

* BUILDABLE LOTS 1-119 AND BUILDABLE BULK PARCEL 'A',
OPEN SPACE LOTS 120-126, 194 AND
NON-BUILDABLE BULK PARCELS 'B' AND 'C'

GTA	GEO-TECHNOLOGY ASSOCIATES, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS MORRIS & RITCHIE ASSOCIATES, INC. ENGINEERS, ARCHITECTS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS 8080 Junction Drive, Suite 8 Annapolis Junction, MD 20701 (410) 792-9440 or (201) 670-4470 Fax: (410) 792-7385	MRA
------------	--	------------

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Walter T. Mahan</i> CHIEF, BUREAU OF HIGHWAY	8-21-03 DATE	* PHASE I, II AND III MONTJOY ELECTION DISTRICT NO. #2 COLUMBIA, HOWARD COUNTY, MARYLAND TAX MAP: 30 GRID: 12 PARCEL 260 RETAINING WALL PLANS PROFILES & CROSS SECTIONS
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING <i>Walter T. Mahan</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9-11-03 DATE	DATE REVISIONS 6/9/03 REVISED TO ADDRESS COUNTY COMMENTS 8/3/03 REVISED TO ADDRESS COUNTY COMMENTS 9/4/03 TITLE BLOCK REVISION FOR DEED
		JOB NO.: 12233.03 SCALE: AS SHOWN DATE: 12-17-02 DRAWN BY: POP DESIGN BY: POP REVIEW BY: BES SHEET: 50 OF 50