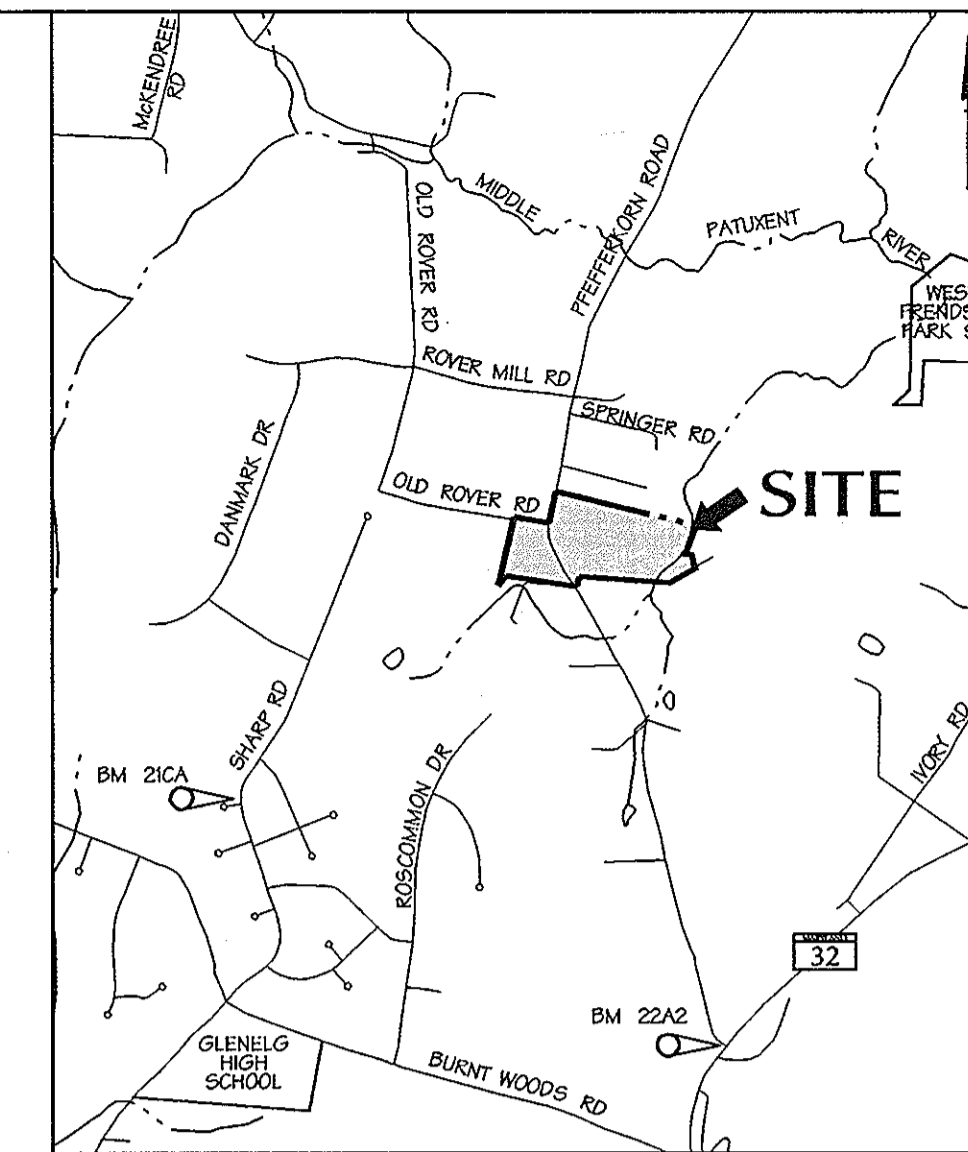


Legend

WETLAND
25' WETLAND BUFFER
HEAD OF STREAM
STREAM BANK
PUBLIC 100 YEAR FLOOD PLAN DRAINAGE AND UTILITY EASEMENT
15' RCP CL.V
EX. CURB & GUTTER
EX. MAJOR CONTOURS
EX. MINOR CONTOURS
PROP. STORM DRAIN
EX. STORM DRAIN
UTILITY EASEMENTS
LIMIT OF DISTURBANCE
PROPOSED SHADE TREE
PROPOSED FLOWERING TREE
PROPOSED EVERGREEN TREE
PROPOSED STREET TREE
SOIL LABEL
SOIL BOUNDARY
SLOPES >25%
SLOPES 15%-25%
EX. FOREST EDGE
SCRUBSHRUB, HEDGEROW OR TREE GROUP
PROPOSED WOODS EDGE
NON-WOODY VEGETATION BUFFER
FOREST CONSERVATION EASEMENT LINE
REFORESTATION AREA
EARTH/DIVERSION DIKE
SILT FENCE
SUPER SILT FENCE
CLEAN WATER DIVERSION PIPE
LIMIT OF DISTURBANCE
MOUNTABLE BERM
CURB INLET PROTECTION
AT GRADE INLET PROTECTION
STABILIZED CONSTRUCTION ENTRANCE
PERMANENT SWALE
PROPOSED SWM EASEMENT
PROPERTY LINE
ROADWAY RIGHT-OF-WAY
PROPOSED LOT LINE
EXISTING CONDITION DRAINAGE AREA TO TRAPS AND BASINS
INTERIM CONDITION DRAINAGE AREAS
PROPOSED CONDITION DRAINAGE AREAS
EXISTING CONDITION TO PATH
PROPOSED CONDITION TO PATH
SOIL BORING
100 YR. FLOODPLAIN

Final Plan for Fox Meadow (Formerly Pfefferkorn Property)

Howard County Maryland



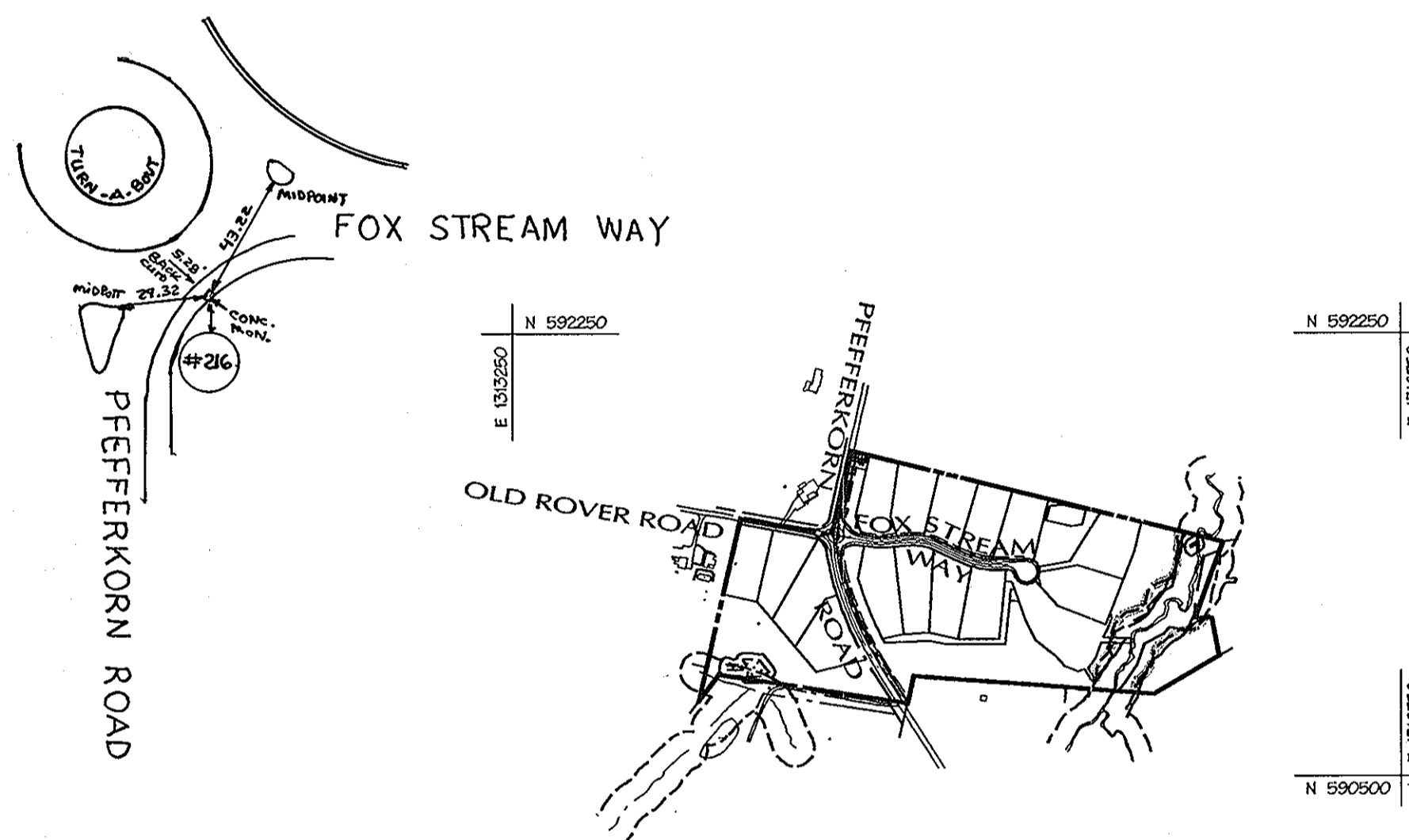
VICINITY MAP
SCALE: 1" = 2,000'

Benchmark Description

- 21CA - Standard Howard County stamped disk set in a concrete monument southwest of the intersection of Sharp Road and Our Mile Court. Elev. - 612.65 ft.
- 22A2 - Standard Howard County stamped disk set in a concrete monument southwest of the intersection of Maryland Route 32 and Pfefferkorn Road. Elev. - 620.18 ft.

RIGHT-OF-WAY ELEVATION CHART NAD 83

R/W POINT NO.	DESCRIPTION	ELEVATION
200	REBAR / CAP	551.93'
201	REBAR / CAP	554.10'
208	REBAR / CAP	558.04'
209	REBAR / CAP	558.51'
210	REBAR / CAP	560.45'
211	REBAR / CAP	559.69'
212	REBAR / CAP	559.38'
38	REBAR / CAP	552.77'
718	REBAR / CAP	532.48'
114	REBAR / CAP	530.45'
216	CONC. MON.	560.88'
217	REBAR / CAP	560.49'
218	REBAR / CAP	561.48'
13	REBAR / CAP	562.78'
12	REBAR / CAP	531.28'
11	REBAR / CAP	536.06'
8	REBAR / CAP	536.82'
7	REBAR / CAP	537.65'
205	REBAR / CAP	558.51'
206	REBAR / CAP	554.99'
204	REBAR / CAP	557.52'
203	REBAR / CAP	560.22'
202	REBAR / CAP	560.68'
201	REBAR / CAP	562.13'
6	REBAR / CAP	561.77'
214	REBAR / CAP	561.31'
213	REBAR / CAP	560.98'
22	REBAR / CAP	544.79'
23	REBAR / CAP	533.74'
29	REBAR / CAP	551.45'
30	REBAR / CAP	553.33'
20	REBAR / CAP	559.16'
28	REBAR / CAP	546.07'
27	REBAR / CAP	534.11'
26	REBAR / CAP	530.75'
21	REBAR / CAP	550.24'
215	REBAR / CAP	561.05'



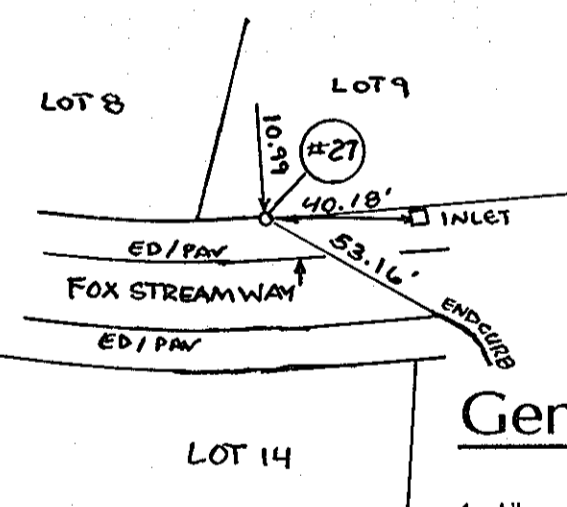
Overall Property Outline
Scale: 1"=600'

Sheet Index

SHEET	DESCRIPTION
1	COVER SHEET
2	FINAL ROAD PLAN & PROFILE - FOX STREAM WAY
3	ROAD DETAILS
4	ROAD SIGNAGE AND PAVEMENT MARKING PLAN
5	TRAFFIC CONTROL PLAN
6	TRAFFIC CONTROL PLAN
7	DRAINAGE AREA MAP
8	STORM DRAIN PROFILE
9	SEDIMENT AND EROSION CONTROL PLAN
10	SEDIMENT AND EROSION CONTROL DETAILS
11	SEDIMENT AND EROSION CONTROL SPECIFICATIONS
12	DRAINAGE AREA MAP - SWM EXISTING CONDITIONS
13	DRAINAGE AREA MAP - SWM PROPOSED CONDITIONS
14	STORMWATER MANAGEMENT PLAN
15	STORMWATER MANAGEMENT PROFILES
16	STORMWATER MANAGEMENT - FACILITY 2 PLAN & DETAIL
17	STORMWATER MANAGEMENT DETAILS
18	STORMWATER MANAGEMENT SPECIFICATIONS
19	FOREST CONSERVATION PLAN
20	FOREST CONSERVATION PLAN
21	FOREST CONSERVATION NOTES AND DETAILS
22	STREET TREE & SWM POND PLANTING PLAN
23	PERIMETER LANDSCAPE PLAN
24	LANDSCAPE NOTES AND DETAILS

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
APPROX. WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2000. OFF-SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William J. Walker</i>	4/13/04
CHIEF, BUREAU OF HIGHWAYS	DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>William J. Walker</i>	4/28/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Linda Hamrick</i>	4/28/04
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE



General Notes

- All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
- The contractor shall notify the Department of Public Works/Bureau of Engineering/Construction Inspection division at 410-313-1880 at least five (5) working days prior to the start of work.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs be in place prior to the placement of any asphalt.
- All plan dimensions are to face of curb unless otherwise noted.
- The existing topography is taken from aerial survey with 2' contour intervals prepared by Virginia Resources Mapping, dated December 2001.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System, Howard County Monument Nos. 21CA and 22A2 were used for this project.
- Water is private
- Sewer is private
- Water quality is met by micro pool, bioretention and natural area conservation credits. Recharge is met by a grass swales along the proposed road along the south edge of lots 11-14 and behind Lots 1 and 16. Channel protection volume is met by extended detention of the 1-year storm in the swm facilities and by natural area conservation credits.
- 95% compaction in fill area will be in accordance with AASHTO - T160.
- The floodplain study for this project was prepared by Daft-McCune-Walker, Inc., dated March 2002, and was approved in June 2002.
- The wetlands delineation study for this project was prepared by Daft-McCune-Walker, Inc.
- The traffic study was prepared by Wells & Associates, and was approved on October 2, 2000.
- Project background information:
Subdivision Name: Fox Meadow
Tax Map: 15
Lot: Parcel 167
Zoning: RR & RC
Election District: 3rd
Total Tract Area: 32.2± acres
Preliminary Plan Approval Date: OCTOBER 2, 2002
File Number: P-02-13, S-00-16
- Street light placement and the type of fixture and pole shall be in accordance with the Howard County Design Manual, Volume III (1993) and as modified by "Guidelines for Street Lights in Residential Developments (June 1993)". A minimum spacing of 20' shall be maintained between lights and any tree.
- Street trees shall be planted at least 5' from any inlet structure.
- Storm water management facilities to be owned by the Home Owners Association (HOA, PARCEL C) - FACILITY ON (PARCEL B) TO BE PUBLIC.
- Maintenance Responsibility, routine and non-routine schedule are shown on sheet 19 of 24. The SWM facilities are to be jointly maintained by Howard Co. and the HOA - routine maintenance by HOA and non-routine by Howard County.
- The outfall from the stormwater management facility is a necessary disturbance to the floodplain/stream buffer.
- The MPE permit number is 200360320.

Donald Mason
AS-BUILT 1-16-07

TRACKING No. 200560280
3-25-04
Date
Professional Engr. No. 10551

DMW
Daft-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

FOX MEADOW
(FORMERLY PFEFFERKORN PROPERTY)
COVER SHEET

Des By: Scale: 1"=600' Proj. No. 00042.B
Dwn By: KDE Date: 1/7/04
Chk By: Approved 1 OF 24

SBARRA MARK G
MONTGOMERY CATHEEN A JIT
33321 406
P.160.5
ZONE: RR-DEO

CURVE DATA					
CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT	CHORD
1	14°07'10"	280.00'	69.00'	34.68'	S 86°13'11" E 68.83'
2	29°3'15"	200.00'	102.00'	52.13'	S 79°10'08" E 100.90'
3	26°59'48"	295.00'	139.00'	70.81'	S 78°03'26" E 137.72'
4	260°01'06"	40.00'	181.53'	-1.00'	S 38°27'13" W 61.28'
5	80°01'06"	35.00'	48.88'	29.38'	N 51°32'47" W 45.00'

NOTE:
SEE LANDSCAPE PLAN
SHEET 17 FOR STREET TREES.

Donald Moon
PROFESSIONAL ENGINEER
AS-BUILT 1-16-07

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Walker 4-13-04
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
William J. Walker 4/28/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Catherine 4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

1-12-07 REVISED PER AS-BUILT CONDITIONS
6-11-04 REVISED LOT NUMBERS
Date No. Revision Description

OWNER: NORTH RIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELF RIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff-McCune-Walker, Inc.
209 East Pennsylvania Avenue
Towson, Maryland 21286
410 294-3333
Fax 410-294-4708

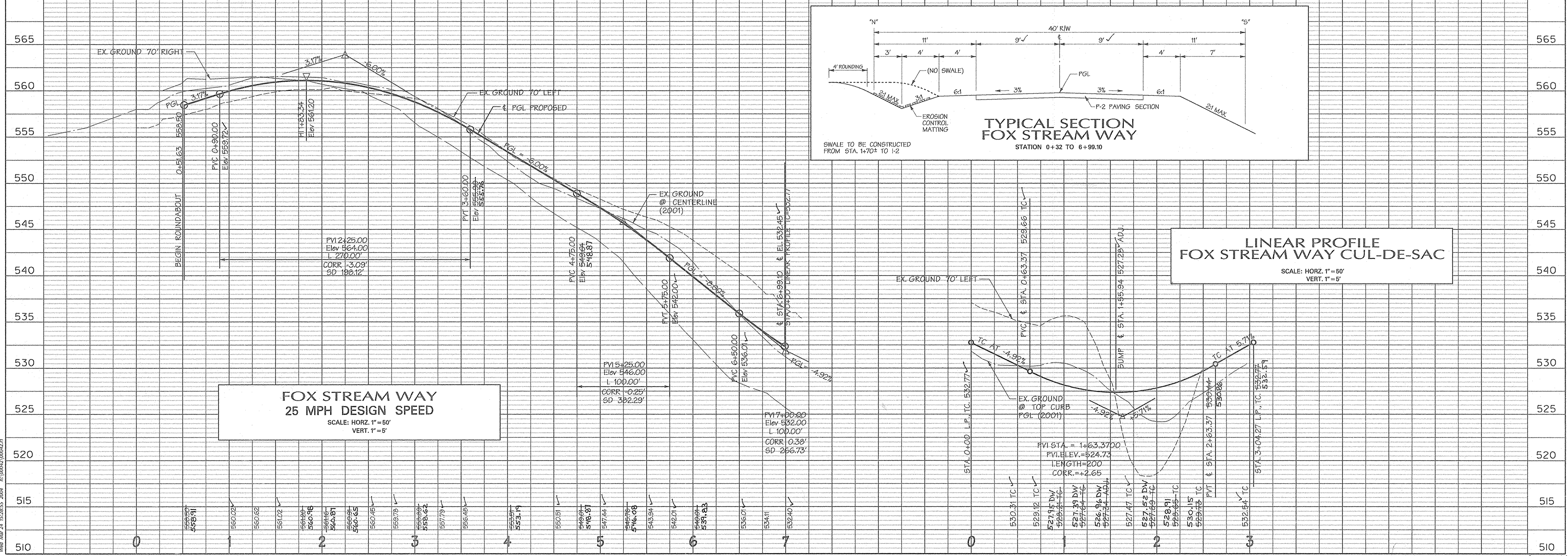
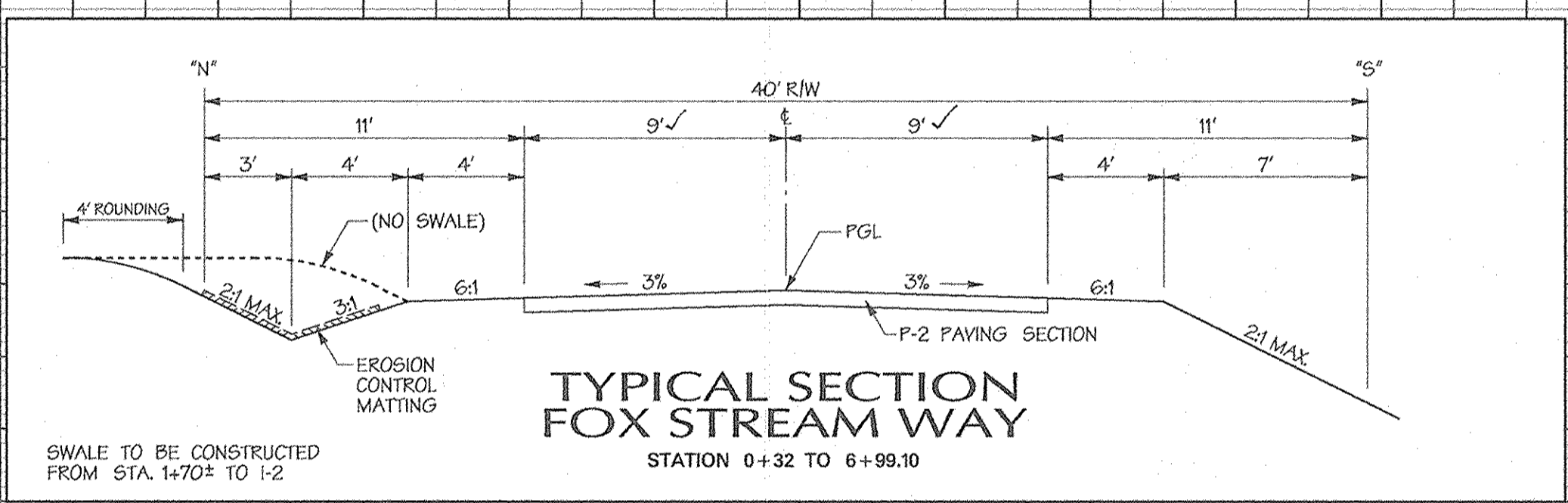
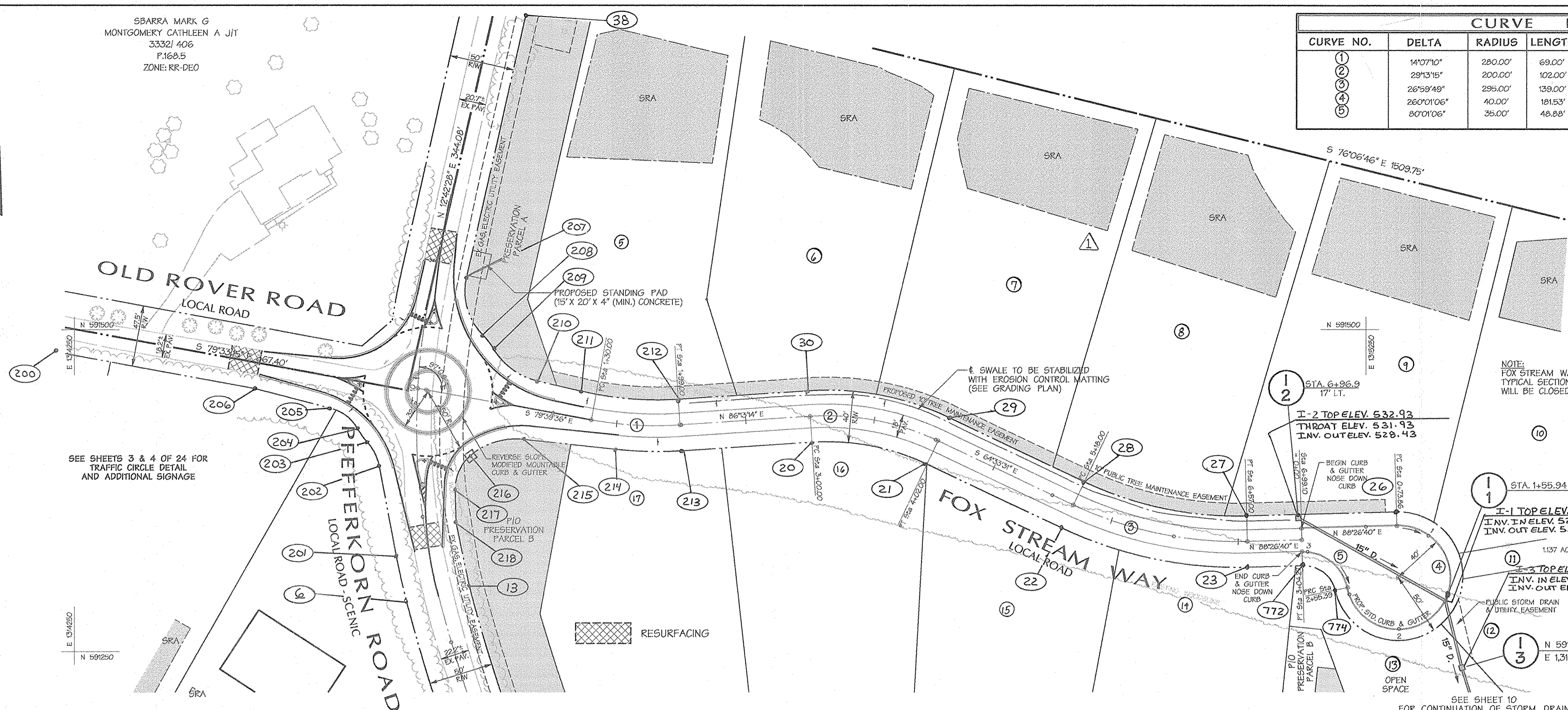
A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SUBMISSION NAME: FOX MEADOW
SECTION/AREA: 1
LOT/FACEL: 167

DATE: 3-25-04

TITLE: FOX MEADOW
(FORMERLY PFEFFERKORN PROPERTY)
Final Road Plan and Profile
Fox Stream Way

Des By: DFM Scale: 1"=50' Proj. No. 00042.B
Dwn By: WDE Date: 1/7/04
Chk By: Approved 2 OF 24

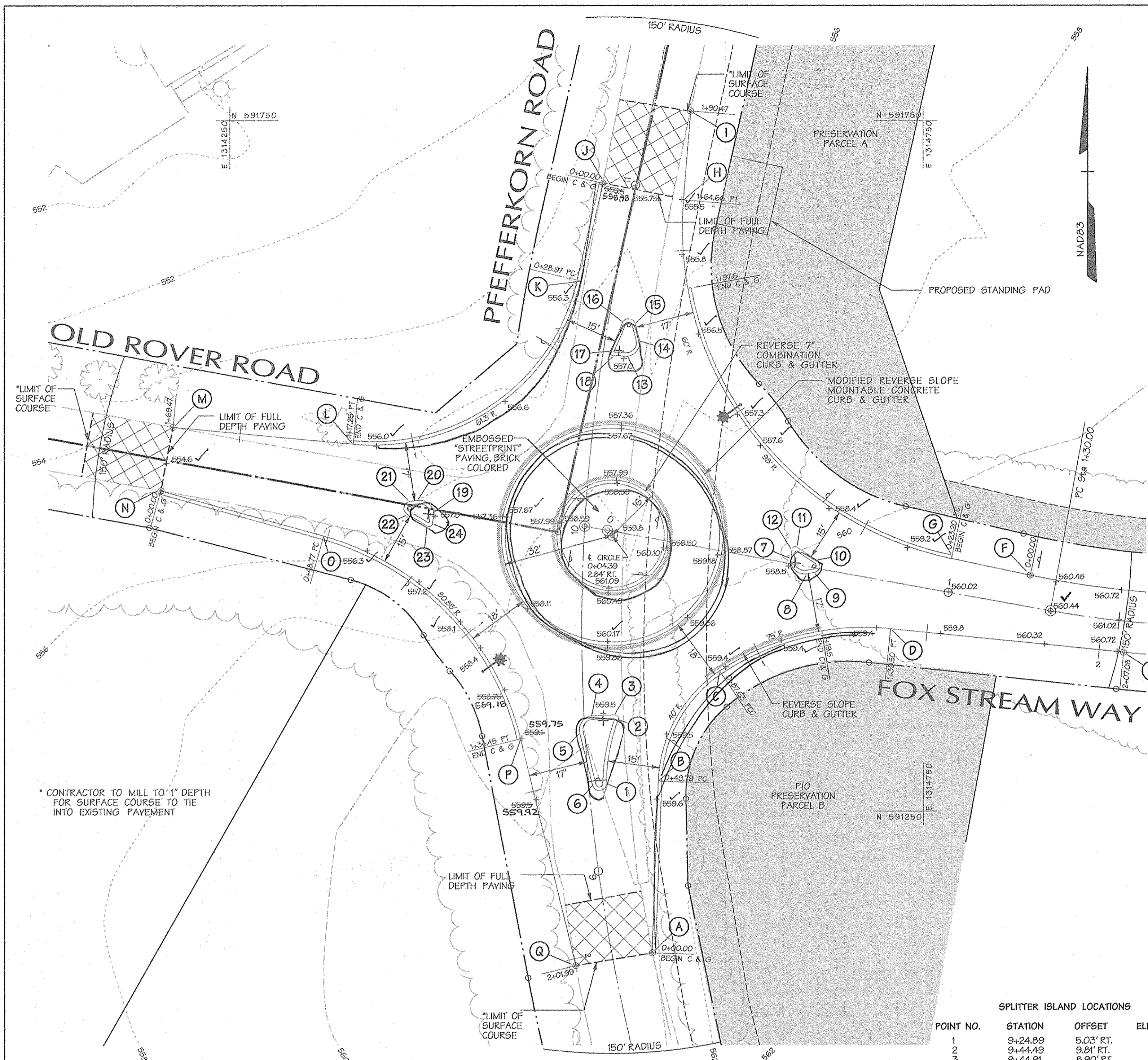


**LINEAR PROFILE
FOX STREAM WAY CUL-DE-SAC**
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

Wed Mar 24 15:28:55 2004 n:\00042\00042.dwg

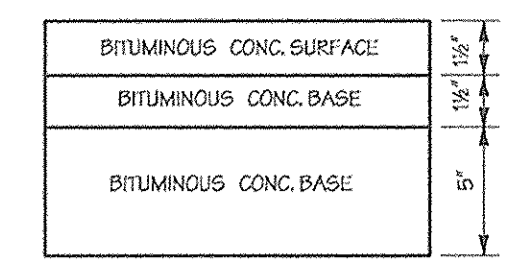
Wed Mar 24 15:28:55 2004 n:\00042\00042.dwg

F.03.45



TRAFFIC CIRCLE DETAIL
SCALE: 1" = 20'

NOTE:
REMOVE TREES WITHIN RIGHT-OF-WAY AS DIRECTED BY THE HOWARD COUNTY TRAFFIC DIVISION FOR SIGHT DISTANCE, SIGNAGE, AND LIGHTING.



FULL DEPTH ALTERNATE

BITUMINOUS CONC. SURFACE
1 1/2" ±

BITUMINOUS CONC. BASE
1" ±

BITUMINOUS CONC. BASE
5"

GRANULAR BASE ALTERNATE

BITUMINOUS CONC. SURFACE
1 1/2" ±

BITUMINOUS CONC. BASE
4 1/2" ±

PRIME
1"

5" GRADED AGGREGATE BASE (GAB)
5"

PAVING SECTION P-3 MINOR & MAJOR COLLECTORS

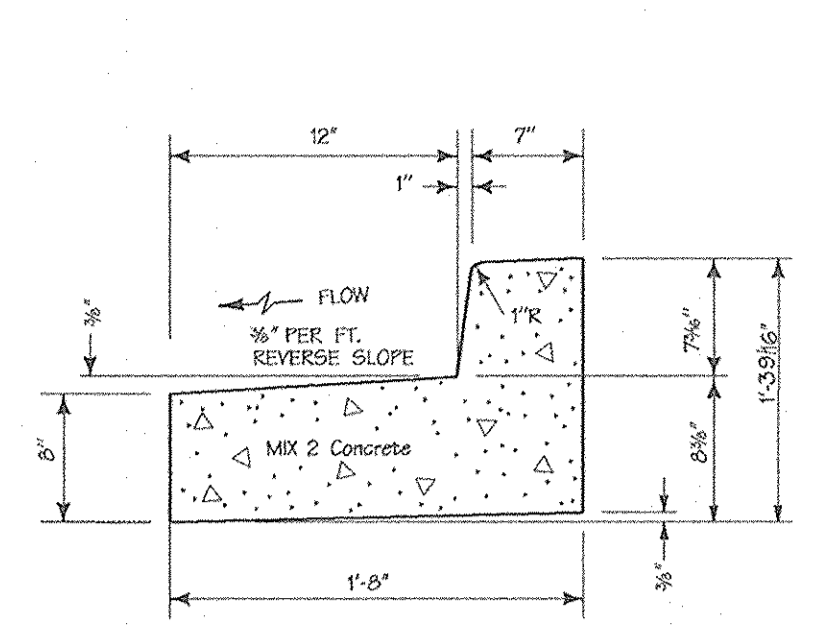
NO SCALE

STREET LIGHT LEGEND

350 WATT HIGH PRESSURE SODIUM (HPS) VAPOR PENDANT (BAG) MOUNTED AT 30' ON A BRONZE FIBERGLASS POLE USING A 12 ARM

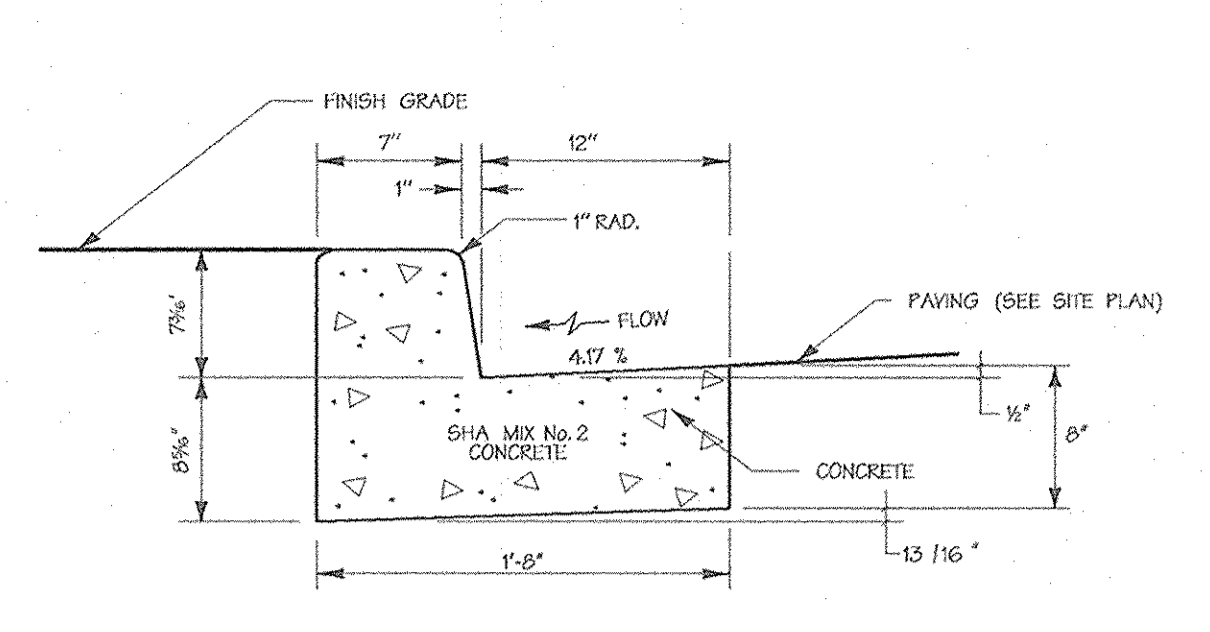
STREET LIGHT TABLE

DWG. No.	STREET NAME	STATION	OFF-SET	FIXTURE / POLE TYPE	COMMENTS
3	PFEFFKORN ROAD	9+60	30' LT.	—	
3	PFEFFKORN ROAD	10+41	38' RT.	—	



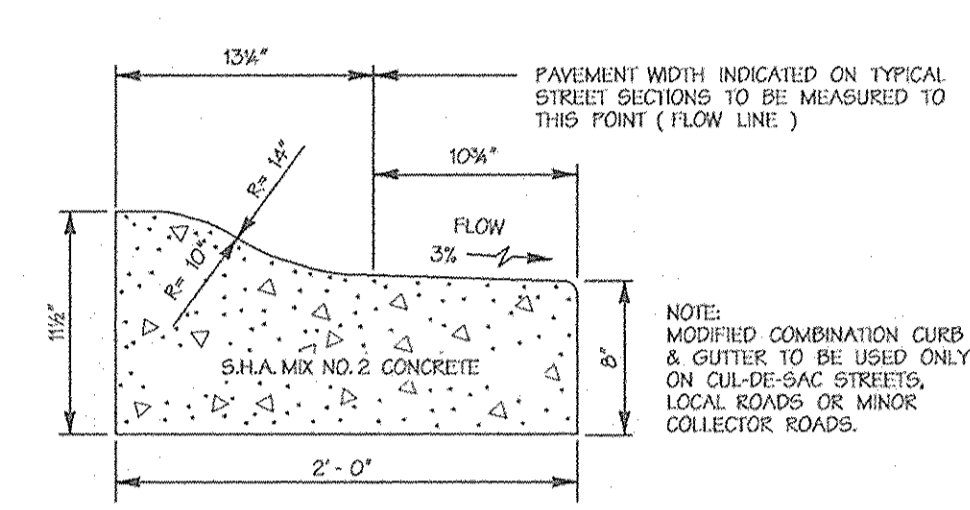
REVERSE 7" COMBINATION CURB & GUTTER

NO SCALE



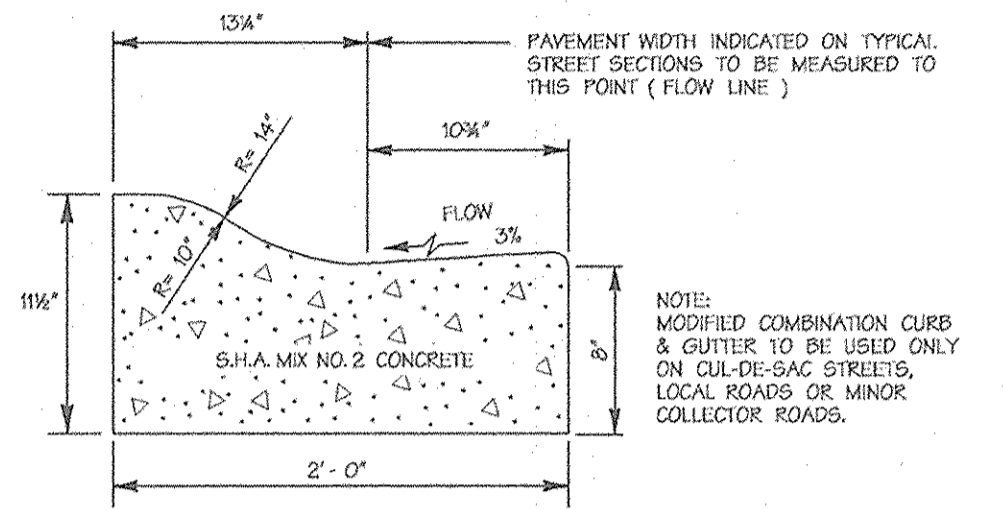
SECTION TYPE 'A' CURB AND GUTTER

NO SCALE



MODIFIED REVERSE SLOPE MOUNTABLE CONCRETE CURB & GUTTER

NO SCALE



MODIFIED MOUNTABLE CONCRETE CURB & GUTTER

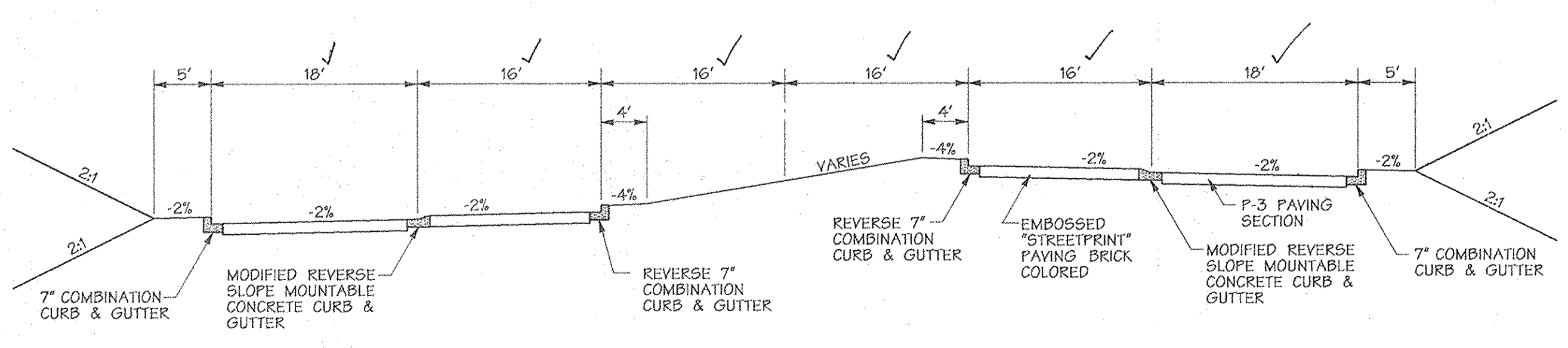
NO SCALE

SPLITTER ISLAND LOCATIONS

POINT NO.	STATION	OFFSET	ELEVATION
1	9+24.89	5.02' RT.	559.8
2	9+44.49	9.81' RT.	559.6
3	9+44.91	8.90' RT.	559.55
4	9+44.35	2.49' RT.	559.55
5	9+40.21	1.81' LT.	559.6
6	9+24.84	1.07' RT.	559.8
7	0+53.59	1.51' LT.	559.6
8	0+55.39	2.03' RT.	559.6
9	0+60.30	1.34' RT.	559.8
10	0+60.96	2.42' LT.	559.8
11	0+54.80	5.02' LT.	559.6
12	0+53.39	4.02' LT.	559.55
13	10+50.54	6.42' RT.	559.8
14	10+56.33	9.68' RT.	559.6
15	10+60.37	7.85' RT.	559.4
16	10+59.31	4.05' RT.	559.4
17	10+51.45	1.98' RT.	559.6
18	10+50.15	3.08' RT.	559.6
19	10+00.61	43.67' LT.	559.9
20	10+04.40	48.56' LT.	559.8
21	10+03.96	50.75' LT.	559.6
22	10+00.53	51.21' LT.	559.6
23	9+97.71	45.30' LT.	559.8
24	9+98.45	43.81' LT.	559.9

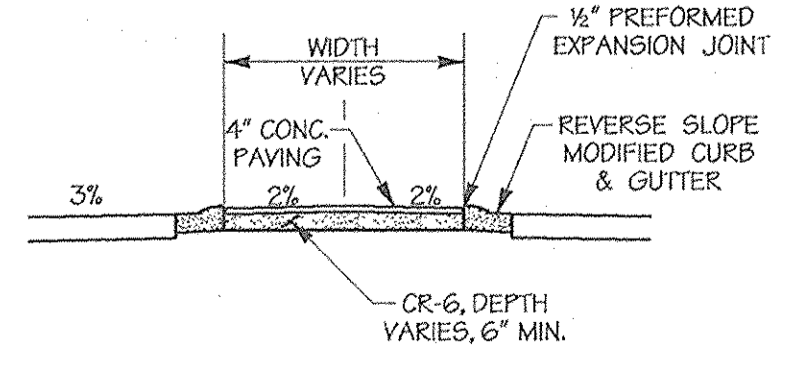
EDGE ROAD/CURB LOCATIONS

POINT NO.	STATION	OFFSET
A	9+75.33	11.49' RT.
B	9+24.35	20.08' RT.
C	9+56.99	39.64' RT.
D	0+55.54	13.36' RT.
E	1+52.23	9.00' RT.
F	1+22.40	9.11' LT.
G	0+99.21	9.76' LT.
H	10+36.54	14.40' RT.
I	11+24.16	11.17' RT.
J	10+98.59	9.34' LT.
K	10+69.79	9.96' LT.
L	10+17.65	68.31' LT.
M	10+17.84	120.52' LT.
N	10+02.80	122.62' LT.
O	9+35.86	75.02' LT.
P	9+39.51	18.63' LT.
Q	8+74.21	10.84' LT.



TYPICAL SECTION TRAFFIC CIRCLE

SCALE: 1" = 10'



SPLITTER ISLAND DETAIL

SCALE: NONE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. Walker 4-13-04
CHIEF, BUREAU OF HIGHWAYS DATE

John P. ... 4/20/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Colleen ... 4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

1-10-07 | REVISED PER AS-BUILT CONDITIONS

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME: FOX MEADOW SECTION/AREA: 167
PLAT OR REF. FIG. NO.: 59831492 13, 19, 20 RR, EC ZONE: 15 PARCEL: 3 SENSUS TRACT:
TITLE: FOX MEADOW (FORMERLY PFEFFKORN PROPERTY)
Final Plan
Roundabout Details

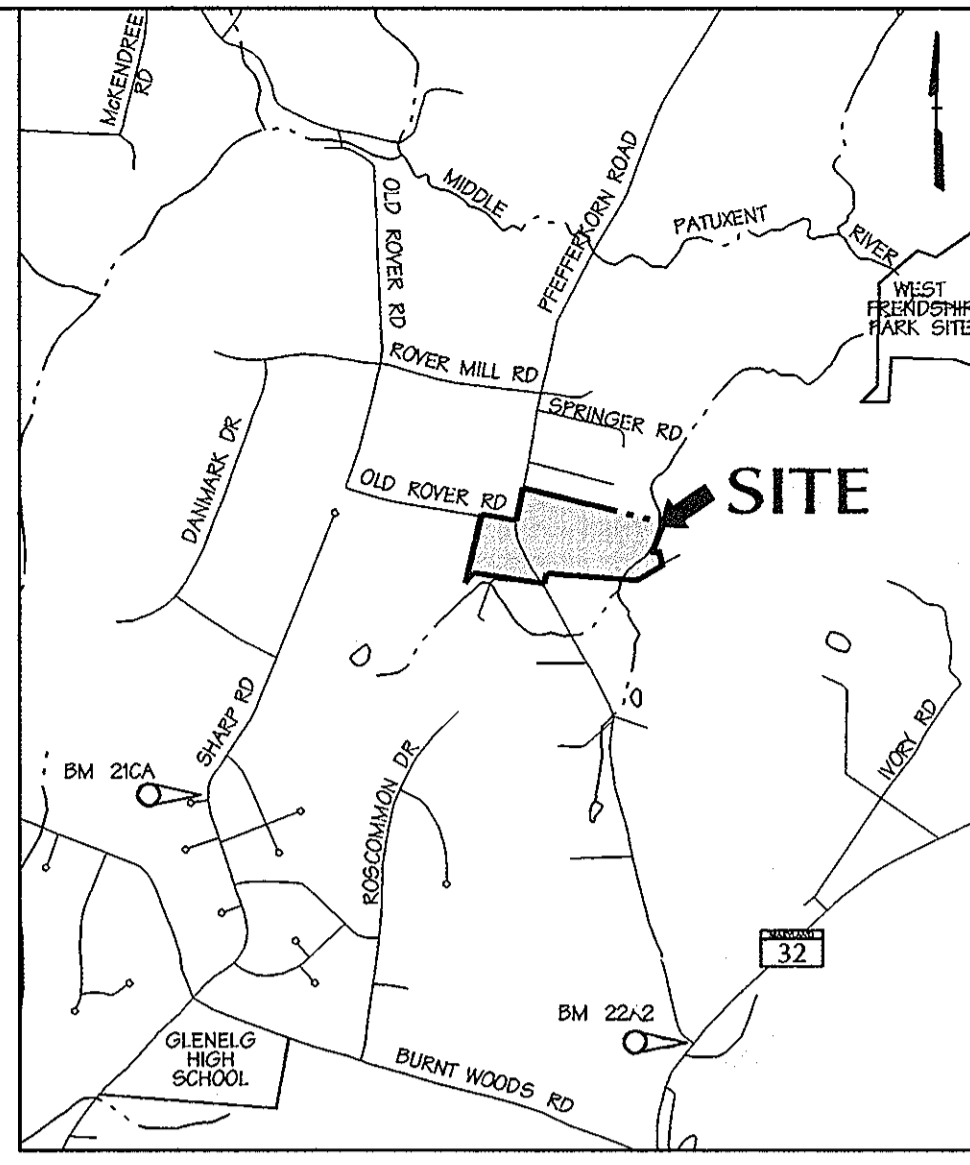
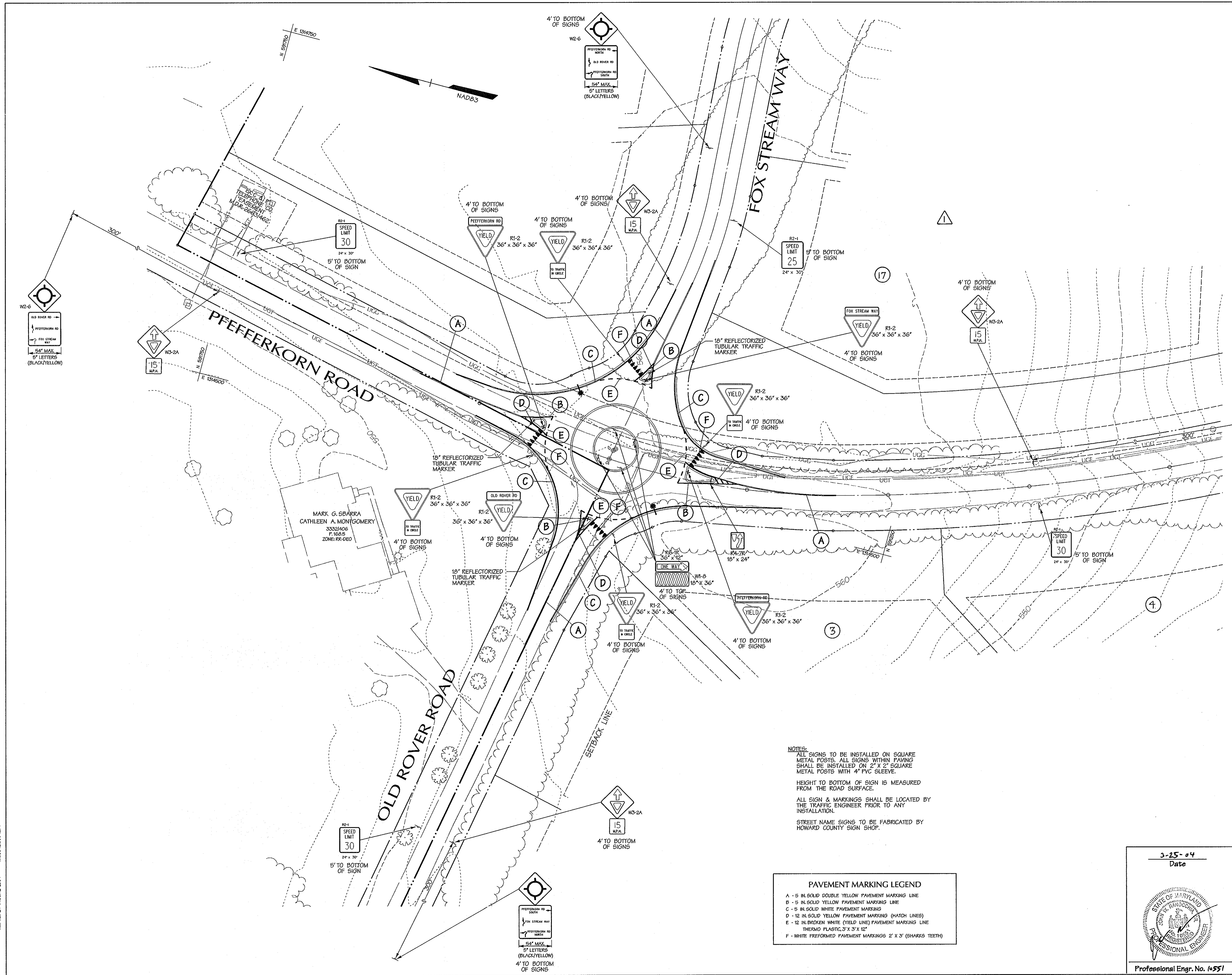
Des By DFM Scale AS SHOWN Proj. No. 00042.B
Dwn By WDE Date 1/7/04
Chk By Approved 3 OF 24

3-25-04
Date

Professional Engr. No. 10551



Wed Mar 24 15:28:00 2004



VICINITY MAP
SCALE: 1" = 2,000'

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
APPROX WETLAND LOCATION PER DMW
FIELD VISIT DATED APRIL 2000. OFF SITE SEPTIC RESERVE AREAS
PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William Z. Walker, Jr. 4-13-04
CHIEF, BUREAU OF HIGHWAYS
DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John J. ... 4/28/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

Andy ... 4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

Date	No.	Revision Description
6-11-04	1	REVISED LOT NUMBERS

OWNER: NORTHRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-8833
Fax: 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME FOX MEADOW	SECTION/AREA 1	LOTPARCEL # 167
PLAT OR LOT BLOCK # 5983/492	ZONE 15, 19, 20	RR, RC 3
TITLE FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) ROAD SIGNAGE AND PAVEMENT MARKING PLAN		
Des By PLH	Scale 1"=30'	Proj. No. 00042.B
Drn By WDE	Date 1/7/04	
Chk By Approved		4 OF 24

NOTES:
ALL SIGNS TO BE INSTALLED ON SQUARE METAL POSTS. ALL SIGNS WITHIN PAVING SHALL BE INSTALLED ON 2" X 2" SQUARE METAL POSTS WITH 4" PVC SLEEVE.
HEIGHT TO BOTTOM OF SIGN IS MEASURED FROM THE ROAD SURFACE.
ALL SIGN & MARKINGS SHALL BE LOCATED BY THE TRAFFIC ENGINEER PRIOR TO ANY INSTALLATION.
STREET NAME SIGNS TO BE FABRICATED BY HOWARD COUNTY SIGN SHOP.

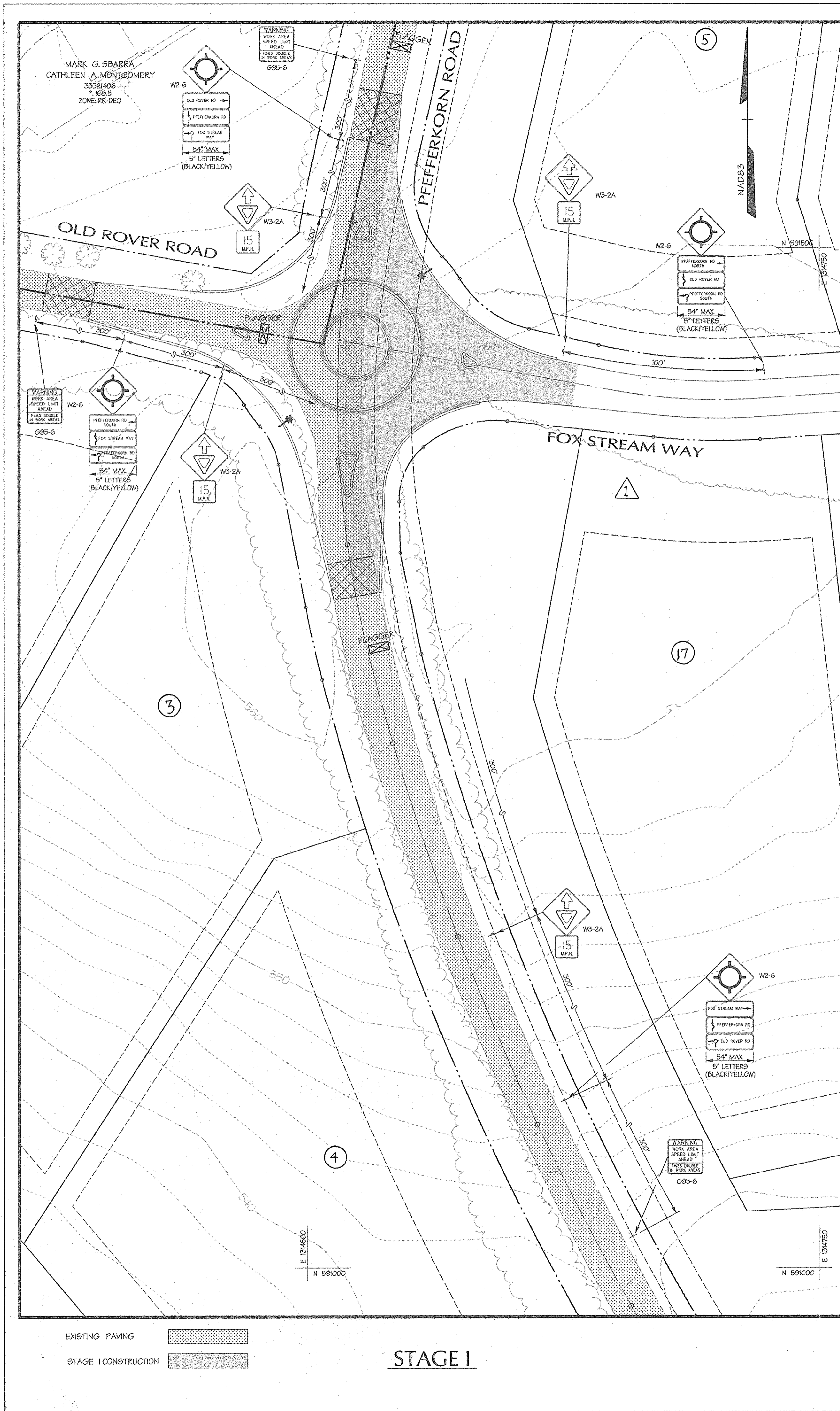
PAVEMENT MARKING LEGEND

- A - 5 IN. SOLID DOUBLE YELLOW PAVEMENT MARKING LINE
- B - 5 IN. SOLID YELLOW PAVEMENT MARKING LINE
- C - 5 IN. SOLID WHITE PAVEMENT MARKING
- D - 12 IN. SOLID YELLOW PAVEMENT MARKING (HATCH LINES)
- E - 12 IN. BROKEN WHITE (YIELD LINE) PAVEMENT MARKING LINE
THERMO PLASTIC, 3" X 3" X 12"
- F - WHITE PERFORMED PAVEMENT MARKINGS 2" X 3" (SHARKS TEETH)

3-25-04
Date

Professional Engr. No. 10551

Wed Mar 24 14:06:42 2004



STAGE I

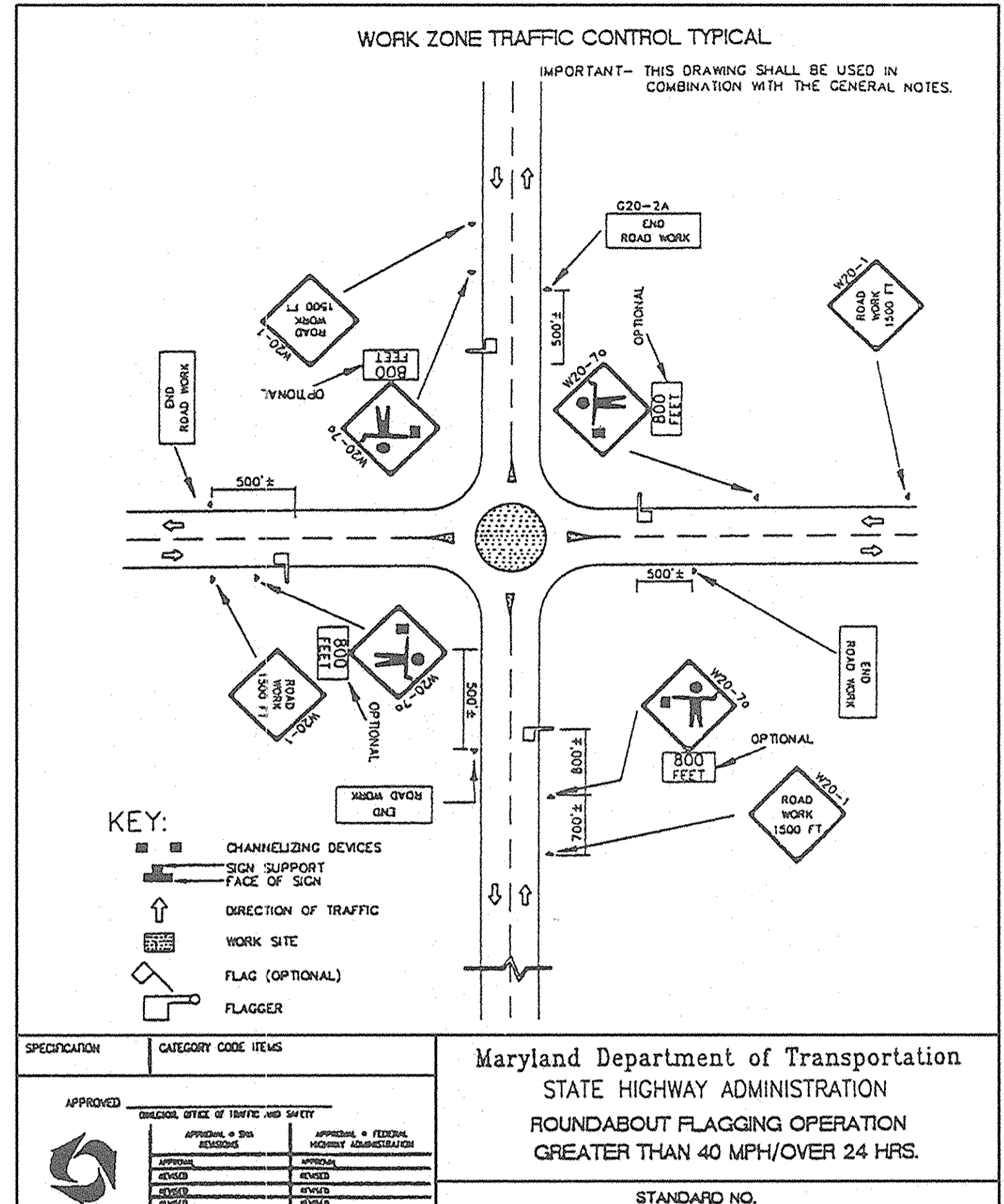
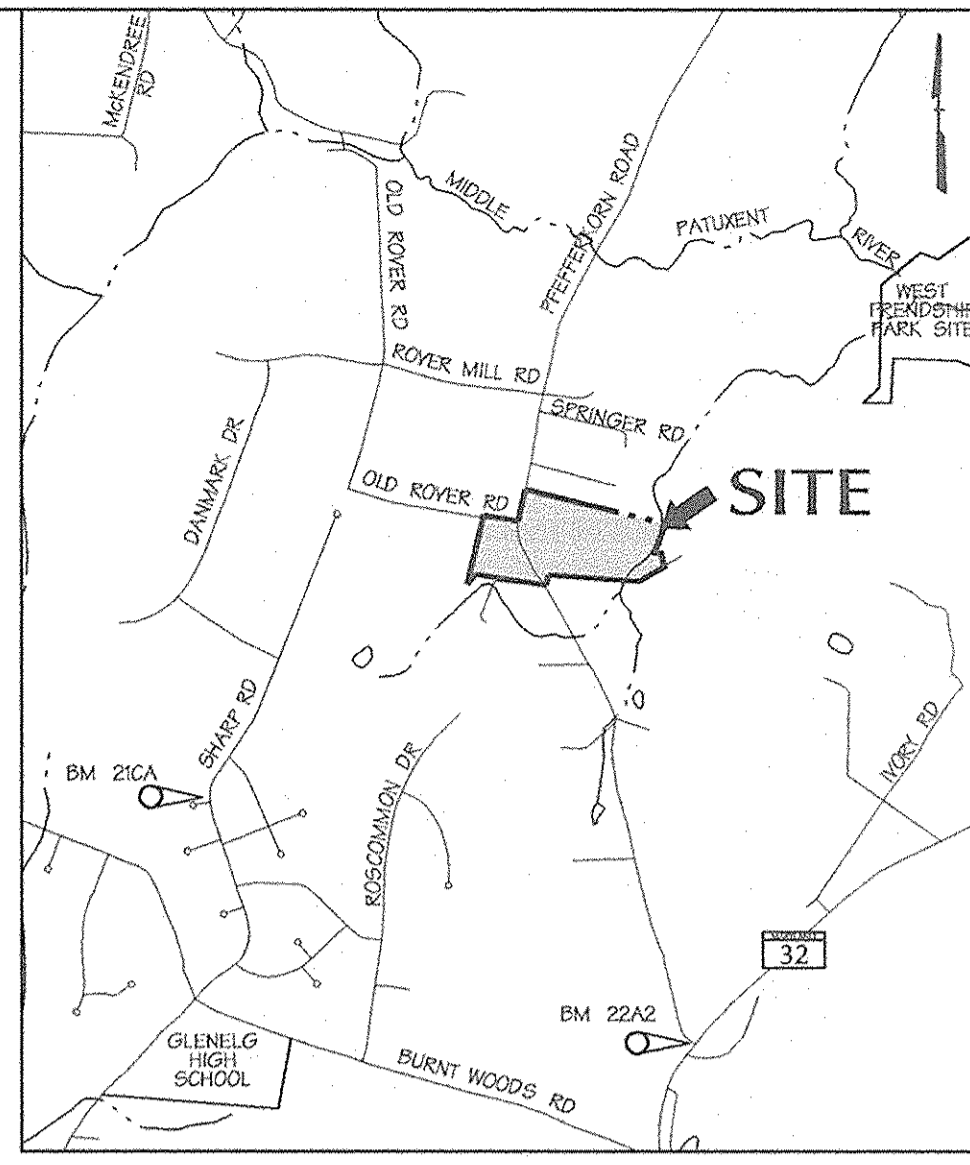


FIGURE 9.2 Work Zone Traffic Control



VICINITY MAP
SCALE: 1" = 2,000'

TRAFFIC CONTROL DURING CONSTRUCTION OF ROUNDABOUT

Construction in 4 stages, during each stage will need 3 flaggers for control of single lane, two way traffic during construction activities. In off hours will need stone, temporary paving, and temporary markings for maintenance of traffic.

During each stage, will need to provide smooth transition from new work to existing paving grade. Will want to place 15 mph limit on approaches during work.

STAGE I:
Construct easterly 1/2 of roundabout (grade, base courses and base for over-run paving in island. Use 3 flaggers to control single lane two way traffic on Pfefferkorn Road and turning movements. Hold barrier curb in center island for construction in stage II.

STAGE II:
Step I: Install stone base and temporary bituminous paving in Southwest quadrant to maintain a minimum 12' single lane for Old Rover Road to Pfefferkorn Road movements while the Northwest quadrant is being constructed.
Step II: Construct Northwest quadrant and remainder of center island, all base courses, mountable curbs and the barrier curbs in the island.

STAGE III:
Complete installation of base courses in Southwest quadrant.
Complete installation of over-run paving in island.

STAGE IV:
Finish construction of splitter islands, if not previously finished.
Install final surface course.
Complete installation of all traffic control signs.

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2003. OFF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. Walker 4-13-04
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

William J. Walker 4/20/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

David Thomas 4/20/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

6-11-04 **REVISD LOT NUMBERS**

Date No. Revision Description

OWNER: NORTHRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Thiessen, Maryland 21286
(410) 296-3833
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

3-15-04
Date

Professional Engr. No. 14551

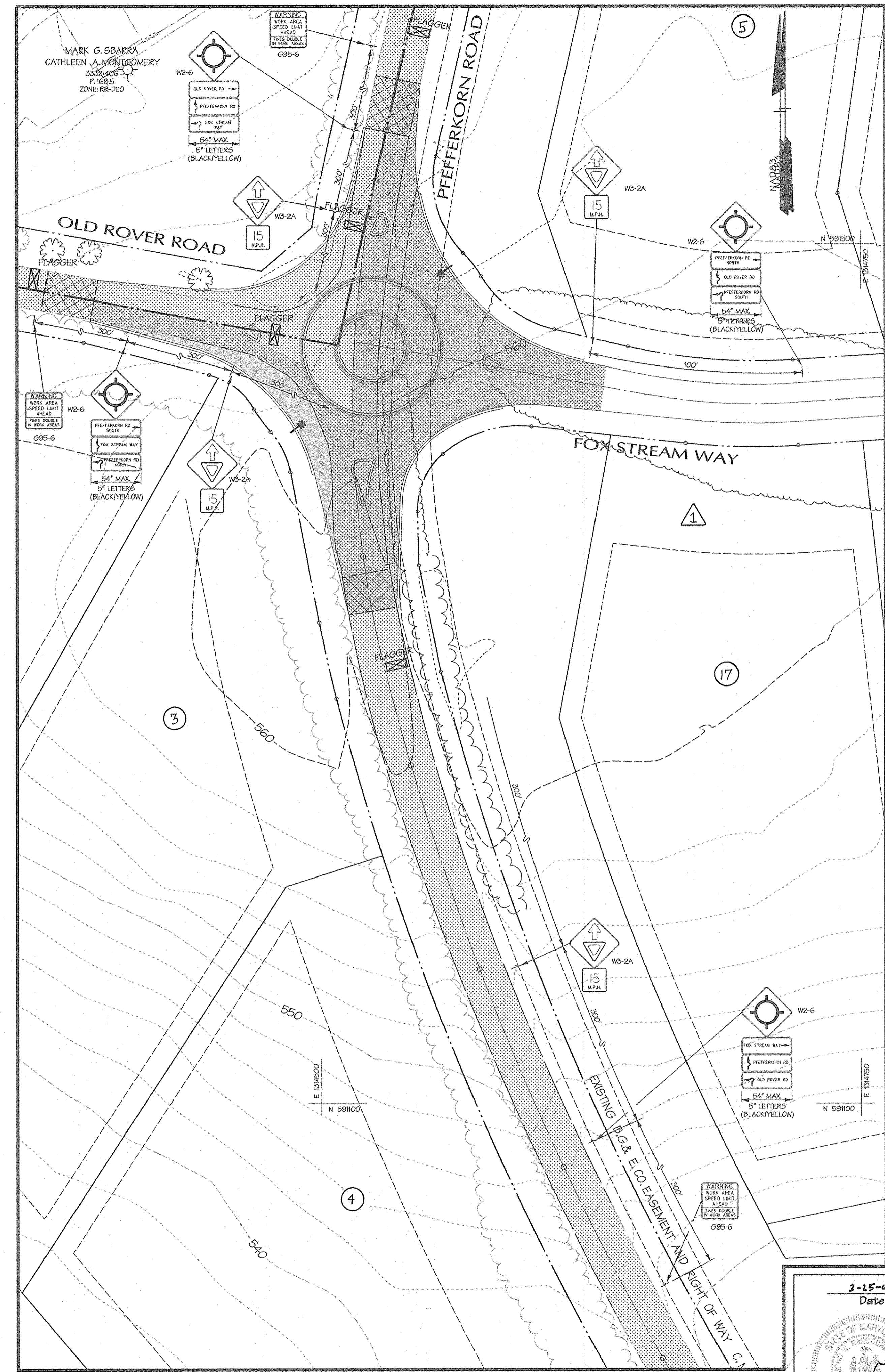
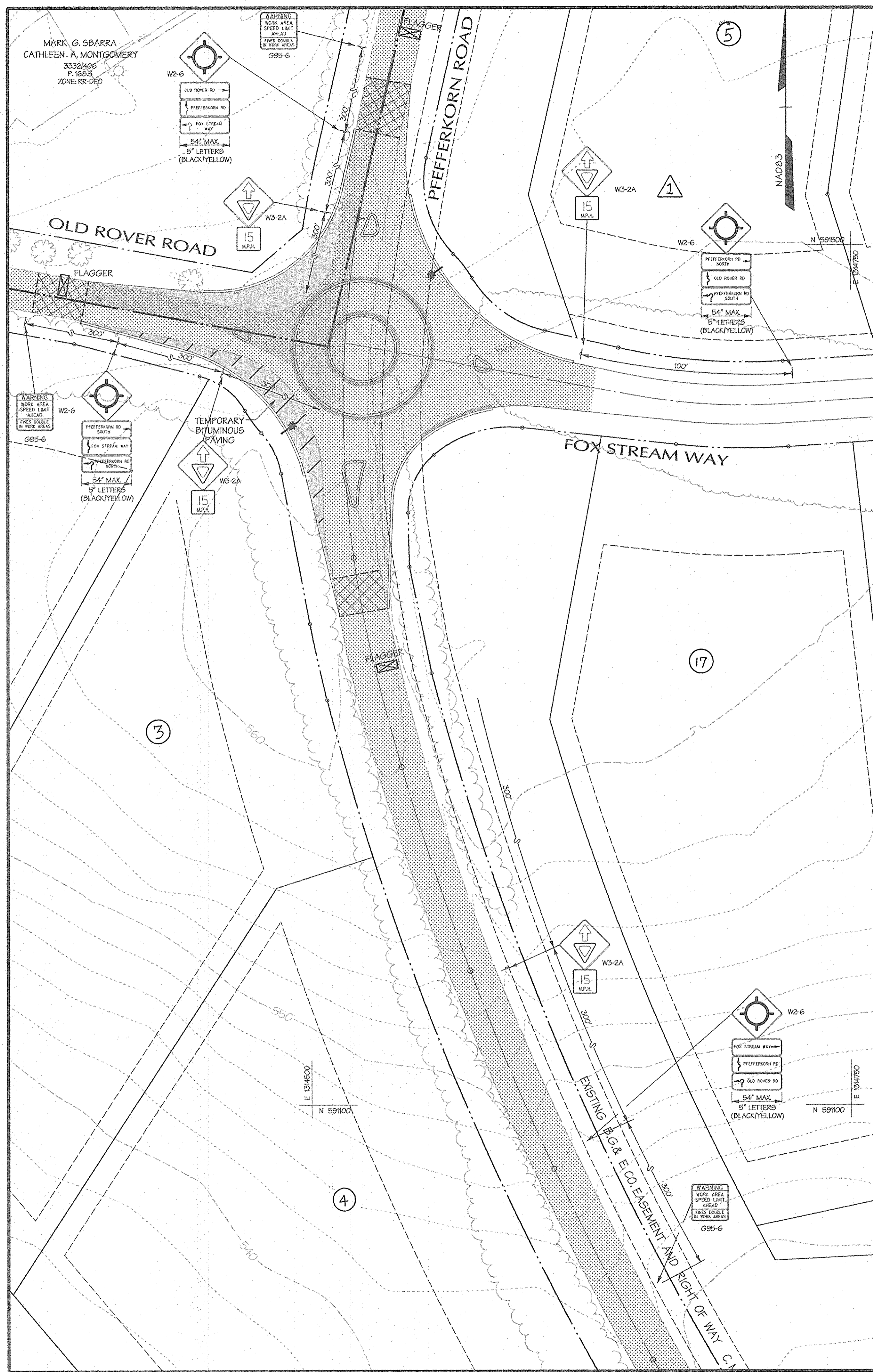
SUBDIVISION NAME: FOX MEADOW SECTION/AREA: 1 LOT/PARCEL #: 167

PLAT OR LOT BLOCK # ZONE: 5983/1492 13, 19, 20 RR, RC TYPICAL MAP: 15 REEL/BOOK: 3 GENESIS TRACT: 3

TITLE: **FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) MAINTENANCE OF TRAFFIC PLAN**

Des By: PLH Scale: 1"=30' Proj. No. 00042.B
Dwn By: WDE Date: 1/7/04
Chk By: Approved

5 OF 24



EXISTING PAVING [Pattern]

STAGE II CONSTRUCTION [Pattern]

STAGE II

EXISTING PAVING [Pattern]

STAGE III CONSTRUCTION [Pattern]

STAGE III

DATA SOURCES:
 BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
 APPROX. WETLAND LOCATION PER DMW
 FIELD VISIT DATED APRIL 2003. OFF-SITE SEPTIC RESERVE AREAS
 PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Walker 4-13-04
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John D. ... 4/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

... 4/20/04
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

6-11-04 [Symbol] REVISED LOT NUMBERS
 Date No. Revision Description

OWNER: NORTHRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DMW
 Draft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Thason, Maryland 21286
 (410) 296-3839
 Fax: 296-4705

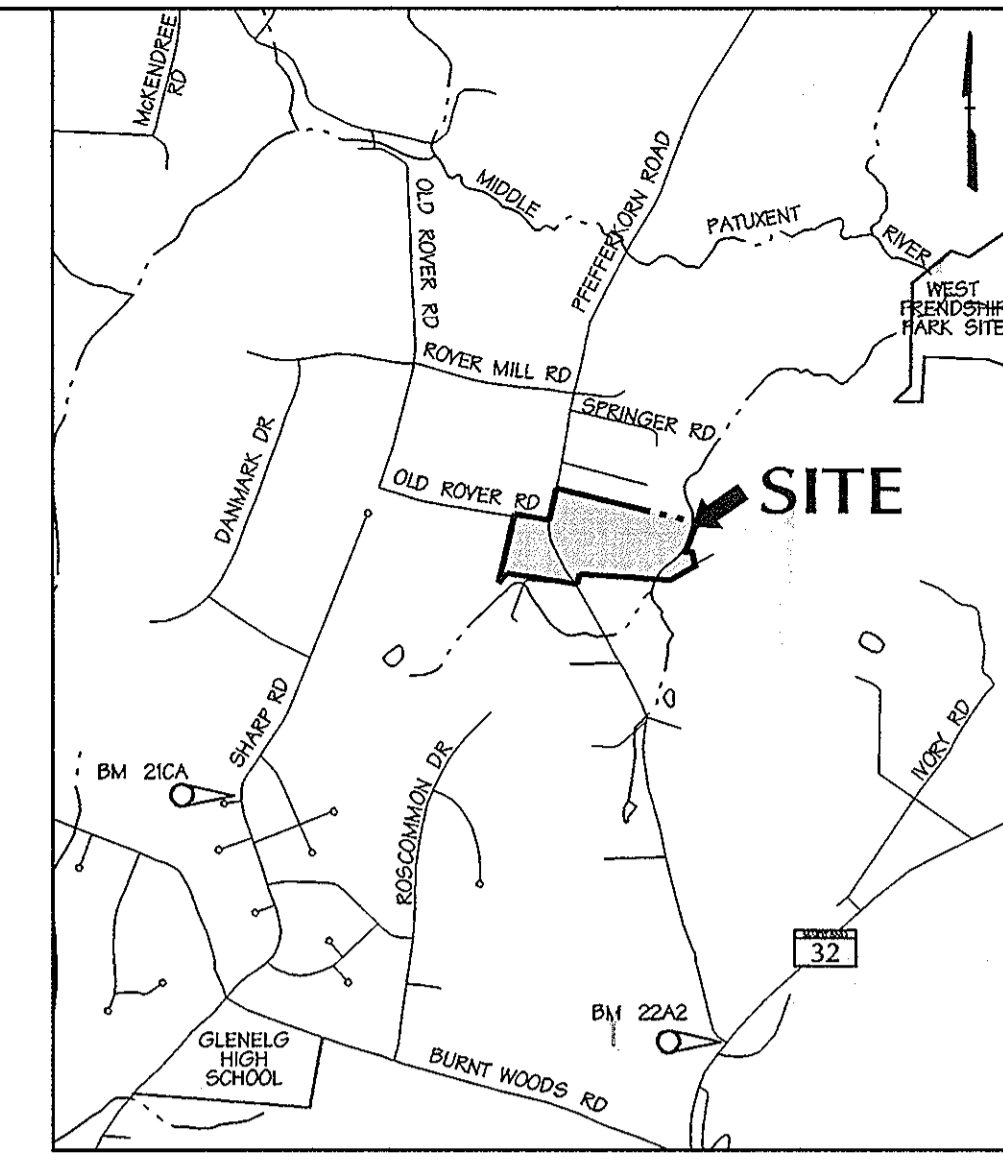
A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
 Environmental Professionals

SUBDIVISION NAME	FOX MEADOW	SECTION/AREA	1	LOT/PARCEL	167
PLAT OR LOT BOOK	5883/492	ZONE	RR_EC	ELEC/DISTRICT	3
TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) MAINTENANCE OF TRAFFIC PLAN					
Des By	PLH	Scale	1"=30'	Proj. No.	00042.B
Drn By	WDE	Date	1/7/04		
Chk By	Approved				6 OF 24

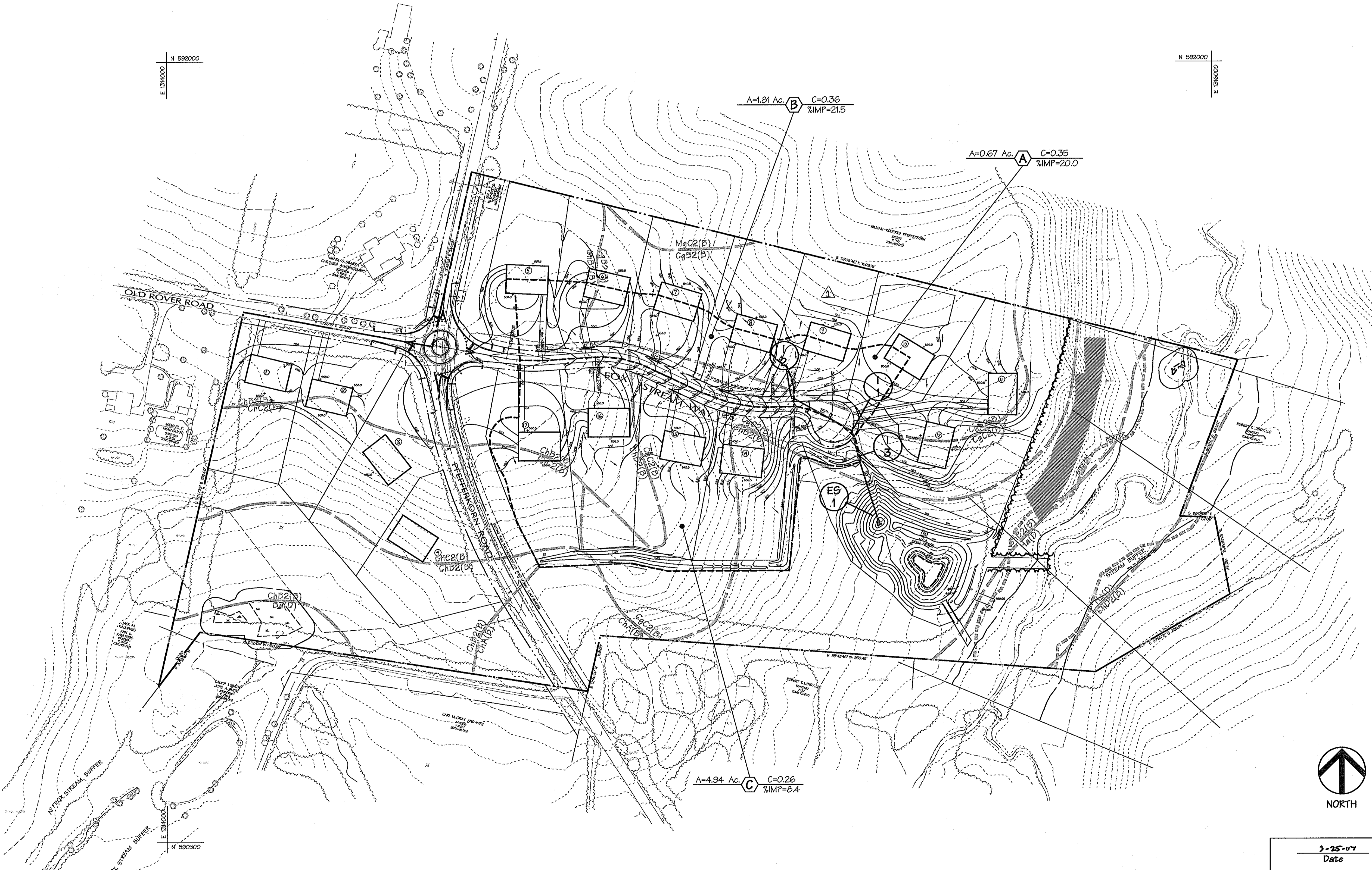
3-15-04
 Date

Professional Engr. No. 4551

Wed Mar 24 14:08:29 2004



VICINITY MAP
SCALE: 1"=2000'



DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
APPROX WETLAND LOCATION PER DMW
FIELD VISIT DATED APRIL 2003. OFF SITE SEPTIC RESERVE AREAS
PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Walker, Jr. 4-13-04
CHIEF, BUREAU OF HIGHWAYS DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John D. ... 4/28/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
John A. ... 4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
DIRECTOR DATE

6-11-04 **REVISD LOT NUMBERS**
Date No. Revision Description
OWNER: NORTHRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738
DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

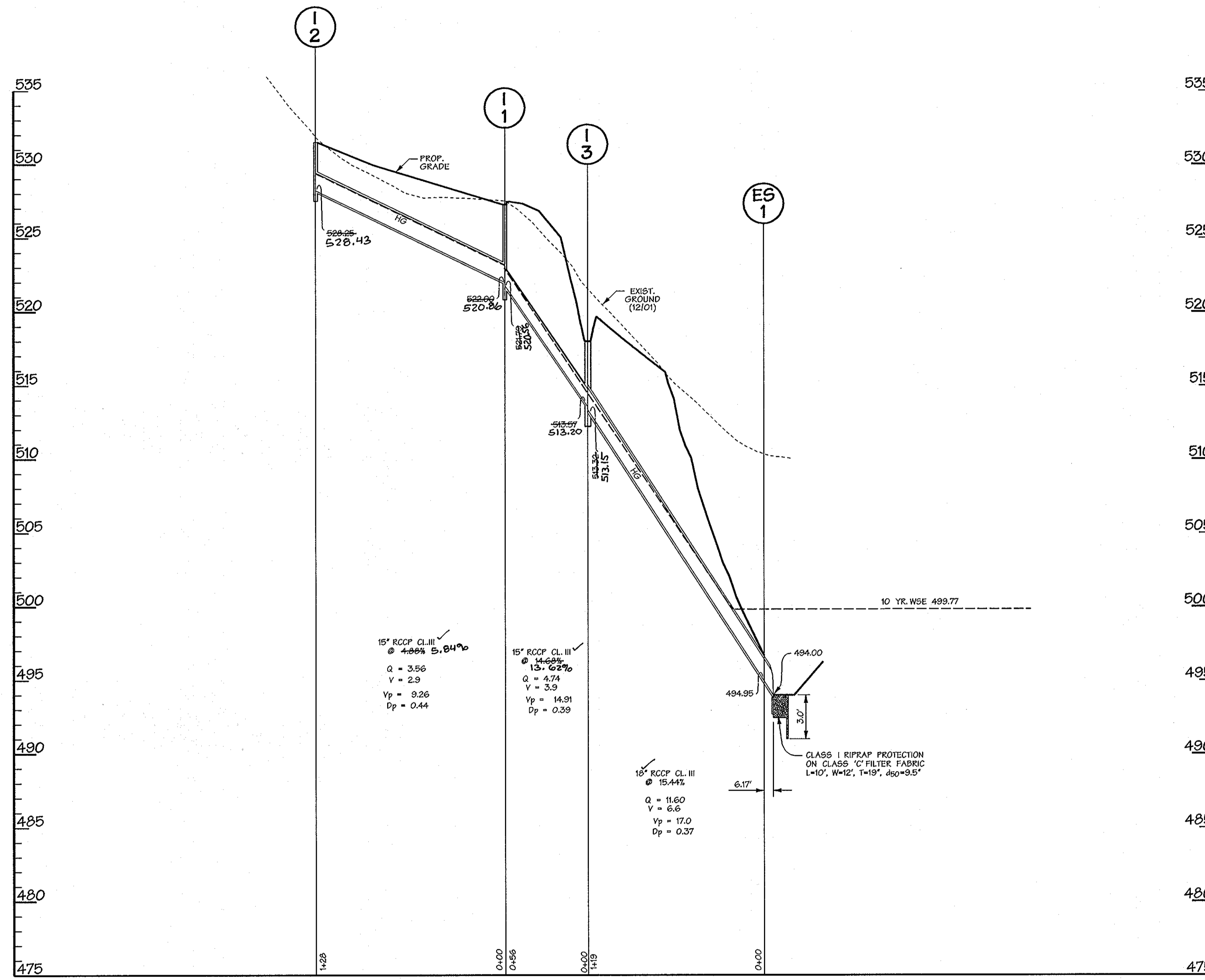
DMW
Duff-McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 296-3333
Fax 296-4705
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SUBDIVISION NAME	FOX MEADOW	SECTION/AREA	1	LOT/FACEL #	167
PLAT OR LOT #	59831492	ZONE	RR, RC	ELEC. FRONT	3
TITLE FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) Drainage Area Map					
Des By	LL	Scale	1"=100'	Proj. No.	00042.B
Drn By	LL	Date	1/7/04		
Chk By		Approved			7 OF 24

3-25-07
Date
Professional Engr. No. 10551



Wed Mar 26 14:00:04 2004



STORM DRAIN PROFILE

SCALE: HORIZ. 1"=50'
VERT. 1"=5'

NOTE:

- 1. LOTS 3-7 CULVERTS ARE TO BE 15" RCCP CL. IV.
- 2. DRIVEWAYS FOR LOTS 8, 9 & 10 ARE CLOSED SECTION ENTRANCE, HO.CO. STD. R-6.05, REMAINDER ARE OPEN SECTION, HO.CO. STD. R-6.06

INLET SCHEDULE

NO.	TYPE	Q	INV. OUT	TOP ELEV.
I-1	A-5, W = 2'6", HO. CO. SD 4.40	1.28	521.79	527.28 ✓
I-2	YARD INLET, W= 2'6", HO.CO. SD 4.14	3.56	528.25 ✓	532.00 "Throat
I-3	YARD INLET, W= 2'6", HO.CO. SD 4.14	7.08	513.37 ✓	518.00 "Throat
ES-1	CONC. END SECTION, HO. CO. SD 5.51		494.95	

PIPE SCHEDULE

SIZE (IN)	CATEGORY	L (FT)
15	RCCP CL. III	184
18	RCCP CL. III	119

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. Walker 4-13-04
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: *M. J. ...* 4/22/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

J.R. ... 4/27/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

Date	No.	Revision Description
1-10-07	1	REVISED PER AS-BUILT CONDITIONS

OWNER: NORTHDRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

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SUBDIVISION NAME	SECTION AREA	LOT/PARCEL #
FOX MEADOW	1	167

FLAT OF THE BLOCK # 1 ZONE 15 PARCELS MAP 13, 19, 20 RR, EC
59831492

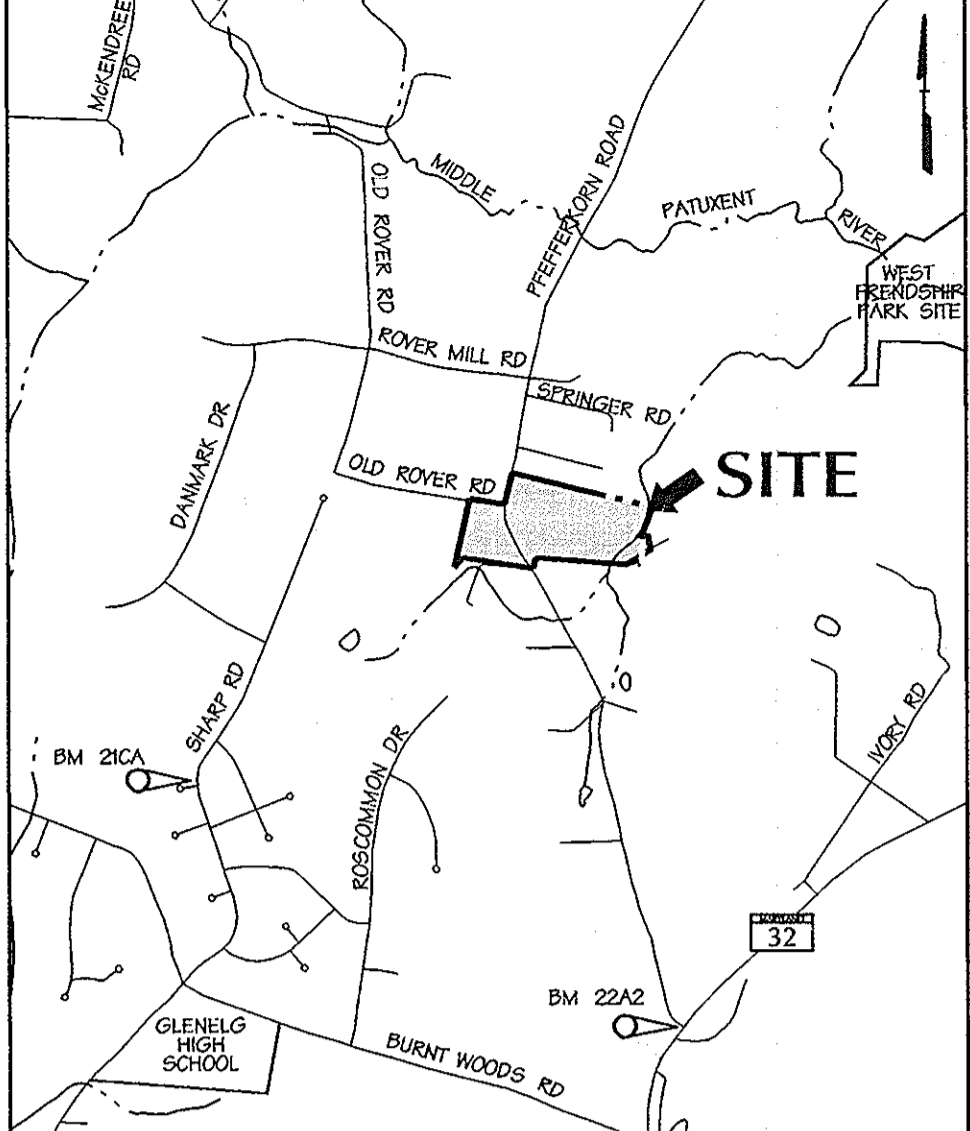
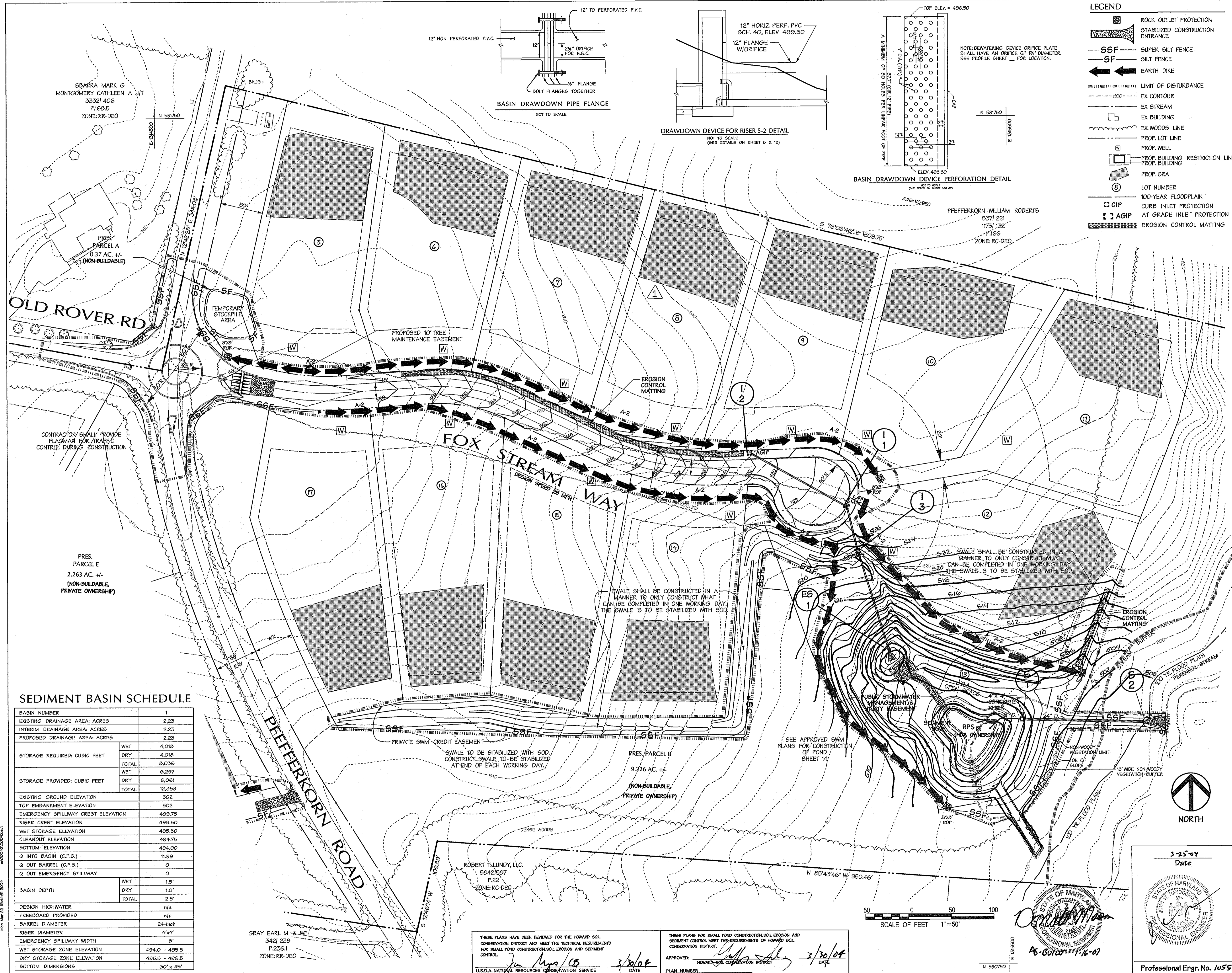
TITLE: **FOX MEADOW**
(FORMERLY PFEFFERKORN PROPERTY)
Storm Drain Profile

Des By	LL	Scale	AS SHOWN	Proj. No.	00042.B
Dwn By	LL	Date	1/7/04		
Chk By		Approved			8 OF 24

3-25-04
Date

Professional Engr. No. 16551

AS-BUILT 1-16-07



DEVELOPERS CERTIFICATE:

I HEREBY 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL EMPLOY A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE FOND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *James R. Selfridge* DATE: 3/23/04
 PRINT NAME BELOW SIGNATURE: JAMES R. SELFDRIDGE

ENGINEERS CERTIFICATE:

I CERTIFY THAT THIS PLAN FOR FOND 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 ADVISED THE DEVELOPER THAT HE/MUST EMPLOY A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE FOND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION.

Signature: *John W. Ranacchia, Jr.* DATE: 3-25-04
 PRINT NAME BELOW SIGNATURE: John W. Ranacchia, Jr.

DATA SOURCES:

BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
 APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2000. OFF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature: *William F. Mahan* DATE: 4-13-04
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Signature: *John Deussen* DATE: 4/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *John A. ...* DATE: 4/20/04
 CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR _____ DATE _____

1-10-07 REVISED PER AS-BUILT CONDITIONS
 6-11-04 REVISED LOT NUMBERS

Date	No.	Revision Description

OWNER: NORTHTRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFDRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DMW
 Dan M. Curran-Walkers, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 286-3333
 Fax: 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

PROFESSIONAL ENGINEER
 STATE OF MARYLAND
 No. 10551

DATE: 3-25-04

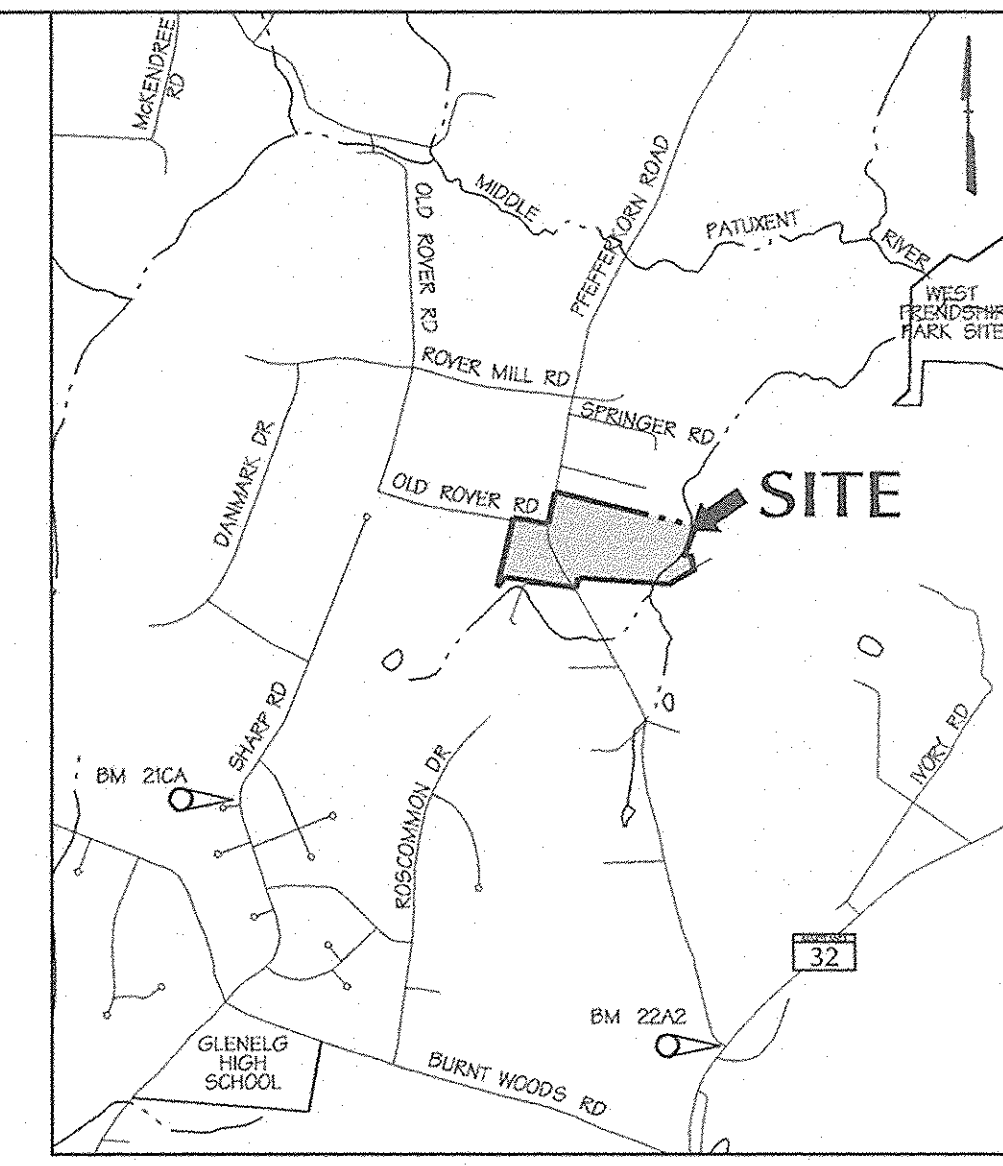
SECTION AREA: 1 LOT/PARCEL #: 167
 PLAN OF THE BLOCK: 5923/492/13, 19, 20 RR, RC
 ZONE: RR, RC ELEC. DISTRICT: 3 CROSS STREET:

TITLE
 FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY)
 Grading & Sediment and Erosion Control Plan

Des By	DWR	Scale	1"=50'	Proj. No.	00042.B
Drn By	DWR/BKC	Date	1/7/04		
Chk By	Approved				9 OF 24

Professional Engr. No. 10551

NO. 00042/00042.B



VICINITY MAP
SCALE: 1"=2000'

LEGEND

- WETLAND BOUNDARY
- 25' STATE WETLANDS BUFFER
- EX CONTOURS
- EX CURB & GUTTER
- EX BUILDING
- D.R. 2
- ZONING LINES & LABELS
- STREAM BUFFER
- STREAM LINE
- PROPERTY BOUNDARY
- STEEP SLOPES
- EXISTING TO PATH
- EXISTING DRAINAGE DIVIDE
- DESIGN POINT
- SOIL LINES/TYPES
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- CENTERLINE OF STREAM
- PROPOSED FLOODPLAIN

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
APPROX WETLAND LOCATION PER DMW
FIELD VISIT DATED APRIL 2003. OFF SITE SEPTIC RESERVE AREAS
PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William J. Walker</i>	4-13-04
CHIEF, BUREAU OF HIGHWAYS	DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING	
<i>John J. ...</i>	4/28/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>John A. ...</i>	4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

Date	No.	Revision Description

OWNER: NORTHRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

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200 East Pennsylvania Avenue
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(410) 296-3333
Fax 296-4705

A Team of Land Planners,
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Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL #
FOX MEADOW	1	167
PLAT OF THE LOT #	ZONING	ELECT. SERVICE #
59831492	13, 19, 20 RR, RC	3
TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) DRAINAGE AREA MAP STORMWATER MANAGEMENT EXISTING CONDITIONS		
Des By	Scale 1"=100'	Proj. No. 00042.B
Drn By	Date 1/7/04	12 OF 24
Chk By	Approved	

3-15-04
Date

Professional Engr. No. 14551



E 103780
N 592000

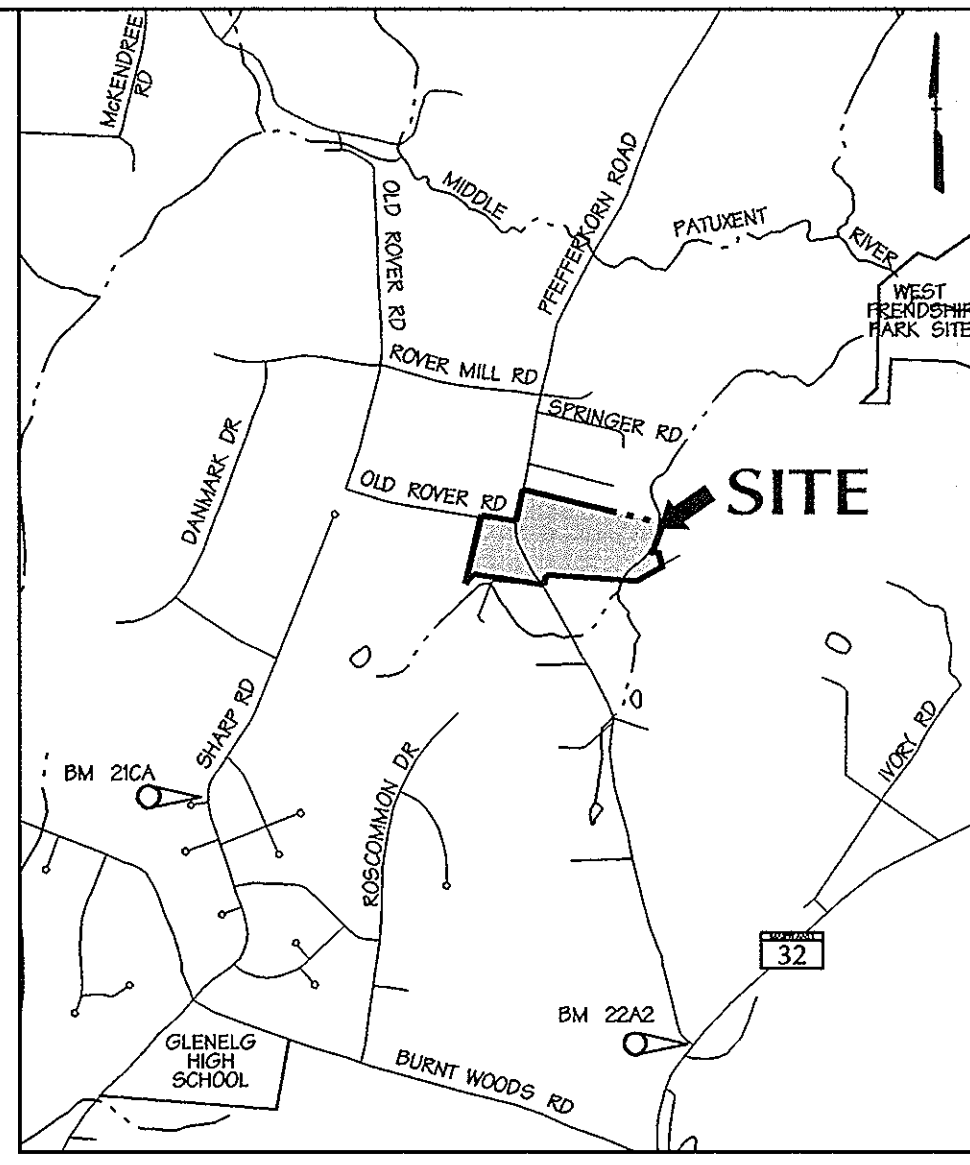
E 103780
N 592000

E 103780
N 592000

NO.	DESCRIPTION	DATE	BY	REVISIONS
1	ISSUED FOR PERMIT	4/20/04	DMW	
2	REVISED TO SHOW CHANGES	4/20/04	DMW	
3	REVISED TO SHOW CHANGES	4/20/04	DMW	
4	REVISED TO SHOW CHANGES	4/20/04	DMW	
5	REVISED TO SHOW CHANGES	4/20/04	DMW	

NO.	DESCRIPTION	DATE	BY	REVISIONS
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2	REVISED TO SHOW CHANGES	4/20/04	DMW	
3	REVISED TO SHOW CHANGES	4/20/04	DMW	
4	REVISED TO SHOW CHANGES	4/20/04	DMW	
5	REVISED TO SHOW CHANGES	4/20/04	DMW	

NO.	DESCRIPTION	DATE	BY	REVISIONS
1	ISSUED FOR PERMIT	4/20/04	DMW	
2	REVISED TO SHOW CHANGES	4/20/04	DMW	
3	REVISED TO SHOW CHANGES	4/20/04	DMW	
4	REVISED TO SHOW CHANGES	4/20/04	DMW	
5	REVISED TO SHOW CHANGES	4/20/04	DMW	



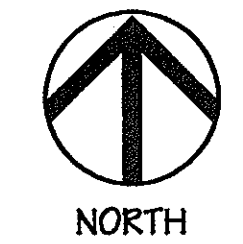
VICINITY MAP
SCALE: 1" = 2,000'



LEGEND

- WETLAND BOUNDARY
- 25' STATE WETLANDS BUFFER
- EX CONTOURS
- EX CURB & GUTTER
- EX BUILDING
- D.R. 2 HOWARD COUNTY ZONING LINES & LABELS
- STREAM BUFFER
- STREAM LINE
- PROPERTY BOUNDARY
- STEEP SLOPES
- EXISTING TO PATH
- EXISTING DRAINAGE DIVIDE
- DESIGN POINT
- SOIL LINES/TYPES
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- CENTERLINE OF STREAM
- PROPOSED FLOODPLAIN

NO.	DESCRIPTION	DATE	BY	REVISIONS
1	ISSUED FOR PERMIT	4/20/04	DMW	
2	REVISED TO SHOW CHANGES	4/20/04	DMW	
3	REVISED TO SHOW CHANGES	4/20/04	DMW	
4	REVISED TO SHOW CHANGES	4/20/04	DMW	
5	REVISED TO SHOW CHANGES	4/20/04	DMW	



3-25-04
Date

Professional Engr. No. 14557

FLOOD STUDY BY DMW, APPROVED FEBRUARY 2002
 DATA SOURCE:
 BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
 APPROX. WETLAND LOCATION PER DMW
 FIELD VISIT DATED APRIL 2000. OFF SITE SEPTIC RESERVE AREAS
 PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Walker 4-13-04
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John P. ... 4/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

John P. ... 4/20/04
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

Date No. Revision Description

OWNER: NORTHRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

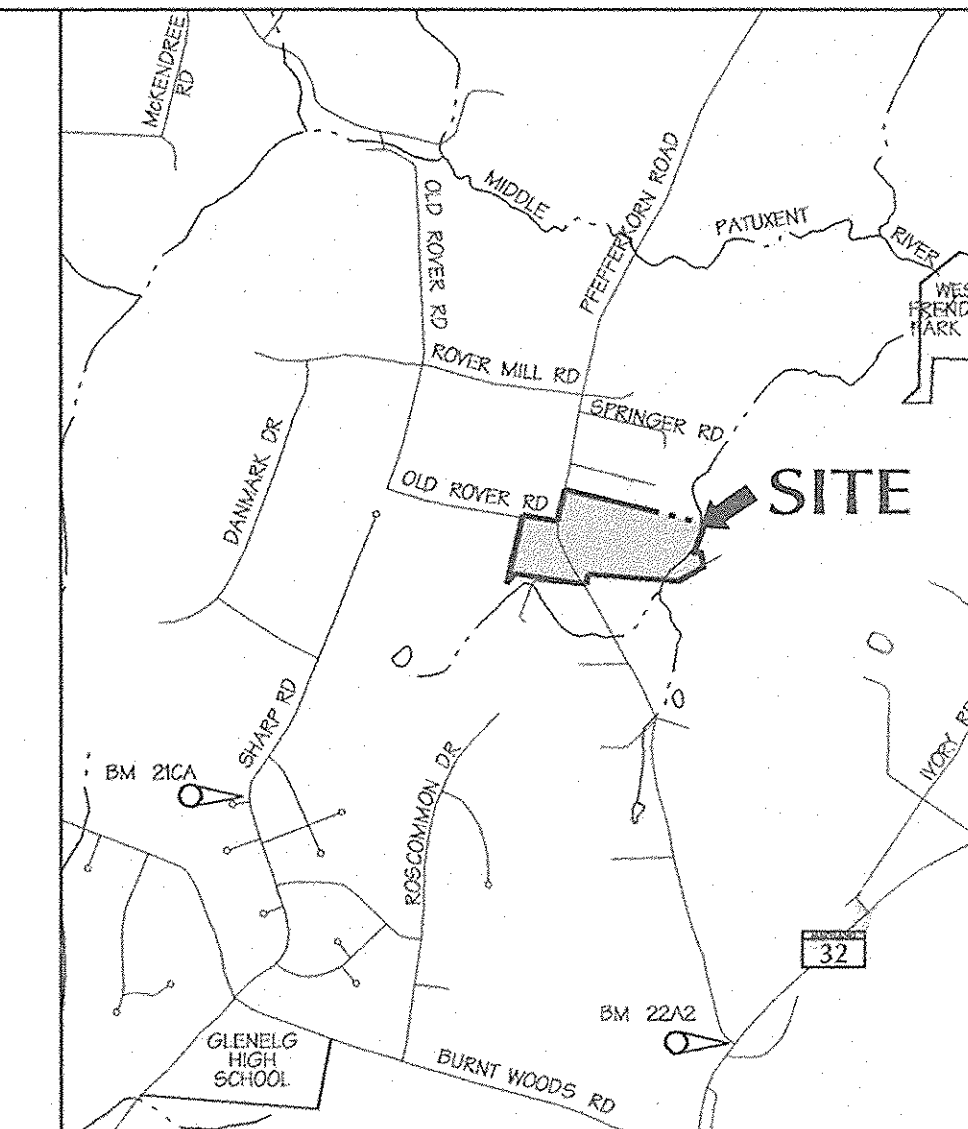
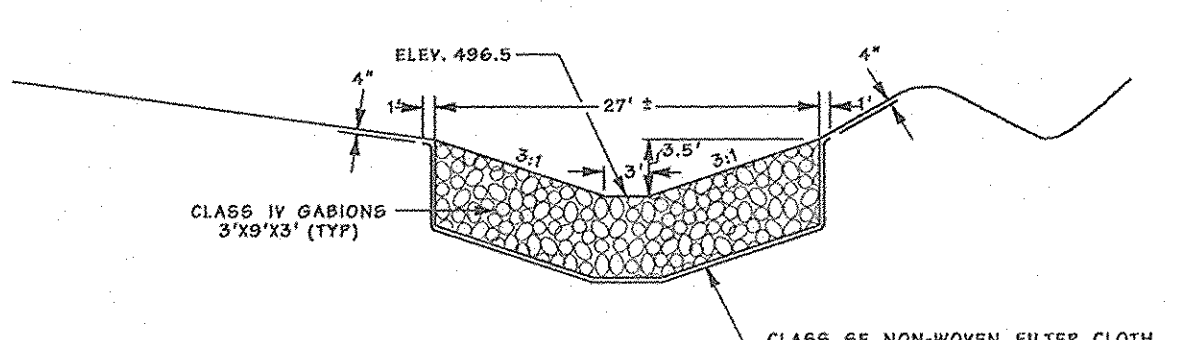
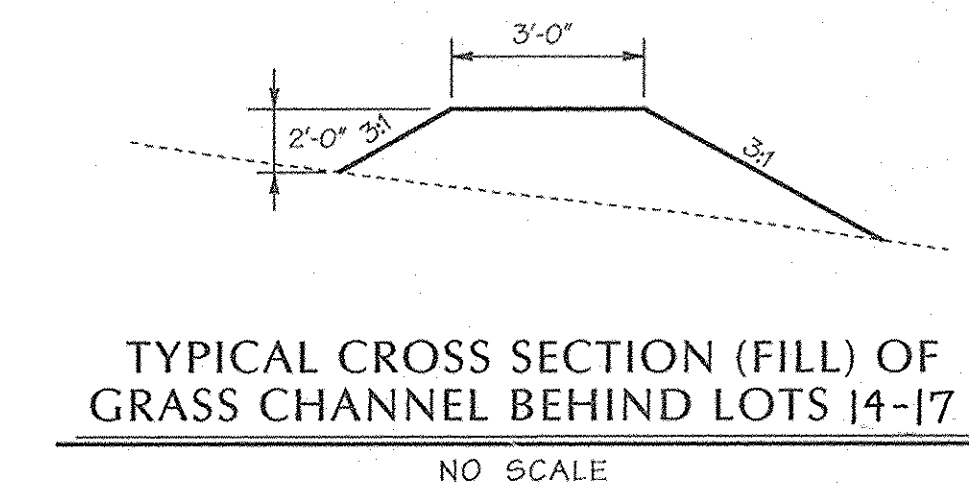
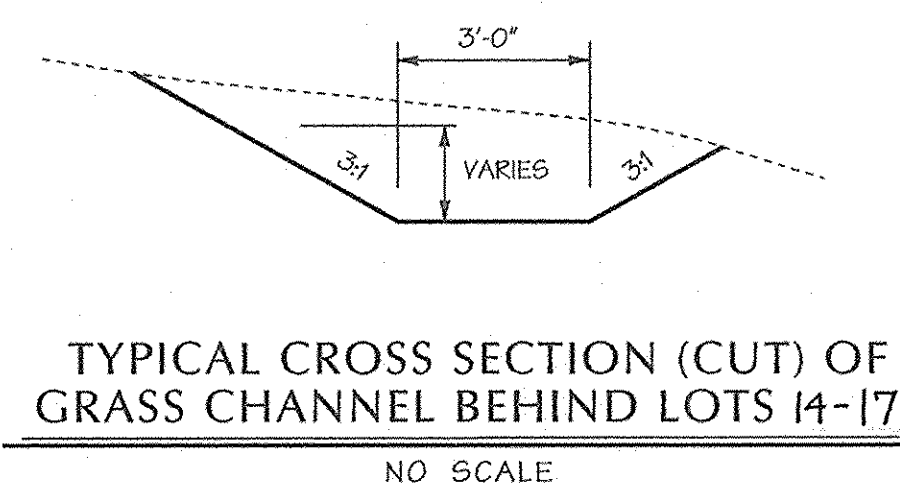
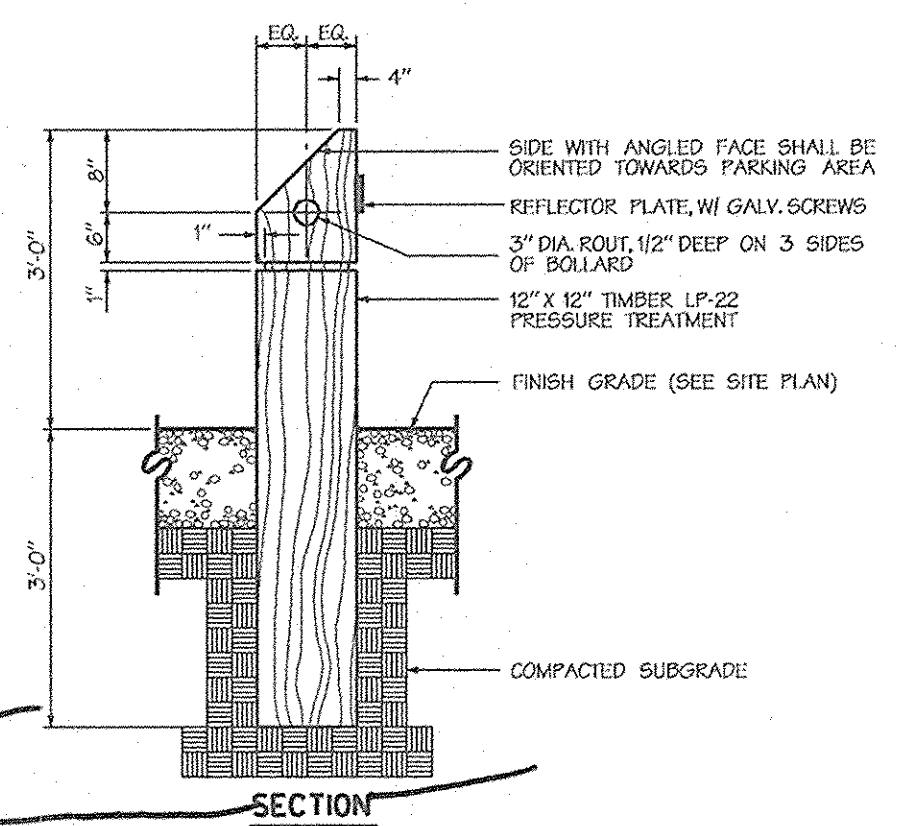
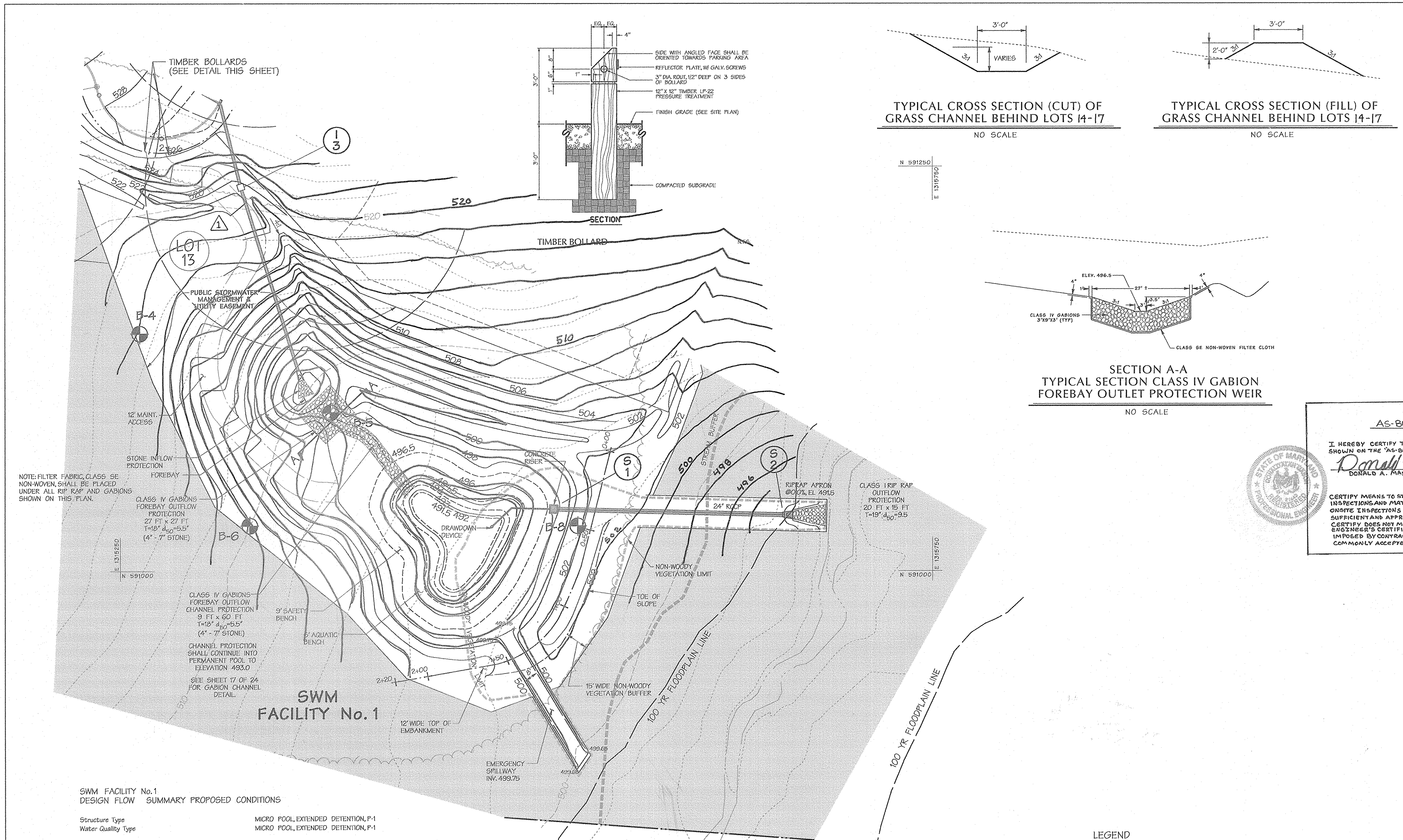
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 Fax 296-4705

A Team of Land Planners,
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 Engineers, Surveyors &
 Environmental Professionals

SUBDIVISION NAME: FOX MEADOW SECTION/AREA: 1 LOT/FACE: 167
 PLAT OR LOT BLOCK # ZONE: 5983/492 13, 19, 20 RR, RC ZONING MAP: 15 ELECTR. DISTRICT: 3 CENSUS TRACT:

TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) DRAINAGE AREA MAP STORMWATER MANAGEMENT PROPOSED CONDITIONS

Des By: DWK/MRT Scale: 1"=100' Proj. No. 00042.B
 Drn By: Date: 9/11/03
 Chk By: Approved: 13 OF 24



SWM FACILITY No. 1 DESIGN FLOW SUMMARY PROPOSED CONDITIONS

Structure Type	MICRO POOL, EXTENDED DETENTION, P-1
Water Quality Type	MICRO POOL, EXTENDED DETENTION, P-1
Water Quality Storage Required (Ac-ft)	0.126
Water Quality Storage Provided (Ac-ft)	0.291
Water Surface Elevation - WQ	496.0
Water Surface Elevation - 1-Year	498.03
Water Surface Elevation - 10-Year	499.53
Water Surface Elevation - 100-Year CLOGGED	500.46
Storage Height Product 1 year	1.10
Storage Height Product 10 year	4.43
Watershed Area to Facility (Actual D.A.)	0.0183 SQ. MILES
Level of Management Required	1-Year, Cpv
Level of Management Provided	1-Year, Cpv
Minimum Top Width Provided	12'
Maximum Height of Fill	1.0'
Freeboard Provided, 10-Year	2.47'
Freeboard Provided, 100-Year	1.57'

WATER QUALITY IS MET BY MICRO POOL AND NATURAL AREA CONSERVATION CREDITS. RECHARGE IS MET BY A GRASS SWALE ALONG THE PROPOSED ROAD AND ALONG THE SOUTH EDGE OF THE LOTS 11-14 AREA. CHANNEL PROTECTION VOLUME IS MET BY EXTENDED DETENTION OF THE 1-YR STORM IN THE SWM FACILITY AND BY NATURAL AREA CONSERVATION.

THIS FACILITY IS CLASSIFIED AS HAZARD CLASS 'A' AND IS A NON-MD-378 FACILITY.

THIS FACILITY IS HAZARD CLASS 'A' BECAUSE THERE ARE NO BUILDINGS OR ROADS DOWNSTREAM OF THIS FACILITY BEFORE FLOWS WOULD ENTER THE MIDDLE PATUXENT RIVER.

DEVELOPERS CERTIFICATION:
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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE FOND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION. I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

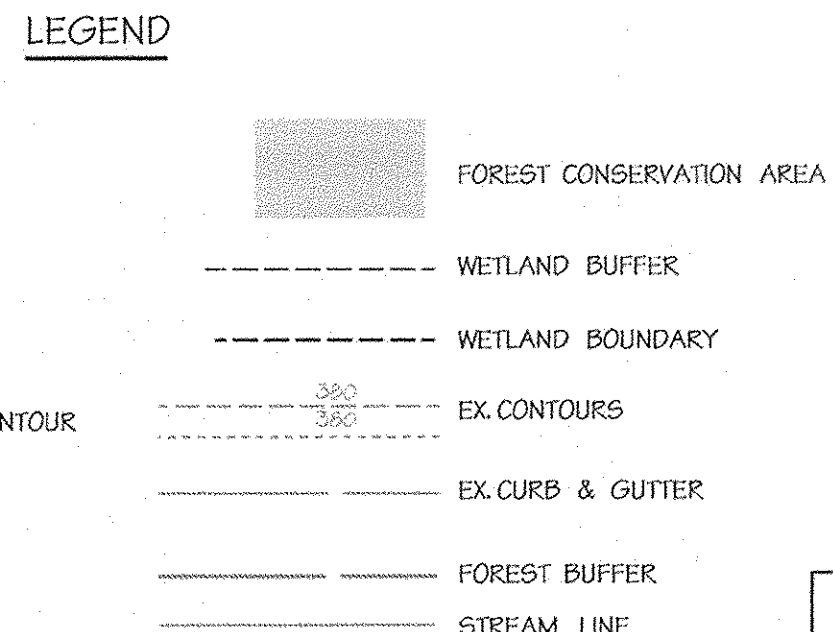
Signature: *James H. Selfridge* DATE: 3/23/04
 SIGNATURE OF DEVELOPER: JAMES H. SELFDRIDGE

ENGINEER'S CERTIFICATION:
I CERTIFY THAT THIS PLAN FOR FOND 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 THERE MUST BE AN ENGINEER'S SUPERVISION OF THE CONSTRUCTION OF THE FOND AND THAT THE HOWARD SOIL CONSERVATION DISTRICT WILL CONDUCT CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE FOND WITHIN 30 DAYS OF COMPLETION.

Signature: *John M. Ranocchia, Sr.* DATE: 3-25-04
 SIGNATURE OF ENGINEER: JOHN M. RANOCCHIA, Sr.

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: *John M. Ranocchia, Sr.* DATE: 3/30/04
 U.S. NATURAL RESOURCE CONSERVATION SERVICE
 HOWARD SOIL CONSERVATION DISTRICT



AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE 'AS-BUILT' PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

Signature: *Donald A. Mason* PE No. 21443 DATE: 1-16-07
 DONALD A. MASON

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

DATA SOURCES:
 BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOW BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
 APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2000. OFF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Signature: *William J. Walker, Jr.* DATE: 4-13-04
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Signature: *William J. Walker, Jr.* DATE: 4/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *William J. Walker, Jr.* DATE: 4/29/04
 CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR: _____ DATE: _____

1-10-07 REVISED PER AS-BUILT CONDITIONS

6-11-04 REVISED LOT NUMBERS

Date	No.	Revision Description

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFDRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DMW
 Dan McCune-Walker, Inc.
 200 East Providence Avenue
 Towson, Maryland 21286
 (410) 296-3059
 Fax 296-4705

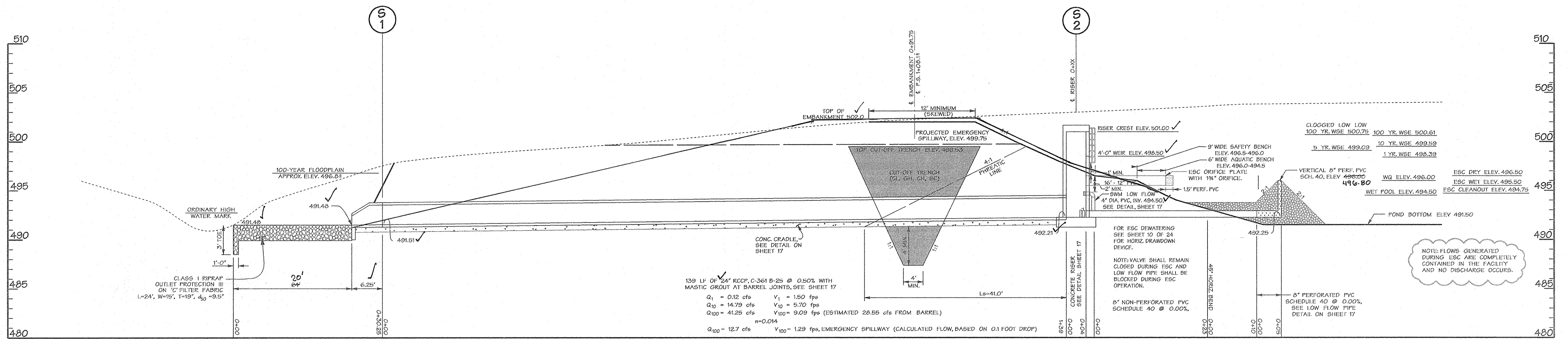
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

3-25-04
 Date

Professional Engr. No. 14551

Subdivision Name	FOX MEADOW	Section/Area	1	Lot/Parcel #	167
Plan or Lot #	BLDG # 22	Taxmap #	15	Elect. District	
Block #	15, 19, 20	Res. RC			
TITLE (FORMERLY PFEFFERKORN PROPERTY) Stormwater Management Facility 1 Stormwater Management Plan					
Des By	DWR	Scale	1"=30'	Proj. No.	00042.B
Drn By	DWR	Date	1/7/04		
Chk By	Approved				14 OF 24

Mon Mar 22 10:28:27 2004 m:\00042\00042.dwg



PROFILE ALONG PRINCIPAL SPILLWAY

SCALE: HORIZ. 1"=10'
VERT. 1"=5'

NOTE:
IF UNSUITABLE (PERVIOUS) MATERIAL IS ENCOUNTERED AT TIME OF CUTOFF TRENCH INSTALLATION DEEPER THAN (4) FEET, IT WILL BE NECESSARY TO EXTEND THE CUTOFF TRENCH DOWN UNTIL SUITABLE MATERIAL IS ENCOUNTERED AS DETERMINED BY A GEOTECHNICAL ENGINEER. FILL MATERIAL FOR THE CUTOFF TRENCH AND IMPERVIOUS CORE SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGN AND CONSTRUCTION ARE SUPERVISED BY A GEOTECHNICAL ENGINEER.

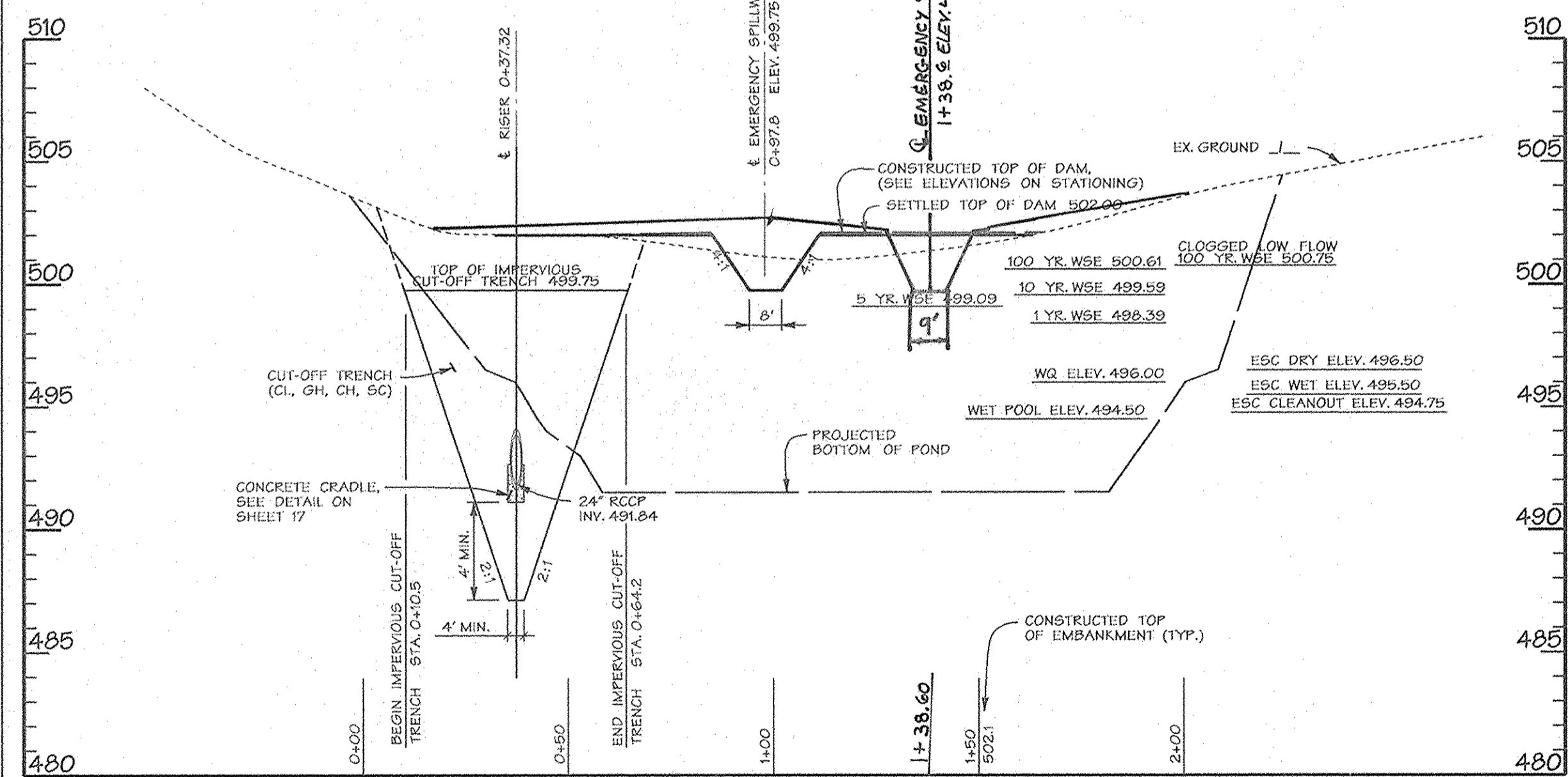
AS-BUILT CERTIFICATION

I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS.

Donald Mason
DONALD A. MASON

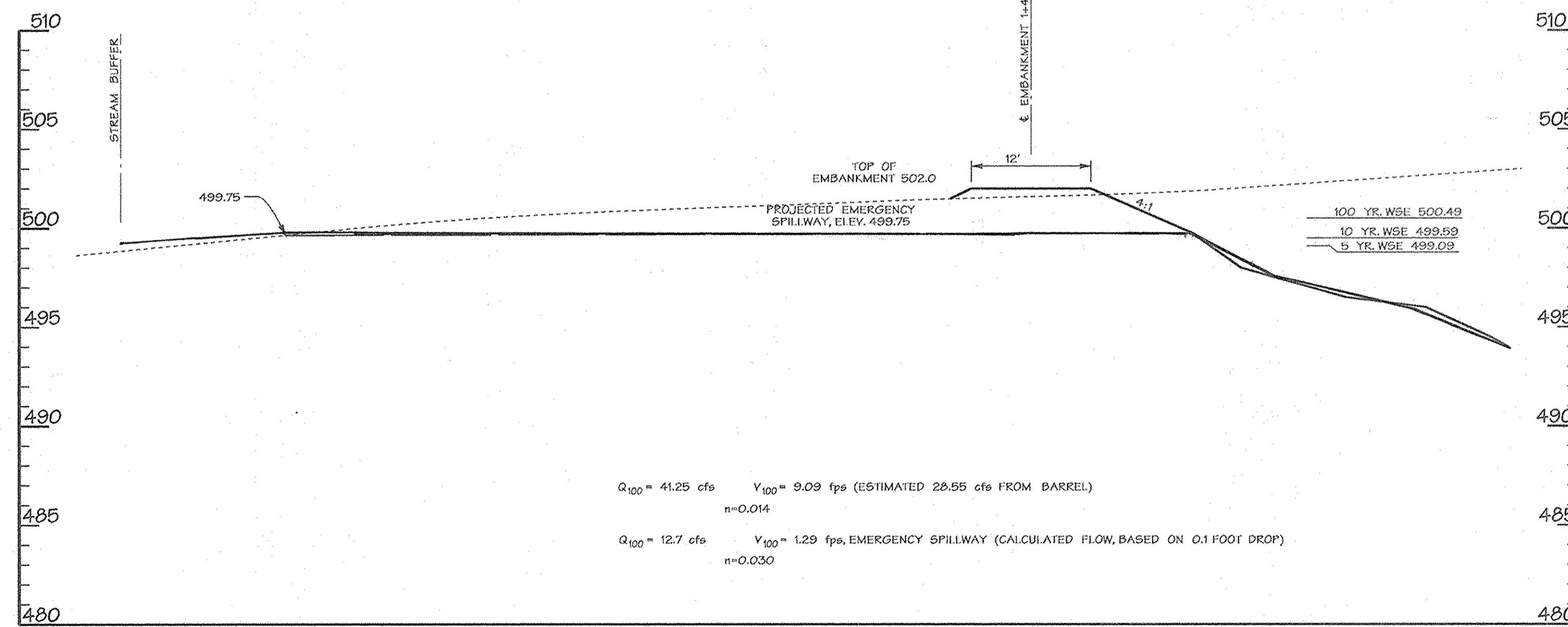
RE. NO. 21443
DATE: 1-16-07

CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED ON ON-SITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ON-SITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE BY THE ENGINEER. NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.



PROFILE ALONG CENTERLINE OF EMBANKMENT

SCALE: HORIZ. 1"=30'
VERT. 1"=5'



PROFILE ALONG EMERGENCY SPILLWAY

SCALE: HORIZ. 1"=10'
VERT. 1"=5'

DEVELOPERS CERTIFICATION:

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 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 AUTHORIZED PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF DEVELOPER: *James H. Selfridge*
PRINT NAME BELOW SIGNATURE: **JAMES H. SELFTRIDGE**
DATE: 3/23/04

ENGINEER'S CERTIFICATION:

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 OF ENGINEER: *John W. Ranecchia, Sr.*
PRINT NAME BELOW SIGNATURE: **John W. Ranecchia, Sr.**
DATE: 3-25-04

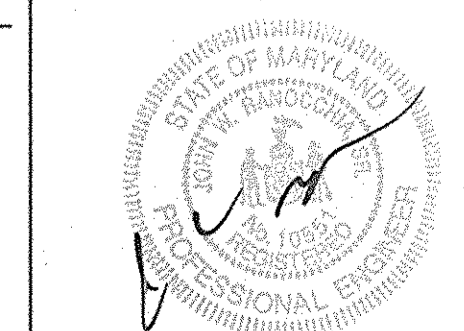
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Jim Inghram 3/30/04
U.S. NATURAL RESOURCE CONSERVATION SERVICE / DATE

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

John W. Ranecchia, Sr. 3/30/04
HOWARD SOIL CONSERVATION DISTRICT / DATE

3-25-04
Date



Professional Engr. No. 1557

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William Z. Walker, Jr.
CHIEF, BUREAU OF HIGHWAYS / DATE: 4-13-04

APPROVED: *John W. Ranecchia, Sr.*
CHIEF, DEVELOPMENT ENGINEERING DIVISION / DATE: 4/20/04

APPROVED: *John W. Ranecchia, Sr.*
CHIEF, DIVISION OF LAND DEVELOPMENT / DATE: 4/21/04

DIRECTOR: _____ / DATE: _____

1-10-07 | REVISED PER "AS-BUILT" CONDITIONS
Date No. Revision Description

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES P. SELFTRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff McCune-Walker, Inc.
300 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3233
Fax 286-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

SUBDIVISION NAME: FOX MEADOW SECTION/AREA: 1 LOT/PARCEL: 167
PLAN OR LOT: 5923/49213, 19, 20 RR, FC ZONE: 15 ELEV./DESIGN: 3 CLASS/STREET:

TITLE: **FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY)**
Stormwater Management Facility 1
Stormwater Management Profiles

Des By: DWR Scale: AS SHOWN Proj. No.: 00042.B
Dwn By: DWR Date: 1/7/04
Chk By: Approved

15 OF 24

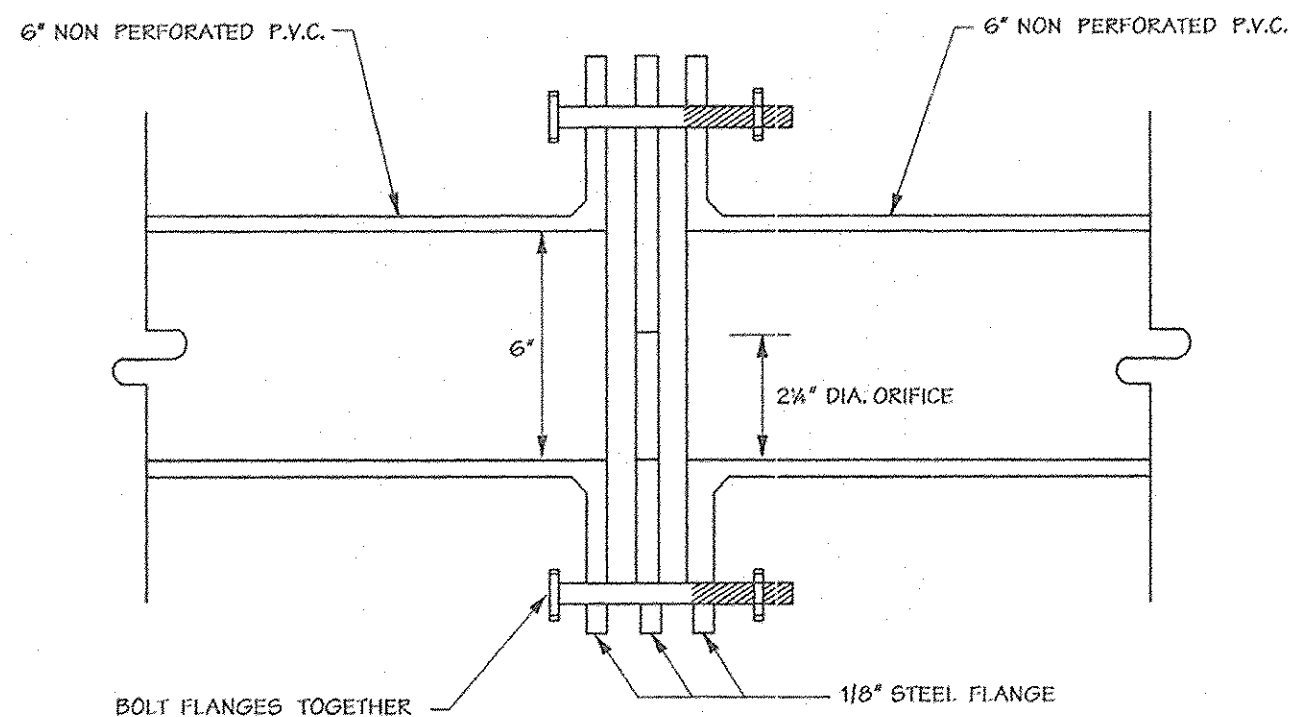
**SWM FACILITY No. 2
DESIGN FLOW SUMMARY PROPOSED CONDITIONS**

Structure Type	BIORETENTION FACILITY-F-6
Water Quality Type	BIORETENTION FACILITY-F-6
Water Quality Storage Required (Ac-Ft)	0.067
Water Quality Storage Provided (Ac-Ft)	0.079
Water Surface Elevation - WQ	536.5
Water Surface Elevation - 1-Year Cpv	536.5
Water Surface Elevation - 10-Year	536.75
Depth of Water Over Bioretention Area - WQ	1.0'
Storage Height Products 10-Year	0.42 Ac-Ft ²
Watershed Area to Facility (Actual D.A.)	0.0299 SQ. MILES
Level of Mgmt. near Riparian	1-Year Cpv
Level of Management Provided	1-Year Cpv
Maximum Height of Filter	3.5'
Floodbank Provided Over 10-Year	0.75'
Floodbank Provided Over 100-Year	0.50'

WATER QUALITY IS MET BY BIORETENTION RECHARGE IS MET BY THE AREA METHOD. PORTIONS OF LOTS 1 AND 2 DRAIN TO A GRASS SWALE CHANNEL. PROTECTION VOLUME IS MET BY EXTENDED DETENTION OF THE 1-YR STORM IN THE FACILITY.

NOTE: THIS SWM FACILITY SHALL BE OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION (HOA)

SEE LANDSCAPE PLAN FOR BIORETENTION PLANTING, SHEET 23 OF 24.

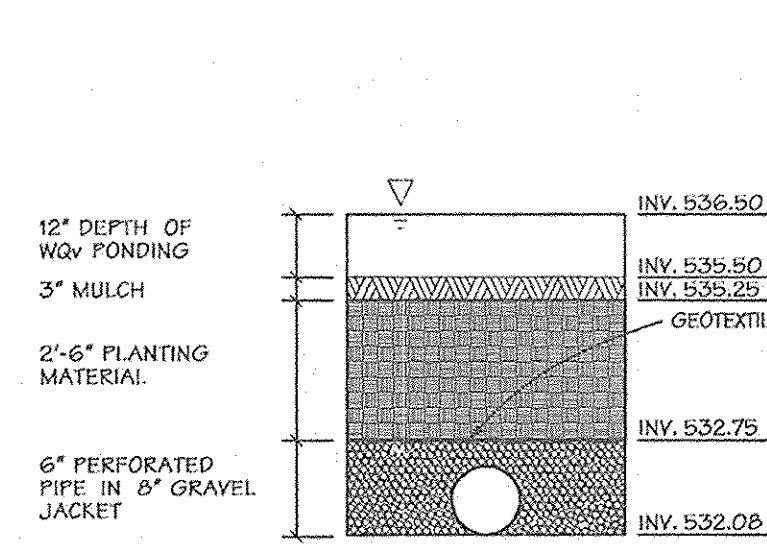


DEWATERING PIPE ORIFICE DETAIL

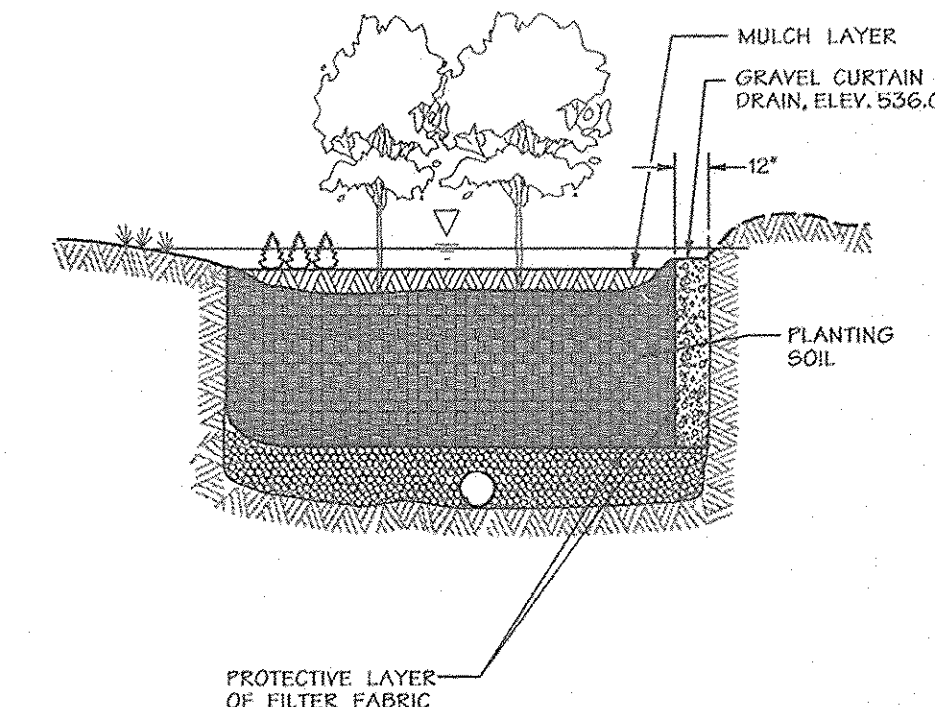
NOT TO SCALE

LEGEND

- WETLAND BUFFER
- WETLAND BOUNDARY
- EX. CONTOURS
- EX. CURB & GUTTER
- EX. BUILDING
- FOREST BUFFER
- STREAM LINE
- PROPERTY BOUNDARY
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED FLOODPLAIN
- SOIL LINES/TYPES
- EXISTING SANITARY SEWER
- EXISTING STORM DRAIN
- CENTERLINE OF STREAM
- PROPOSED EARTH DIKE
- PROPOSED SILT FENCE
- PROPOSED SUPER SILT FENCE
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- SEPTIC AREA
- GRAVEL CURTAIN



BIORETENTION FACILITY 1



TYPICAL SECTION

BIORETENTION EXAMPLE

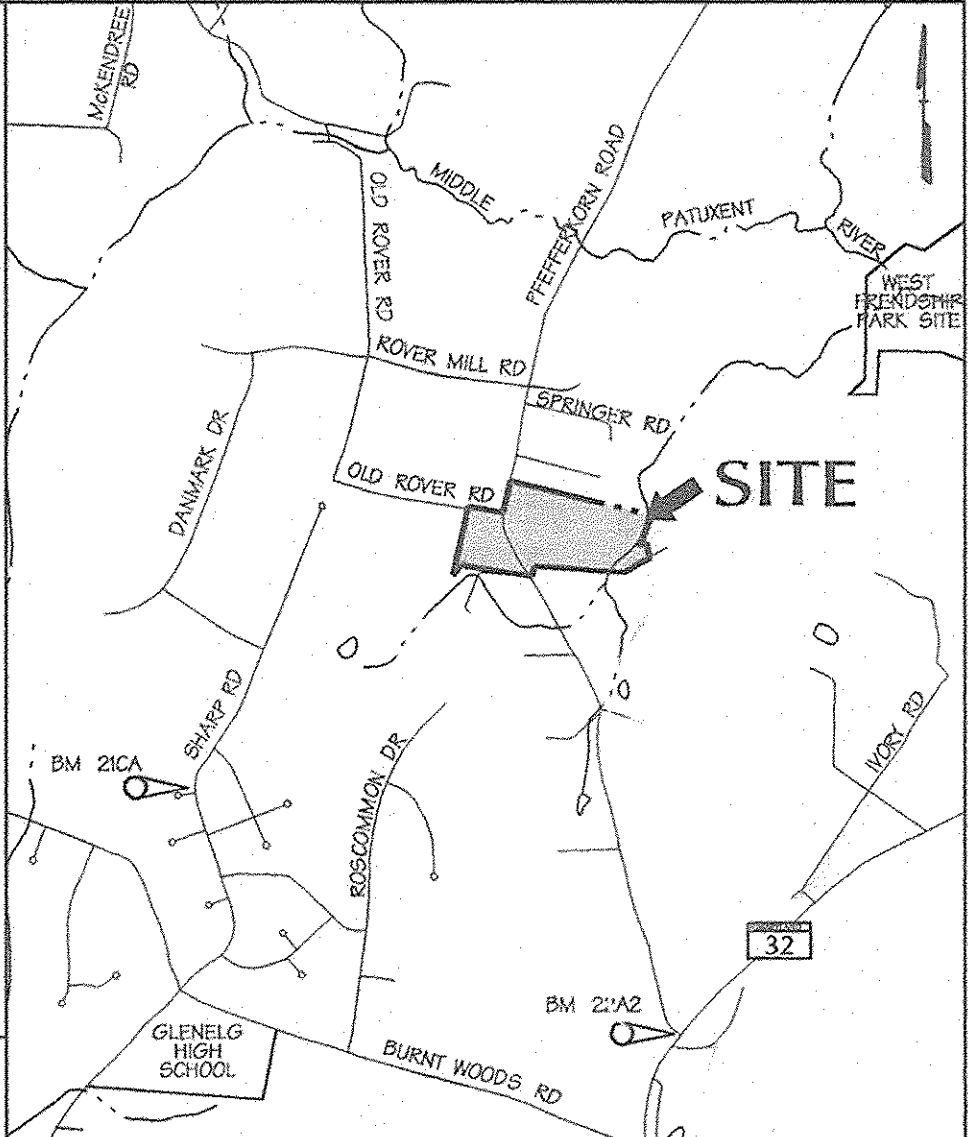
NOT TO SCALE

MATERIALS SPECIFICATION FOR BIORETENTION

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE-SPECIFIC
PLANTING SOIL (2.5 FEET DEEP)	SAND 35 - 60% SILT 30 - 55% CLAY 10 - 25%	N/A	USDA SOIL TYPES LOAMY SAND, SANDY LOAM OR LOAM.
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MIN.
PEA GRAVEL DIAPHRAGM AND CURTAIN DRAIN	PEA GRAVEL: ASTM-D-448 ORNAMENTAL STONE: WASHED COBBLES	PEA GRAVEL: NO. 6 STONE: 2" TO 5"	
GEOTEXTILE	CLASS 'C' - APPARENT OPENING SIZE (ASTM-D-4751), GRAB TENSILE STRENGTH (ASTM-D-4533), PUNCTURE RESISTANCE (ASTM-D-4533)	N/A	FOR USE AS NECESSARY BENEATH UNDERDRAINS ONLY.
UNDERDRAIN GRAVEL	ASHTO M-43	0.375" TO 0.75"	
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR ASHTO M-278	4" TO 6" RIGID SCH 40 PVC OR SDR25	3/4" PERFT. @ 6" ON CENTER, 4 HOLES PER ROW, MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES.
POURED IN PLACE CONCRETE (IF REQUIRED)	MSHA MIX NO. 3; F'c=3600 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED, REINFORCED TO MEET ASTM-619-60	N/A	ON-SITE TESTING OF POURED-IN-PLACE CONCRETE REQUIRED: 28 DAY STRENGTH AND SLUMP TESTS. ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS. REQUIRES DESIGN DRAWINGS SEALED AND APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND - DESIGN TO INCLUDE MEETING ACI CODE 309.2.1(B); VERTICAL LOADING (HO OR H-20); ALLOWABLE HORIZONTAL LOADINGS (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING.
SAND (1 FOOT DEEP)	ASHTO M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND.

SPECIFICATION FOR BIORETENTION MAINTENANCE

TRASH AND DEBRIS SHALL BE REMOVED AS NECESSARY.
WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY (E.G. WHEN WATER PONDS ON THE SURFACE OF THE FILTER BED FOR MORE THAN 72 HOURS), THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH NEW MATERIAL. THE REMOVAL OF SEDIMENTS SHOULD BE DISPOSED IN AN ACCEPTABLE MANNER (E.G. LANDFILL). SILT/SEDIMENT SHOULD BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATION EXCEEDS ONE INCH.
A DROP OF AT LEAST SIX INCHES SHALL BE PROVIDED AT THE INLET OF THE BIORETENTION FACILITY (1-6) (STONE DIAPHRAGM). DEAD OR DISEASED PLANT MATERIAL SHALL BE REMOVED. AREAS DEVOID OF MULCH SHOULD BE RE-MULCHED ON AN ANNUAL BASIS.
DIRECT MAINTENANCE ACCESS SHALL BE PROVIDED TO THE RETREATMENT AREA AND THE FILTER BED.



VICINITY MAP

SCALE: 1"=2000'

SEQUENCE OF CONSTRUCTION - FACILITY No. 2

No.	Description	No. of days
1.	Obtain a grading permit.	7
2.	Install sediment and erosion control devices.	2
3.	Rough grade site after obtaining permission from inspector to proceed.	2
4.	Construct Facility Number 2, (bioretention facility) and fine grade.	5
5.	Stabilize all areas in accordance with the standards and specifications.	2

NOTE: THIS FACILITY WILL NOT BE USED DURING THE ESC PHASE OF THIS PROJECT

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
APPROX. WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2000. OFF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[Signature] 4-13-04
CHIEF, BUREAU OF HIGHWAYS
[Signature] 4/20/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT

DIRECTOR

1-10-01 **REVISED PER 'AS-BUILT' CONDITIONS**
6-11-04 **REVISED LOT NUMBERS**

OWNER: NORTHDRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738
DEVELOPER: JAMES P. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Darr-McCann-Walkers, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3328
Fax 286-4705
A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME: FOX MEADOW	SECTION/AREA: 1	TOTAL PAGES: 167
PLAT OR TITLE BLOCK NO.: 5903/1492	PARCELS MAP: 15	ELECT. RECORDS: 3
DATE: 13, 19, 20 RR, RC		
TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY)		
STORMWATER MANAGEMENT FACILITY 2 PLAN, DETAILS AND SEDIMENT & EROSION CONTROL		
Des By: MRT/DW	Scale: 1"=50'	Proj. No. 00042.B
Dwn By: MRT/DW	Date: 1/17/04	
Chk By:	Approved:	16 OF 24

DEVELOPERS CERTIFICATION:

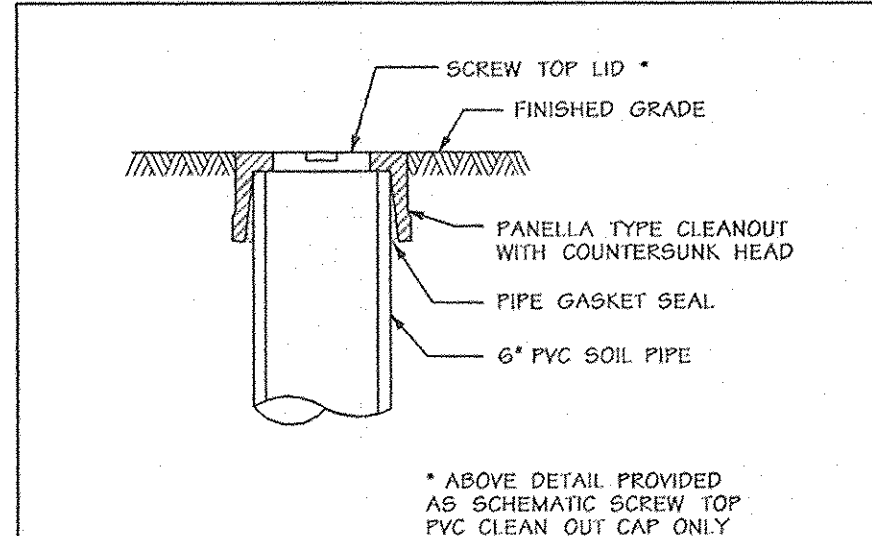
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[Signature] 3/23/04
DATE
JAMES H. SELFRIDGE

ENGINEER'S CERTIFICATION:

I HEREBY 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 DEFECTS THAT THESE PLANS MAY 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] 3/25/04
DATE
John W. Rancich, Sr.

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] 3/30/04
DATE
U.S. NATIONAL RESOURCE CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 3/26/04
DATE
HOWARD S.C.D.



CLEAN OUT DETAIL

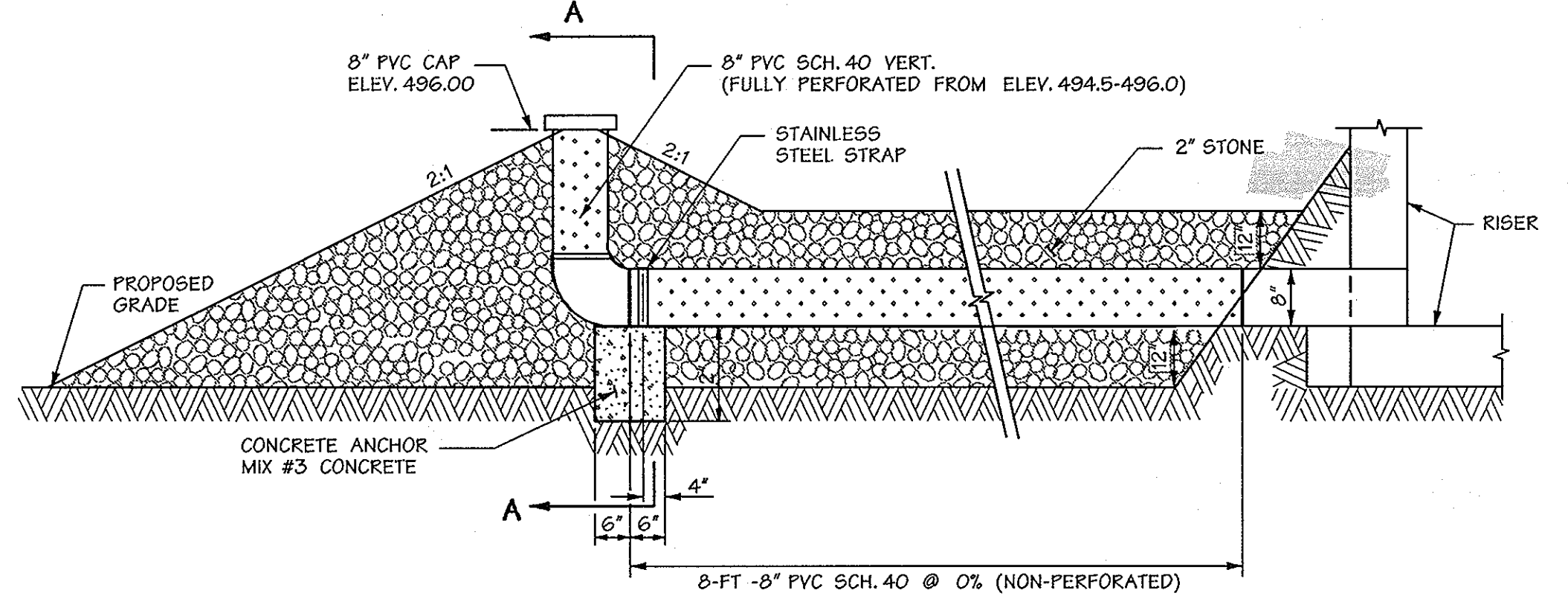
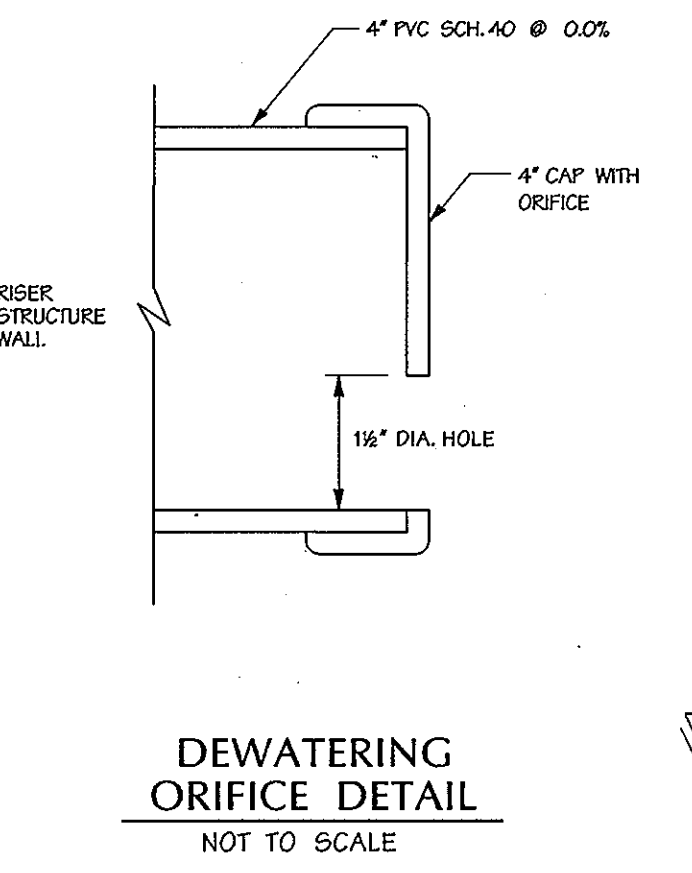
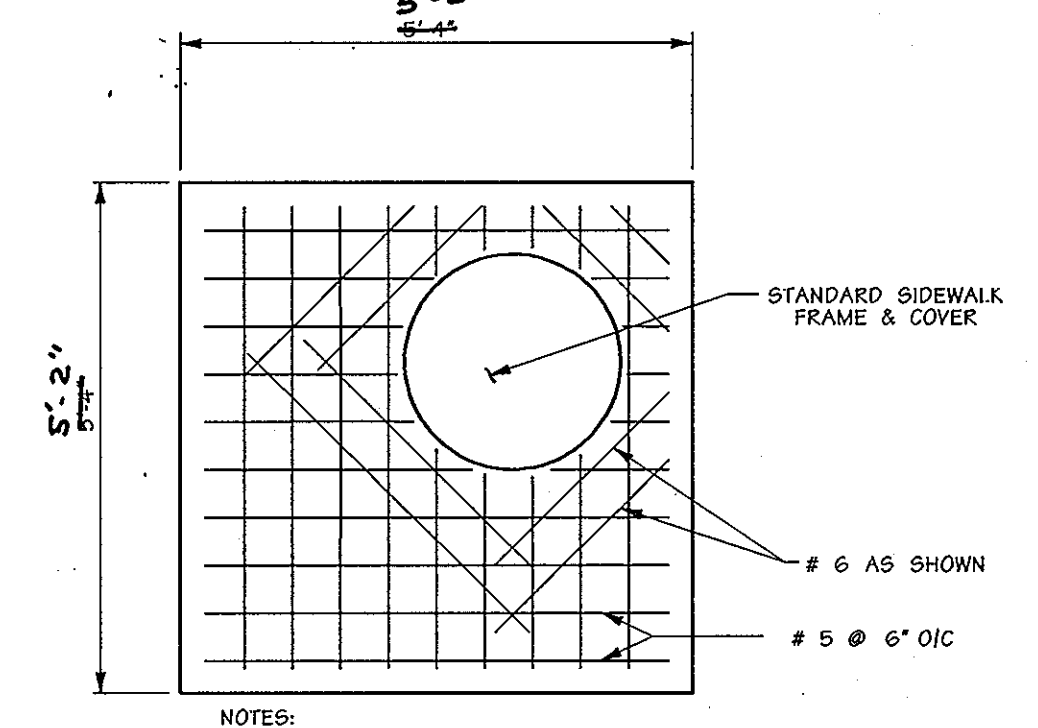
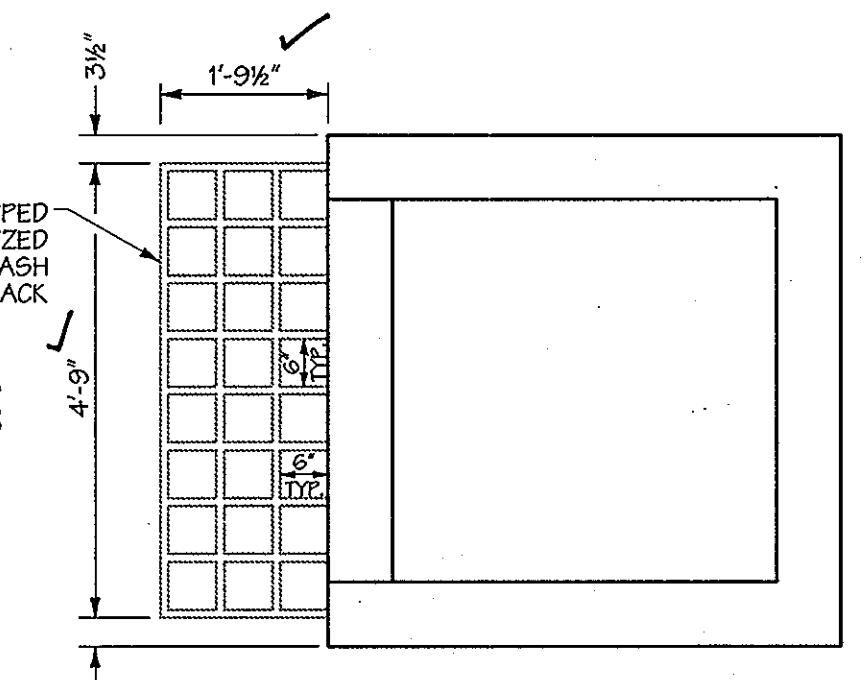
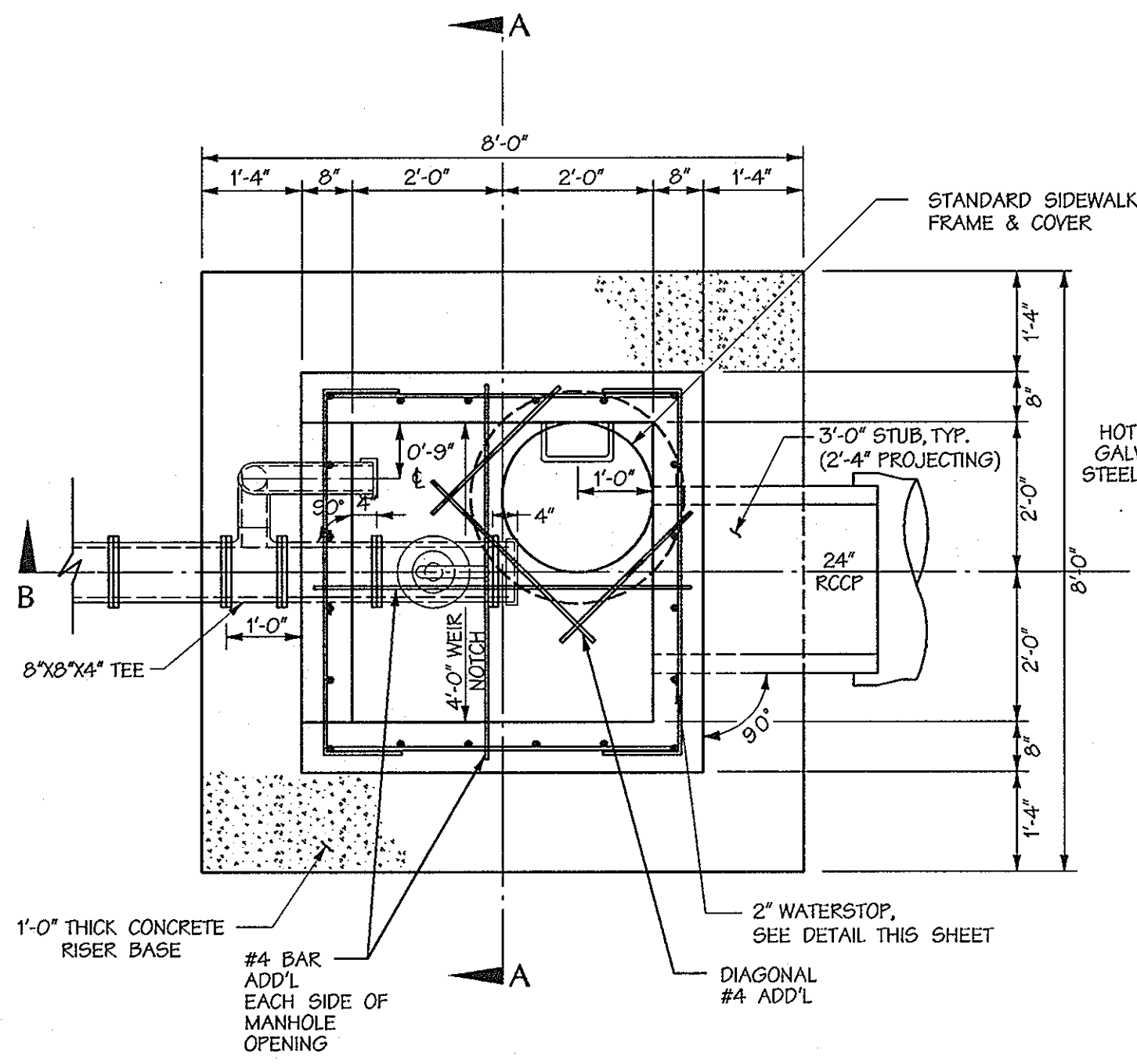
NOT TO SCALE

- FOR AN UNDERGROUND FLUSH MOUNTED CLEANOUT, PROVIDE A TUBE MADE OF NON-CORROSIVE MATERIAL, SCHEDULE 40 OR EQUAL, AT LEAST 3-FEET LONG WITH AN INSIDE DIAMETER OF AT LEAST 6-INCHES.
- THE TUBE SHALL HAVE A FACTORY ATTACHED CAST IRON OR HIGH IMPACT PLASTIC COLLAR WITH RIBS TO PREVENT ROTATION WHEN REMOVING SCREW TOP LID. THE SCREW TOP LID SHALL BE CAST IRON OR HIGH IMPACT PLASTIC THAT WILL WITHSTAND ULTRA-VIOLET RAYS.

[Signature]
Professional Engineer
AS-801-176-07

[Signature]
Professional Engineer
Professional Engr. No. 16551

NOTE: FOR TEST BORING INFORMATION B1, B2, B3 & B7 SEE SHEET 13 OF 24.



NOTES:
 1. BOLT TOP SLAB TO RISER WITH (4) 1/2" x 6" L.G. HEX. HEAD GALVANIZED BOLTS.
 2. THE SIDE AND THE SLAB CLOSEST TO THE FRAME AND COVER WILL LINE UP WITH THE SIDE OF THE RISER WITH STANDARD MANHOLE STEPS.

NOTE:
 PERFORATED PVC SHALL BE "FULLY PERFORATED", HAVING A MINIMUM OF 32, 1" DIAMETER HOLES PER LINEAR FOOT. PERFORATIONS SHALL BE EVENLY DISTRIBUTED AROUND THE FULL PERIPHERY OF THE PIPE.

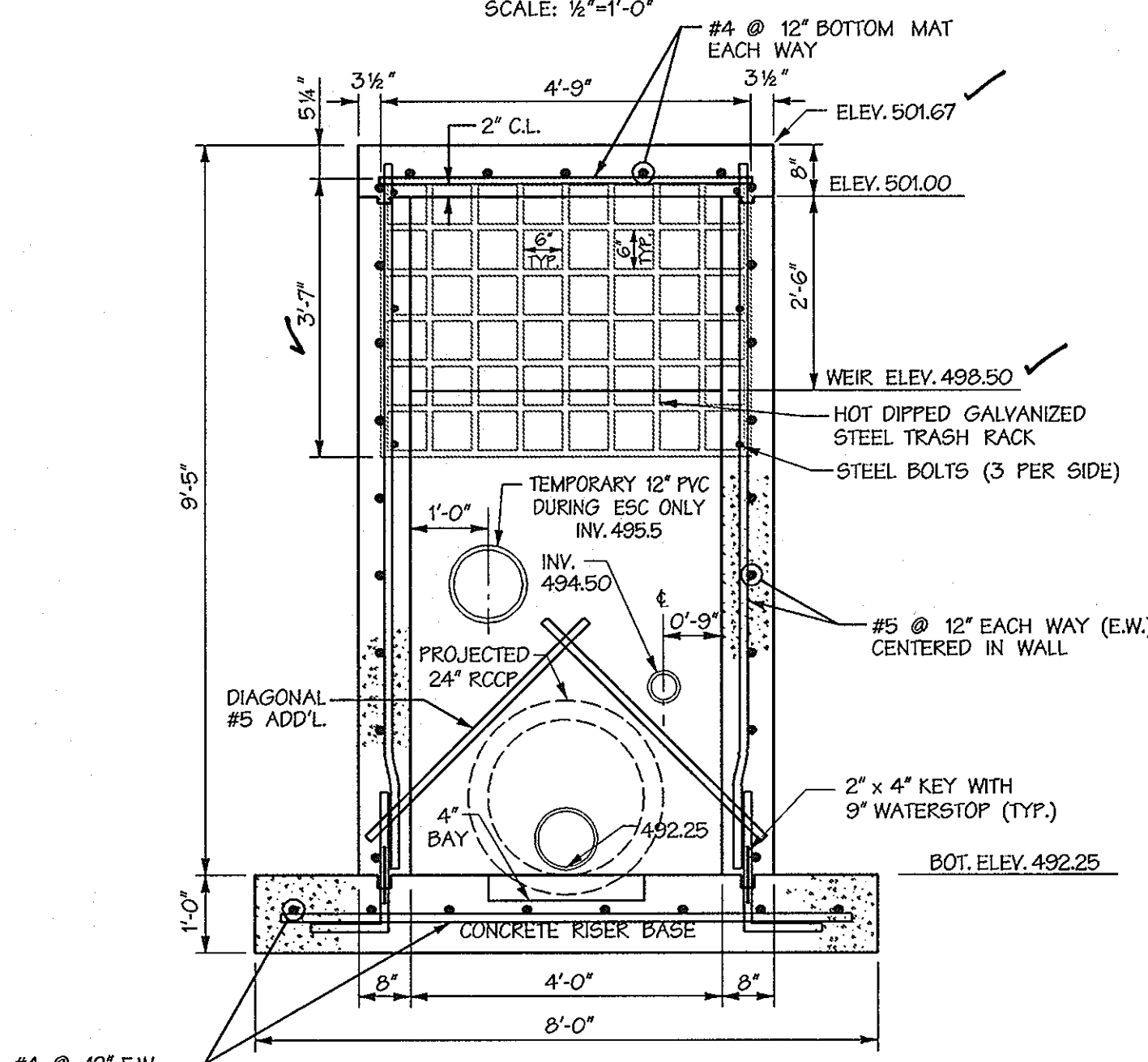
TRASH RACK DETAIL
 SCALE: 1/4"=1'-0"

TOP SLAB
 Scale: 3/16" = 1'-0"
 CAST-IN-PLACE

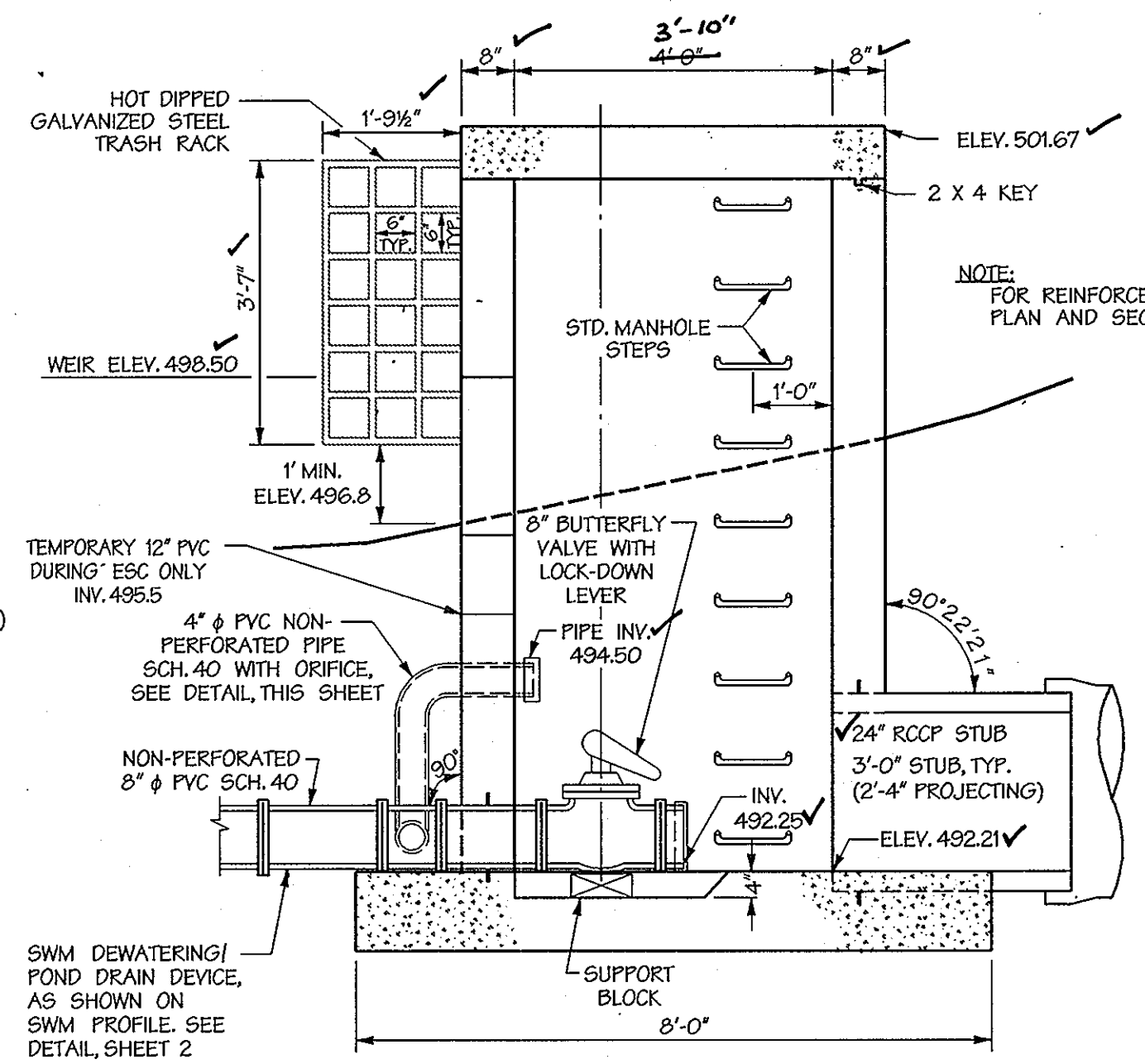
LOW FLOW PIPE DETAIL
 NO SCALE

* No. 2 SMOOTH BAR MAY BE SUBSTITUTED WITH 1x1" TUBULAR BARS, ALL JOINTS TO BE WELDED ALL AROUND. AFTER FABRICATION AND GALVANIZATION OF THE TRASH RACK, THE TRASH RACK SHALL BE PAINTED BATTLESHIP GRAY.

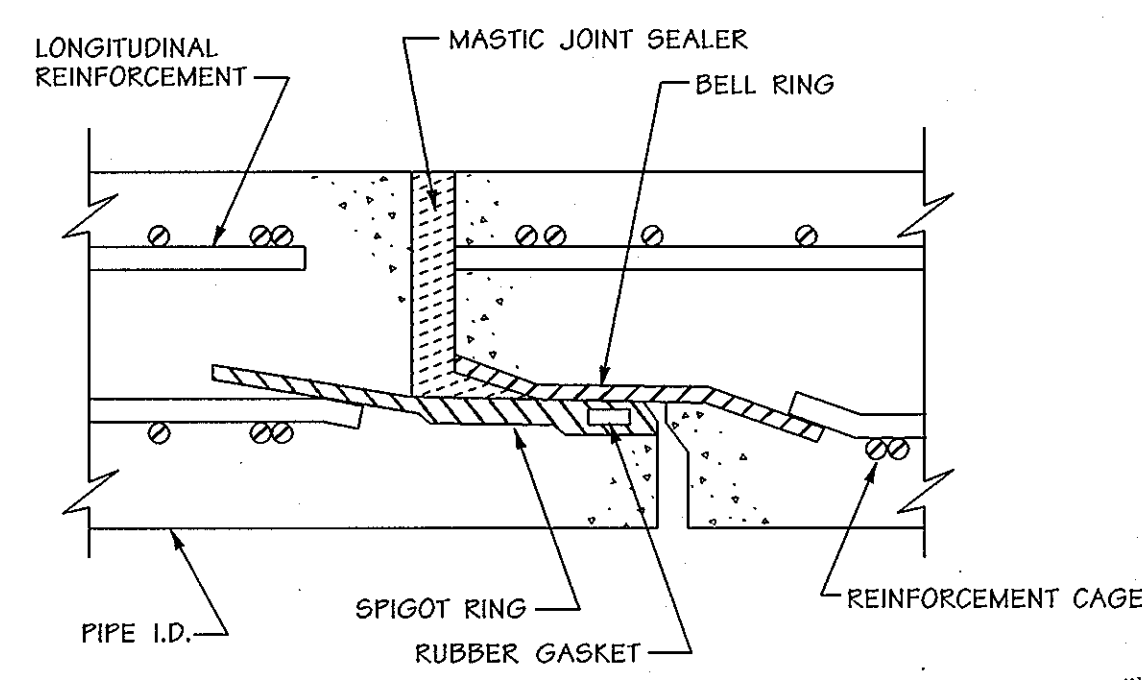
RISER - PLAN
 CAST-IN-PLACE
 SCALE: 1/4"=1'-0"



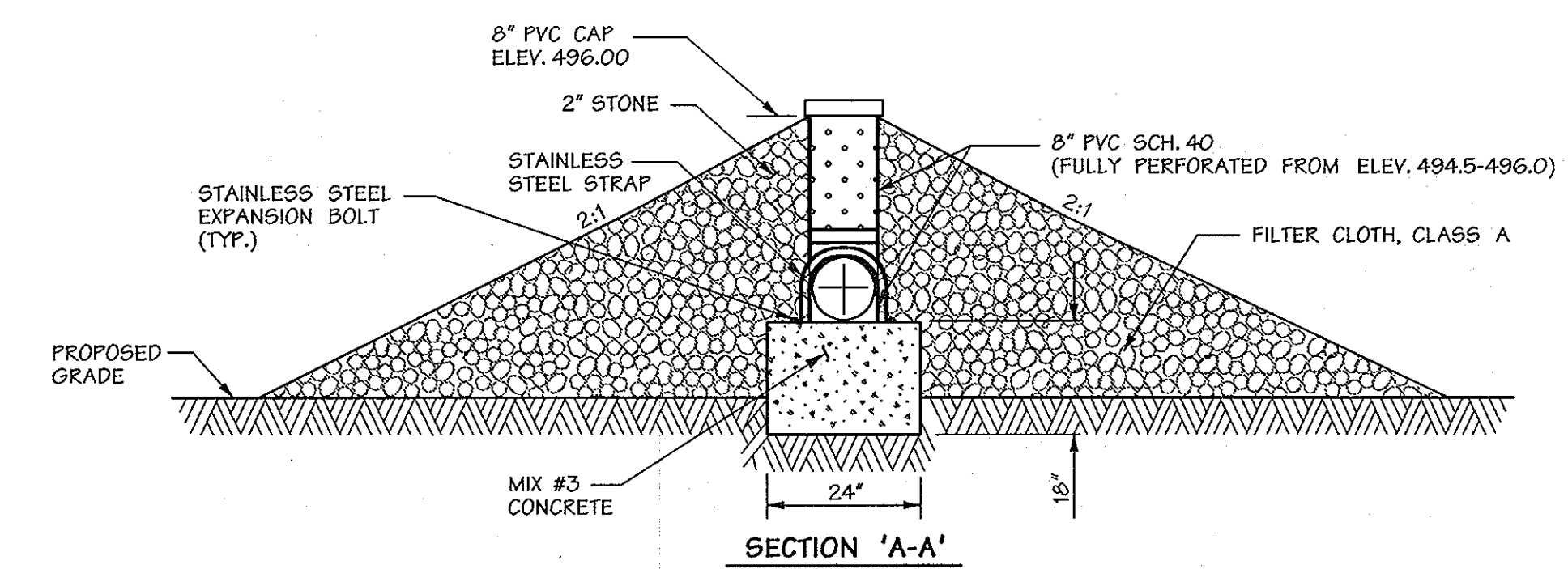
SECTION A-A
 CAST-IN-PLACE
 SCALE: 1/4"=1'-0"



SECTION B-B
 CAST-IN-PLACE
 SCALE: 1/4"=1'-0"

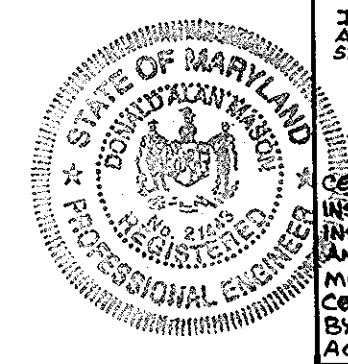


BARREL JOINT SEAL DETAIL
 NTS



SECTION 'A-A'

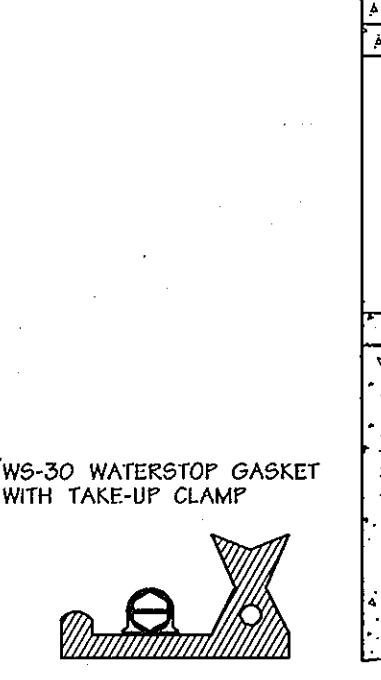
AS BUILT CERTIFICATION
 I HEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEET THE APPROVED PLANS AND SPECIFICATIONS.
Donald A. Mason
 DONALD A. MASON
 R.E. No. 21443
 DATE 1-16-07



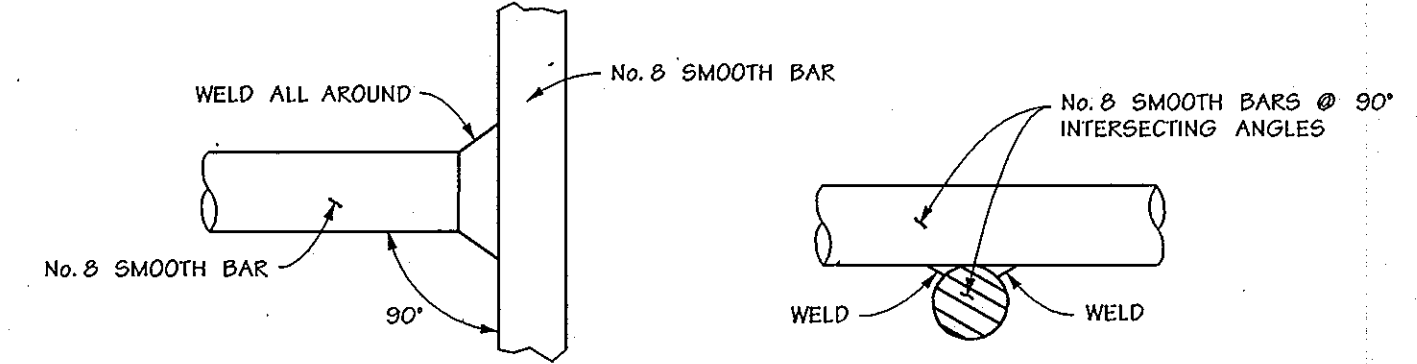
WS-30 WATERSTOP CONNECTION (SEE DETAIL THIS SHEET)



WS-30 WATERSTOP CONNECTION
 NOT TO SCALE

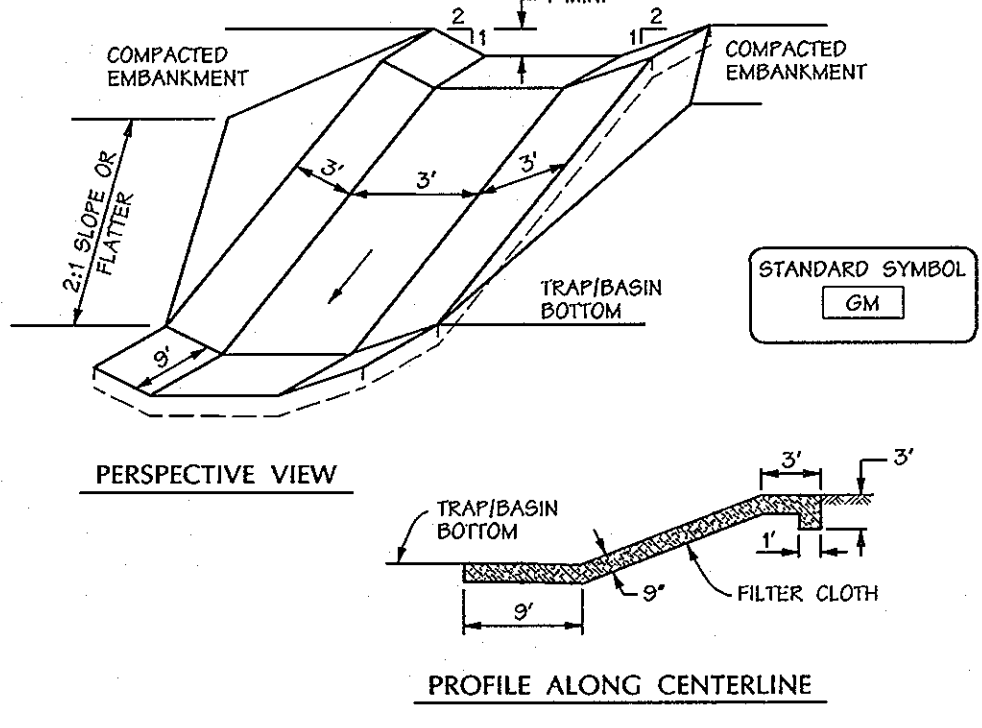


WATERSTOP DETAIL
 NOT TO SCALE



TRASH RACK WELDING DETAIL
 NOT TO SCALE

- NOTES
- NO RUST SHALL BE PERMITTED ON REPAIR SURFACES TO BE WELDED.
 - TRASH RACK SHALL BE NO. 8 SMOOTH BAR WELDED AT ALL INTERSECTIONS.
 - 1/2" x 4" STAINLESS STEEL BOLT (TYP.) ASTM F593-98.
 - *ALL STEEL SHALL BE ASTM A-36 (OR A-500 FOR TUBING) FULLY GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A-123.
 - ALL WELDED CONNECTIONS MUST BE HOT DIPPED GALVANIZED AND SHOP FABRICATED.
 - EXPOSED CONCRETE CORNERS MUST BE CHAMFERED WITH 1/4" x 1/4" MILLED CHAMFER STRIPS.
 - MINIMUM COVER FOR RE-BARS IS 2" AT WALLS AND 3" AT BOTTOM.
 - ALL PVC SHALL BE SCHEDULE 40.



GABION INFLOW PROTECTION
 NOT TO SCALE

- CONSTRUCTION SPECIFICATIONS
- GABION INFLOW PROTECTION SHALL BE CONSTRUCTED OF 9" x 3" x 9" GABION BASKETS FORMING A TRAPEZOIDAL CROSS SECTION 1' DEEP, WITH 2:1 SIDE SLOPES, AND A 3" BOTTOM WIDTH.
 - GEOTEXTILE CLASS C SHALL BE INSTALLED UNDER ALL GABION BASKETS.
 - THE STONE USED TO FILL THE GABION BASKETS SHALL BE 4" - 7".
 - GABIONS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
 - GABION INFLOW PROTECTION SHALL BE USED WHERE CONCENTRATED FLOW IS PRESENT ON SLOPES STEEPER THAN 4:1.

DEVELOPERS CERTIFICATION:
 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 ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING OF 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.

James H. Selfridge
 PRINT NAME BELOW SIGNATURE
 DATE 3/25/04

ENGINEER'S CERTIFICATION:
 I/WE 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/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.

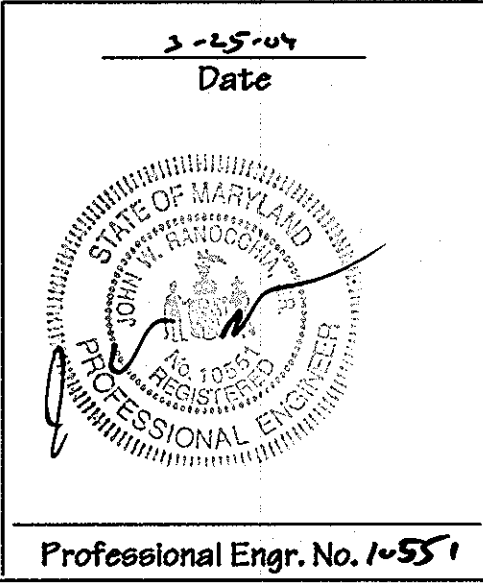
John W. Ramech, Sr.
 PRINT NAME BELOW SIGNATURE
 DATE 3-25-04

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 Meyer
 U.S. NATURAL RESOURCE CONSERVATION SERVICE
 DATE 3/30/04

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

John W. Ramech, Sr.
 DATE 3/30/04



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Walker
 CHIEF, BUREAU OF HIGHWAYS
 DATE 4-13-04

APPROVED:
John Ramech
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE 4/28/04

John Ramech
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE 4/29/04

Date	No.	Revision Description
1-10-07	1	REVISE PER AS-BUILT CONDITIONS

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFTRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DMW
 Duff-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3535
 Fax 296-4705

A Team of Land Planners,
 Landscape Architects,
 Engineers, Surveyors &
 Environmental Professionals

Des By	DWR	Scale	AS SHOWN	Proj. No.	00042.B
Drn By	DWR	Date	1/7/04		
Chk By	Approved				17 OF 24

10004200042.B



LEGEND

- EX CONTOUR
- EX STREAM
- EX BUILDING
- EX WOODS LINE
- EX SEPTIC AREA
- ZONING LINE
- PROF. LOT LINE
- PROF. REPLACEMENT WELL AREA
- PROF. WELL
- PROF. BUILDING
- PROF. SRA
- LOT NUMBER
- 75' STREAM BUFFER
- 25' WETLAND BUFFER
- WETLAND
- PRELIMINARY 100-YEAR FLOODPLAIN
- FOREST RETENTION
- REFORESTATION
- FOREST CLEARING
- FOREST CONSERVATION EASEMENT
- SIGHT DISTANCE EASEMENT
- PERC TEST HOLE (PASSED)
- PERC TEST HOLE (FAILED)
- PROPOSED WELL AND WELL RELOCATION AREA
- TEMPORARY FOREST PROTECTION FENCE
- PERMANENT FOREST PROTECTION SIGN
- REFORESTATION ZONE DELINEATION LINE

NOTE: SEE SHEET 15 OF 18 FOR FOREST CONSERVATION NOTES AND DETAILS.

FOREST CONSERVATION EASEMENT "A" 1.74± ACRES
0.70± AC RETENTION
1.04± AC REFORESTATION

REFORESTATION ZONE V
0.14± AC. REFORESTATION
CREDIT DERIVED FROM
LANDSCAPE PLANTING

FOREST CONSERVATION EASEMENT "B" 8.59± ACRES
3.47± AC RETENTION
2.50± AC REFOREST. (ZONE III)
2.48± AC FLOODPLAIN
0.14± AC REFORESTATION CREDIT
FOR LANDSCAPING (ZONE V)

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
APPROX WETLAND LOCATION PER DMW
FIELD VISIT DATED APRIL 2003. OFF SITE SEPTIC RESERVE AREAS
PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. White 4-13-04
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

William J. White 4/13/04
CHIEF, BUREAU OF HIGHWAYS DATE

John A. Smith 4/29/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR _____ DATE _____

6-11-04 **REVISED LOT NUMBERS**

Date	No.	Revision Description
6-11-04	1	REVISED LOT NUMBERS

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff McCreary-Walker, Inc.
200 East Pennsylvania Avenue
Tusson, Maryland 21286
(410) 886-3833
Fax 296-4705

A Team of Land Planners,
Landscape Architects,
Engineers, Surveyors &
Environmental Professionals

3.25.04
Date

SUBDIVISION NAME	SECTION/AREA	LOT/PARCEL
FOX MEADOW	1	167
PLAT OR REF. NO.	ZONE	TAXING MAP
5983/492	15	RR, RC
		GENUS TRACT
TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) FINAL FOREST CONSERVATION PLAN		
Des By	AJS	Scale 1"=50'
Drn By	AJS/MSS	Proj. No. 00042.B
Chk By	MM	Date 1/07/04
		Approved
Landscape Architect No.		19 OF 24

NOTE: SEE SHEET 15 OF 18 FOR FOREST CONSERVATION NOTES AND DETAILS.

- LEGEND**
- EX. CONTOUR
 - EX. STREAM
 - EX. BUILDING
 - EX. WOODS LINE
 - ▨ EX. SEPTIC AREA
 - RC-DFO RR-DEO ZONING LINE
 - PROP. LOT LINE
 - PROP. REPLACEMENT WELL AREA
 - PROP. WELL
 - PROP. BUILDING
 - ▨ PROP. GRA
 - ⊙ LOT NUMBER
 - 75' STREAM BUFFER
 - 25' WETLAND BUFFER WETLAND
 - PRELIMINARY 100-YEAR FLOODPLAIN
 - ▨ FOREST RETENTION
 - ▨ REFORESTATION
 - ▨ FOREST CLEARING
 - ▨ FOREST CONSERVATION EASEMENT
 - PERC TEST HOLE (PASSED)
 - PERC TEST HOLE (FAILED)
 - PROPOSED WELL AND WELL RELOCATION AREA
 - × TEMPORARY FOREST PROTECTION FENCE
 - PERMANENT FOREST PROTECTION SIGN
 - ▨ REFORESTATION ZONE DELINEATION LINE
 - PROP. TREELINE

DATA SOURCES:
 BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
 APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2002 OF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Walker 4-13-04
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Michael J. ... 4/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Robert ... 4/19/04
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR _____ DATE _____

Date	No.	Revision Description
6-11-04	1	REVISED LOT NUMBERS

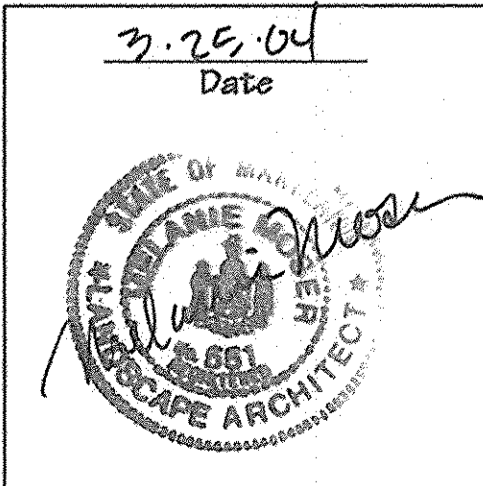
OWNER: NORTHRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

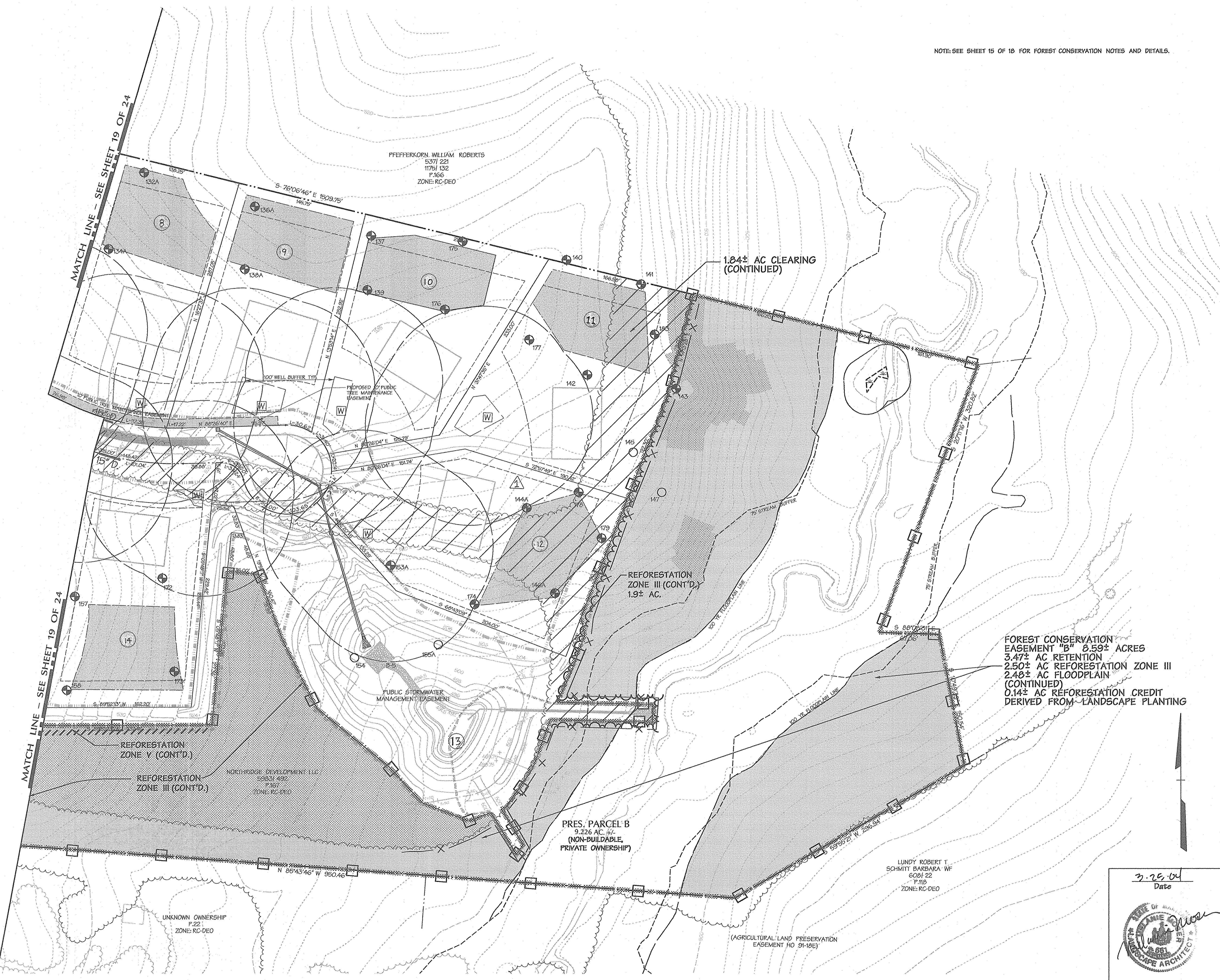
DMW
 Draft/McCune/Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 286-3283
 Fax: 286-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME	FOX MEADOW	SECTION/AREA	1/17/PARCEL
PLAT OR LOT BLOCK	5983/492	TAX MAP ZONE	15, 19, 20 RR, RC
TITLE	FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) FINAL FOREST CONSERVATION PLAN		
Des By	AJS	Scale	1" = 50'
Drn By	AJS/MGS	Date	1/07/04
Proj. No.	00042.B	Page	20 OF 24
Chk By	MM	Approved	<i>MM</i>



Landscape Architect No. _____



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SEE SHEET 23 FOR PLANT LIST AND SHEET 25 FOR PLANTING NOTES & DETAILS.
 TOTAL LANDSCAPE PLANTS (THIS SHEET):
 52 SHADE
 72 EVERGREEN
 26 ORNAMENTAL
 (DOES NOT INCLUDE BIORETENTION PLANTING)

Water Quality Planting Plan**
 Facility #:

ZONE "A" (7,780 A-s.f.)

Species	Size	Spacing	Quantity	Remarks
<i>Scirpus tabernaemontani</i>	quart container*	36"	166	OBI
<i>Iris pseudacoris</i>	quart container*	36"	166	OBI
<i>Lobelia cardinalis</i>	quart container*	36"	166	FACW
<i>Iris versicolor</i>	quart container*	36"	166	OBI
<i>Panicum virgatum</i>	quart container*	36"	166	FAC
<i>Saururus cernuus</i>	quart container*	36"	166	OBI
TOTALS			996	

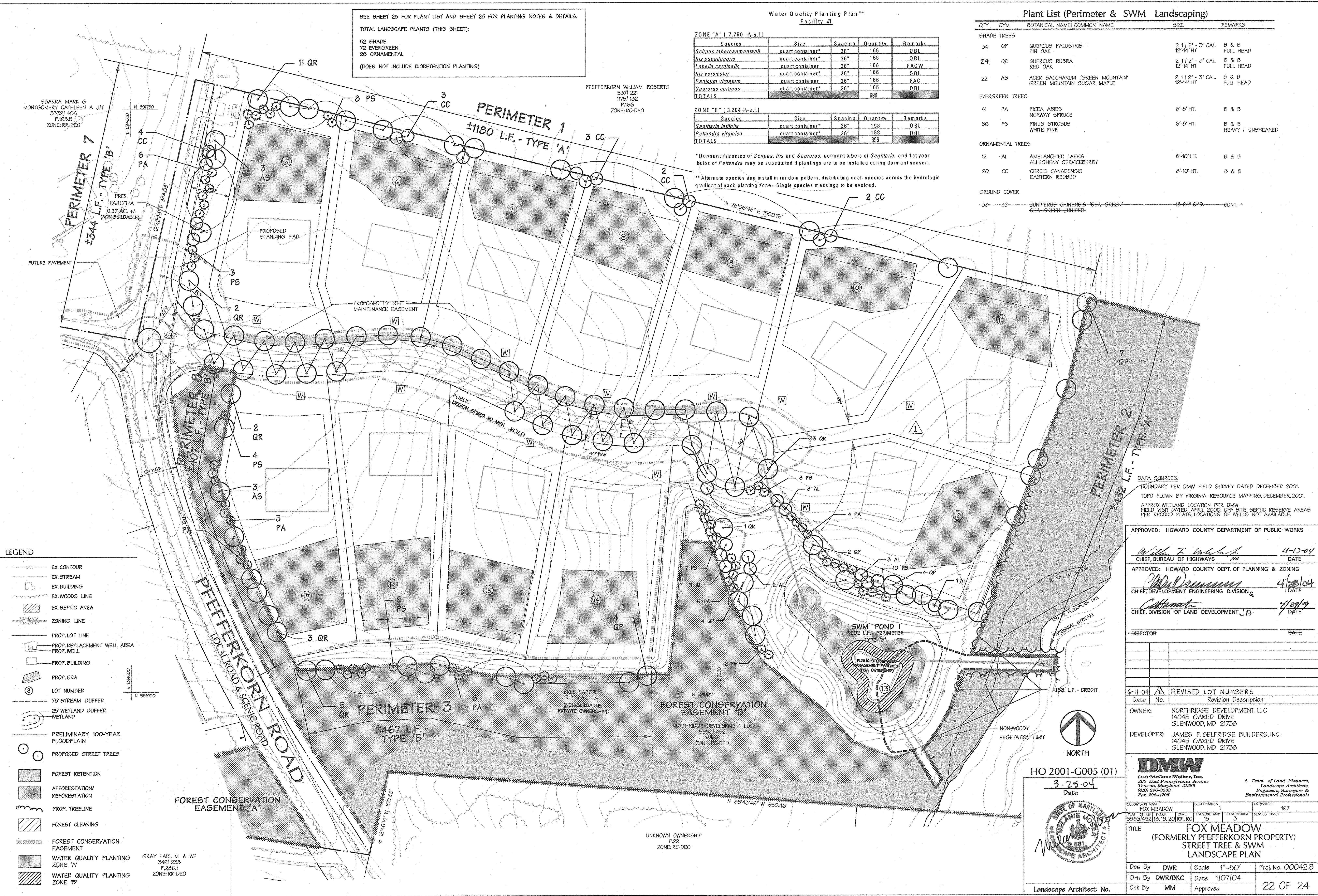
ZONE "B" (3,204 A-s.f.)

Species	Size	Spacing	Quantity	Remarks
<i>Sagittaria latifolia</i>	quart container*	36"	198	OBI
<i>Peltandra virginica</i>	quart container*	36"	198	OBI
TOTALS			396	

* Dormant rhizomes of *Scirpus*, *Iris* and *Saururus*, dormant tubers of *Sagittaria*, and 1st year bulbs of *Peltandra* may be substituted if plantings are to be installed during dormant season.
 ** Alternate species and install in random pattern, distributing each species across the hydrologic gradient of each planting zone. Single species massings to be avoided.

Plant List (Perimeter & SWM Landscaping)

QTY	SYM	BOTANICAL NAME/COMMON NAME	SIZE	REMARKS
SHADE TREES				
34	QP	QUERCUS PALUSTRIS PIN OAK	2 1/2" - 3" CAL. 12'-14" HT	B & B FULL HEAD
24	QR	QUERCUS RUBRA RED OAK	2 1/2" - 3" CAL. 12'-14" HT	B & B FULL HEAD
22	AS	ACER SACCHARUM 'GREEN MOUNTAIN' GREEN MOUNTAIN SUGAR MAPLE	2 1/2" - 3" CAL. 12'-14" HT	B & B FULL HEAD
EVERGREEN TREES				
41	FA	PICEA ABIES NORWAY SPRUCE	6'-8" HT.	B & B
56	PS	PINUS STROBUS WHITE PINE	6'-8" HT.	B & B HEAVY / UNSHEARED
ORNAMENTAL TREES				
12	AL	AMELANCHIER LAEVIS ALLEGHENY SERVICEBERRY	8'-10" HT.	B & B
20	CC	CERCIS CANADENSIS EASTERN REDBUD	8'-10" HT.	B & B
GROUND COVER				
38	JG	JUNIPERUS CHINENSIS 'SEA-GREEN' SEA-GREEN JUNIPER	18-24" 6FP.	CONT.



LEGEND

- EX. CONTOUR
- EX. STREAM
- EX. BUILDING
- EX. WOODS LINE
- EX. SEPTIC AREA
- ZONING LINE
- PROP. LOT LINE
- PROP. REPLACEMENT WELL AREA
- PROP. WELL
- PROP. BUILDING
- PROP. SRA
- LOT NUMBER
- 75' STREAM BUFFER
- 25' WETLAND BUFFER
- WETLAND
- PRELIMINARY 100-YEAR FLOODPLAIN
- PROPOSED STREET TREES
- FOREST RETENTION
- AFFORESTATION/REFORESTATION
- PROP. TREELINE
- FOREST CLEARING
- FOREST CONSERVATION EASEMENT
- WATER QUALITY PLANTING ZONE 'A'
- WATER QUALITY PLANTING ZONE 'B'

DATA SOURCES:
 BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
 APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2002. OFF-SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 4-13-04
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 4/20/04
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 4/29/04
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DIRECTOR

6-11-04 [Symbol] REVISED LOT NUMBERS
 Date No. Revision Description
 OWNER: NORTHRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21730
 DEVELOPER: JAMES F. GELFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21730

HO 2001-G005 (01)
 3-25-04
 Date



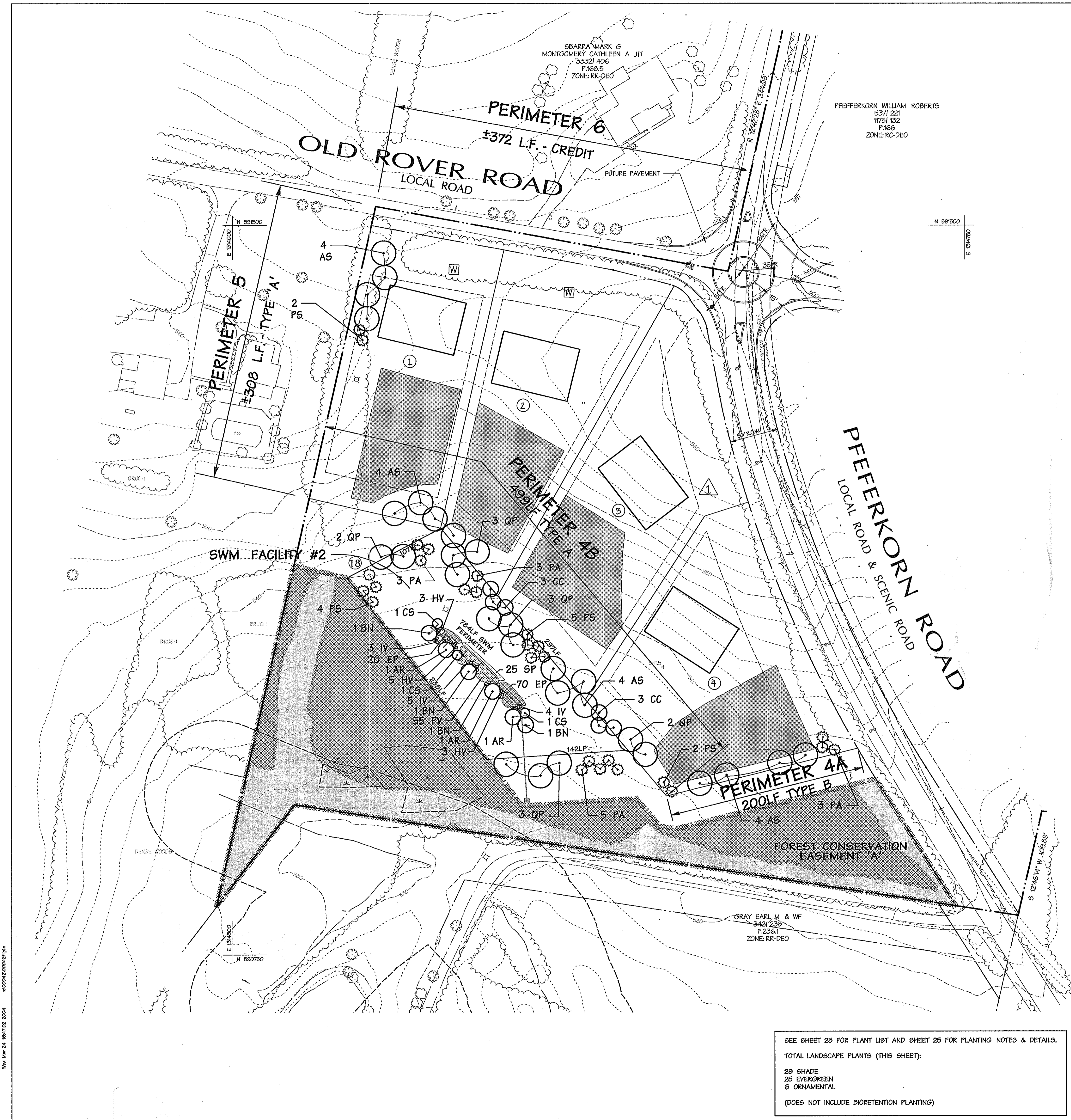
DMW
 Daft-McCune-Walker, Inc.
 200 East Pennsylvania Avenue
 Towson, Maryland 21286
 (410) 296-3333
 Fax 296-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME: FOX MEADOW
 PLAT OR LOT: 15
 BLOCK: 15
 ZONE: RR, RC
 TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) STREET TREE & SWM LANDSCAPE PLAN

Des By: DWR Scale: 1"=50' Proj. No. 00042.B
 Dwn By: DWR/BKC Date: 1/07/04
 Chk By: MM Approved: 22 OF 24

Wed Mar 24 14:05:57 2004



Bioretention Area Plant List

Species	Common name	Size	Quantity	Spacing	Indicator status
<i>Acer rubrum</i> (AR)	red maple	2 1/2" - 3" caliper, container grown	3	As shown	FAC
<i>Betula nigra</i> (BN)	river birch	2 1/2" - 3" caliper, container grown	3	As shown	FACW
<i>Cornus stolonifera</i> (CS)	red-osier dogwood	18" - 24" height, container grown	3	As shown	FACW
<i>Hamamelis virginiana</i> (HV)	witch hazel	18" - 24" height, container grown	13	As shown	FAC
<i>Ilex verticillata</i> (IV)	winterberry	18" - 24" height, container grown	12	As shown	FACW
<i>Eupatorium perfoliatum</i> (EP)	Joe Pye weed	quart-sized container*	70	Approx 3' OC throughout	FAC
<i>Panicum virgatum</i> (PV)	switchgrass	quart-sized container*	65	Approx 3' OC throughout	FAC
<i>Scirpus pungens</i> (SP)	common three square	quart-sized container*	25	Approx 3' OC throughout	FACW

* Note: Plugs, dormant rhizomes, or bare root stock may be substituted if available.

SCHEDULE A PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT to ROADWAYS	ADJACENT to PERIMETER PROPERTIES												
		P 1	P 2	P 3	P 4A	P 4B	P 5	P 6	P 7					
LANDSCAPE TYPE "A"														
LINEAR FEET OF PERIMETER		1180 LF.	432 LF.					489 LF.	308 LF.					
LANDSCAPE TYPE "B"														
LINEAR FEET OF PERIMETER		313 LF.	344 LF.	407				467 LF.	200 LF.					
LANDSCAPE TYPE "C"														
LINEAR FEET OF PERIMETER														
CREDIT FOR EXISTING VEGETATION (DESCRIBE BELOW IF NEEDED)		313 LF.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CREDIT FOR BERM (DESCRIBE BELOW IF NEEDED)		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NUMBER OF PLANTS REQUIRED														
SHADE TREES		0	7	8	20	7	9	4	8	5	0	0	0	0
EVERGREEN TREES		0	0	10	0	0	12	0	0	0	0	0	0	0
SHRUBS		0	9	0	0	0	0	0	0	0	0	0	0	0
NUMBER OF PLANTS PROVIDED														
SHADE TREES		0	5	8	11	7	9	4	8	5	0	0	0	0
EVERGREEN TREES		0	9	10	8	0	12	0	0	0	0	0	0	0
OTHER TREES (2:1 SUBSTITUTION)		0	4	0	10	0	0	0	0	0	0	0	0	0
SHRUBS (10:1 SUBSTITUTION)		0	0	0	0	0	0	0	0	0	0	0	0	0
OTHER TREES (DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)														

* NOTE: STREET TREES WILL BE PROVIDED @ 140 LF.
* THE DEVELOPER WILL PROVIDE ALL PERIMETER LANDSCAPE OBLIGATIONS

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING

POND #	1	2
LINEAR FT OF PERIMETER (TYPE "B")	1175 LF	784 LF
NUMBER OF TREES REQUIRED		
SHADE TREES @ 150 LF.	20	16
EVERGREEN TREES @ 140 LF.	25	20
CREDIT FOR EXISTING VEGETATION	183 LF	NA
CREDIT FOR OTHER LANDSCAPING	NA	NA
NUMBER OF TREES PROVIDED		
SHADE TREES	11	13
EVERGREEN TREES	21	20
FLOWERING TREES	12	6

* THE DEVELOPER WILL PROVIDE ALL SWM LANDSCAPE OBLIGATIONS

DATA SOURCES:
BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER, 2001.
APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2003 OFF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. Labella 4-13-04
CHIEF, BUREAU OF HIGHWAYS MS DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
John Dammann 4/20/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Joseph H. Harnett 4/21/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DIRECTOR DATE

6-11-04 **REVISED LOT NUMBERS**
Date No. Revision Description

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
14045 GARED DRIVE
GLENWOOD, MD 21738

DEVELOPER: JAMES F. SELFRIDGE BUILDERS, INC.
14045 GARED DRIVE
GLENWOOD, MD 21738

DMW
Duff McCune-Walker, Inc.
200 East Pennsylvania Avenue
Towson, Maryland 21286
(410) 286-3233
Fax: 286-4705

A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals

SUBDIVISION NAME: FOX MEADOW
PLAY OR USE BLOCK: 5983/492
ZONE: RR, FC
SECTION AREA: 167
TAXATION MAP: 13, 19, 20
ELEC DISTRICT: 3
GENESIS TRACT:

TITLE: FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) STREET TREE & SWM LANDSCAPE PLAN

Des By: DWR Scale: 1"=50' Proj. No. 00042.B
Dwn By: DWR/BKC Date: 1/07/04
Chk By: MM Approved: 23 OF 24

HO 2001-G005 (01)
3-25-04
Date



LEGEND

- 500--- EX. CONTOUR
- EX. STREAM
- EX. BUILDING
- EX. WOODS LINE
- ▨ EX. SEPTIC AREA
- RR-DEQ RR-DTC ZONING LINE
- PROP. LOT LINE
- PROP. REPLACEMENT WELL AREA
- PROP. WELL
- PROP. BUILDING
- PROP. SRA
- ⑧ LOT NUMBER
- 75' STREAM BUFFER
- 25' WETLAND BUFFER
- WETLAND
- PRELIMINARY 100-YEAR FLOODPLAIN
- PROPOSED STREET TREES
- ▨ FOREST RETENTION
- ▨ AFFORESTATION/REFORESTATION
- PROP. TREELINE
- ▨ FOREST CLEARING
- FOREST CONSERVATION EASEMENT

SEE SHEET 25 FOR PLANT LIST AND SHEET 25 FOR PLANTING NOTES & DETAILS.
TOTAL LANDSCAPE PLANTS (THIS SHEET):
29 SHADE
25 EVERGREEN
6 ORNAMENTAL
(DOES NOT INCLUDE BIORETENTION PLANTING)

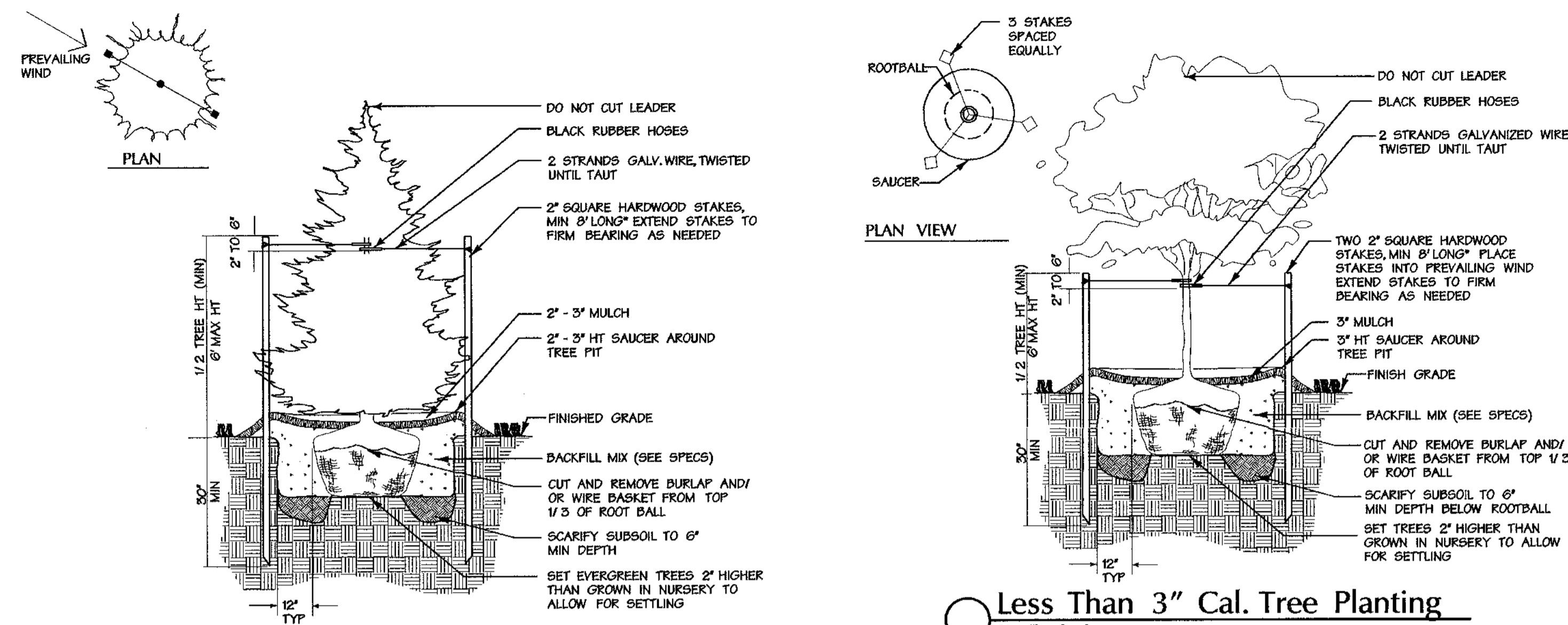
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Landscape Notes

- The contractor shall review architectural/engineering plans to become thoroughly familiar with grading and surface utilities.
- All equipment and tools shall be placed so as not to interfere or hinder the pedestrian and vehicular traffic flow. See Seasonal Plant List for planting times of bulbs and seasonal plants.
- The contractor shall coordinate with lighting and irrigation contractors regarding timing of installation of plant material.
- The contractor shall insure that his work does not interrupt established or projected drainage patterns.
- During planting operations, excess waste materials shall be promptly and frequently removed from the site.
- The contractor is advised of the existence of underground utilities on the site. Their exact location shall be verified in the field with the owner or general contractor prior to the commencement of any digging operations. In the event they are uncovered, the contractor shall be held responsible for all damage to utilities and such damage shall not result in any additional expenses to the owner.
- If utility lines are encountered in excavation of tree pits, other locations for trees shall be made by the contractor without additional compensation. No changes of location shall be made without approval of the landscape architect.
- Maintain positive drainage out of planting beds at a minimum 2% slope. All grades, dimensions, and existing conditions shall be verified by the contractor on site before construction begins. Any discrepancies shall be brought to the attention of the landscape architect or owner.
- Every possible safeguard shall be taken to protect building surfaces, equipment, and furnishings. The contractor shall be responsible for any damage or injury to person or property which may occur as a result of his negligence in the execution of the work.
- In the event of variation between quantities shown on the plant list and the plans, the plans shall control. The contractor is responsible for verifying all plants quantities prior to the commencement of work. Good quantity take-offs are the responsibility of the contractor. All discrepancies shall be reported to the landscape architect for clarification prior to bidding. The contractor shall furnish plant material in sizes as specified in plant list.
- The contractor shall stake all material located on the site for review and/or adjustment by the landscape architect prior to planting. All locations are to be approved by the landscape architect before excavation.
- Plants shall conform to current "American Standards for Nursery Stock" by American Association of Nurserymen (AAN), particularly with regard to size, growth, size of ball, and density of branch structure. Plant material shall be tagged at the source by the landscape architect unless this requirement is specifically waived.
- All plants (B&B or container) shall be properly identified by weather-proof labels securely attached to stems 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 landscape architect or agent in charge.
- Any material and/or work may be rejected by the landscape architect if it does not meet the requirements of the specifications. All rejected materials shall be removed from the site by the contractor.
- No substitutions shall be made without written consent of the owner or landscape architect.
- The landscape architect or owner shall have the right, at any stage of the operations, to reject any and all work and material which, in his opinion, does not meet the requirements of these plans and specifications.
- The contractor shall be wholly responsible for stability and conditions of all trees and shrubs and shall be legally liable for any damage caused by instability of any plant materials.
- All proposed trees to be installed either entirely in or entirely out of planting beds. Planting bed lines are not to be constructed. All shrubs and ground cover areas shall be planted in continuous prepared bed and top dressed with 3-inch shredded hardwood mulch. Mulch shall have been shredded within the last six months.
- All planting beds adjacent to lawn, sod, or seeded areas shall be spade edged.
- Maintenance shall begin after each plant has been installed and shall continue until 90 days after final acceptance by the architect or owner representative. Maintenance includes mowing, watering, pruning, weeding, fertilizing, mulching, replacement of sick or dead plants, and any other care necessary for the proper growth of the plant material. The contractor must be able to provide continued maintenance if requested by the owner.
- Upon completion of all landscaping, acceptance of the work shall be held. The contractor shall notify the landscape architect or owner for scheduling the inspection at least seven (7) days prior to the anticipated inspection date.
- All trees shall be guaranteed for 12 months from the date of acceptance. All shrubs and ground covers shall be guaranteed for 12 months from the date of acceptance.
- The contractor is responsible for testing project soils. The contractor is to provide a certified soils report to the owner. The contractor shall verify that the soils on site are acceptable for the proper growth of the proposed plant material. Should the contractor find poor soil conditions, the contractor shall be required to provide soil amendments as necessary. These amendments shall include, but not be limited to, fertilizers, lime, and topsoil. Proper planting soils must be verified prior to planting of materials.

Water Quality Planting Specifications

- PART 1 GENERAL**
- 1.01 DESCRIPTION: Work consists of all labor, materials, equipment and services necessary for and incidental to the execution and completion of WETLAND PLANTS as indicated on the Drawings and specified herein.
- 1.02 QUALITY ASSURANCE
- American Association of Nurserymen (A.A.N.); "American Standard for Nursery Stock" (ANSI, 2651) as expanded herein.
 - Nomenclatures: in accordance with HORTUS III by L.H. Bailey.
 - United States Department of Agriculture: Federal Classification Diagram for Soils.
- 1.03 STANDARD OF COMPARISON
- A. When the Drawings indicate a total quantity of five (5) or more of an individual plant (other than bulbs or perennials) the Contractor shall obtain approval of a standard of comparison prior to delivery on site. Assemble samples of all plants to be evaluated as "standards" at the principal business location of the Contractor. Notify Owner to schedule an inspection for approval of "standards" and to obtain record photographs. Photographs of each "standard" shall be used for comparison of all material subsequently installed on the site.
- 1.04 SUBMITTALS
- A. Source: Notify the Owner, in writing, of source of all material before delivery.
- 1.05 DELIVERY, STORAGE AND HANDLING
- Root stock of the plant material shall be kept moist during transport from the source to the job site and until planted.
 - Transport and handle plants so that foliage, roots, or balls are protected from breakage, sun and wind. Tops or roots of plants allowed to dry out or which have been damaged or disturbed root balls will be cause for rejection.
- 1.06 DRAWINGS
- A. The Contractor shall remove quantities of wetland plants noted on the plant list.
- 1.07 PROJECT CONDITIONS
- A. Planting shall commence following approval of the as-built certification of the subject water quality facility.
- B. All emergent wetland plantings shall be installed between April 15 and June 30 or as directed by the Landscape Architect. Do not plant when ground is frozen. Do not use frozen planting soil at any time.
- 1.08 DEFINITIONS
- Start of Planting: Installation of plant material into excavated pits or beds.
 - Payment Release Inspection: Conducted monthly by the Owner or designated representative to verify quantity only for partial payment to the Contractor. Payment release inspection does not waive any requirements of the standard of comparison or initial acceptance clause.
 - Initial Inspection: Conducted at the request of the Contractor and the Owner when 90% or more of all planting and related tasks are complete.
 - Final Acceptance: Occurs when all plant material is in place in accordance with the specifications and approved by the Owner.
 - Maintenance Period: From start of planting to final acceptance.
 - Guarantee Period: From initial acceptance and continuing for 90 days thereafter, excluding the period from November 1 to April 15.
 - Final Acceptance: Occurs after Contractor has completed all outstanding items, as determined by the Owner, at the end of the maintenance and guarantee period.
- 1.09 GUARANTEE AND REPLACEMENT
- A. All plants in an impaired, dead or dying condition prior to initial acceptance and prior to final acceptance shall be removed and replaced. Replacement materials shall be the same size as other unimpacted material considering growth that has occurred since original installation. Methods of installation shall be identical to the original. The contractor shall guarantee 95% survivorship at the end of the guarantee period.
- B. Replacement shall be made between April 15 and June 30 the season following the initial planting, and shall conform to the planting specifications listed above.
- C. The contractor shall notify the Landscape Architect to arrange a site meeting to determine the replacement requirements, at the end of the guarantee period.
- PART 2 PRODUCTS**
- 2.01 PLANTS
- Sound, healthy, vigorous, free from plant diseases, insect pests or their eggs.
 - Plants cut back from larger sizes or pruned prior to delivery will not be accepted.
 - It is anticipated that these plants will need to be obtained from a nursery source. These plant species are normally unavailable from standard landscape nursery sources.
 - Shape and Form: Plant materials shall be symmetrical and typical for the variety and species.
 - Plants: The soil/moist masses shall be thoroughly moist upon delivery to the job site. Any dry soil and wilted plants shall be rejected. If not planted immediately after being delivered to the job site, the plants shall be stored out of direct exposure to the sun and wind and their root masses maintained moist, through periodic watering, until the time of planting. The number of plants, stems, or culms per pot or shown in the plant table/shall be at least as specified or shown in the plant table/shall be at least as specified or shown in the plant table/shall be at least as specified.
 - Plants shall appear healthy with no leaf spots, leaf damage, leaf discolorations, leaf wilting, or evidence of insects on the leaves.
 - Plants shall be well-rooted through the sides and bottoms of the pots and firmly contained therein. Should the plants be removed from the pots by holding them from their tops and gently pulling on the pots, the plants shall be rejected.
 - If growing the plants shall appear healthy with no foliar spots, discolorations, wilting, or other evidence of the presence of disease or insects.
- Plants shall not be rejected if supplied in pots larger than specified.
- The number of plants, stems, or culms per pot as specified or shown in the plant table/shall be at least as specified or shown in the plant table/shall be at least as specified or shown in the plant table/shall be at least as specified.
- Dormant Propagulae (Herbaceous): If not planted immediately after being delivered to the job site, the dormant propagulae shall be stored out of the direct exposure to the sun and wind, and they shall be protected by covering with straw, peat moss, compost, or other suitable materials and shall be maintained moist, through periodic watering, until the time of planting.
- The bolls and shoots associated with the propagulae shall have turgor or be rigid to the touch. If the bolls and/or shoots associated with the propagulae are soft or mushy or appear rotten or decomposed, the plant materials shall be rejected.
- Rhizomes (Solan): Sections shall provide a minimum of two nodes per section or Rhizome (Solan) sections shall contain at least a terminal shoot shall be a minimum of four inches in length (in order to ensure sufficient stored energy to support the new growth). Rhizome sections containing shoots that are soft or mushy or otherwise appear rotten shall not be accepted.
- Stems shall contain a terminal shoot and be a minimum of four inches in length (in order to ensure sufficient stored energy to support the new growth).
- Growing Bare Root Plants (Herbaceous): The plants shall contain new roots that are clean and white in coloration.
- If not planted immediately after delivery to the job site, the plants shall be stored out of direct exposure to the sun and wind and the new roots shall be protected by the use of straw, peat moss, compost, or other suitable materials and shall be maintained moist, through periodic watering, until the time of planting.
- The plants shall appear healthy with no foliar spots, discolorations, wilting, or other evidence of the presence of disease or insects.
- 2.02 FERTILIZER
- A. Plant Fertilizer: Slow release fertilizer such as Osmocote 19-6-12 analysis (3-4 month release) or equal approved by the Landscape Architect.
- B. Slow release fertilizer shall be applied at the time of planting and at the following rate:
- All emergent plant material - planting pit application of 1 oz. per container or bare root plant.
- C. Pesticides, herbicides and fungicides will not be used unless justified necessary by the wetland landscaper. If applied, quantities recommended by the Department of Agriculture shall not be exceeded.
- D. Fertilizer shall be delivered to the site in the original unopened containers with formulas attached.



General Planting Notes

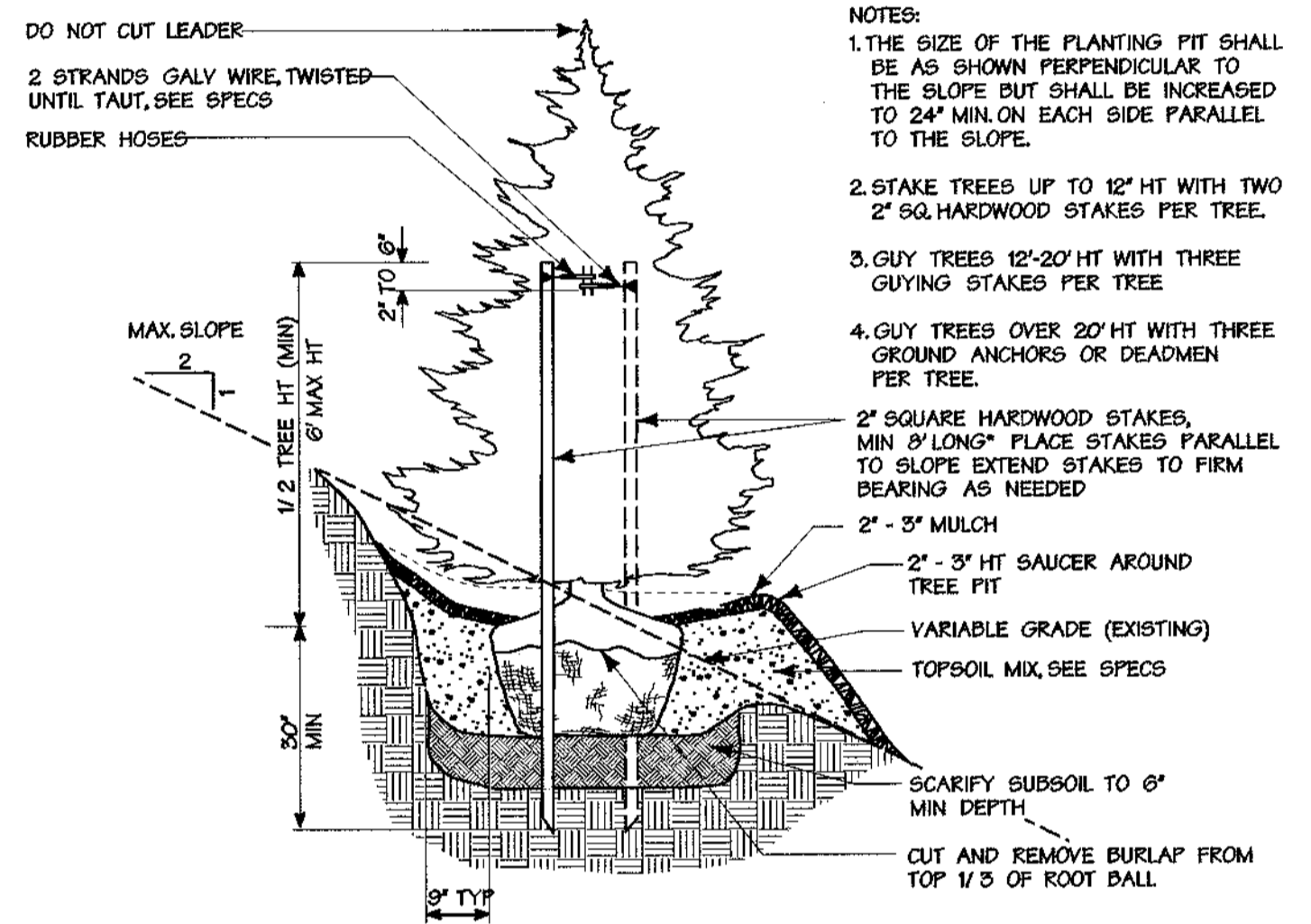
- All plant material to meet A.A.N. Standards.
- Landscape Contractor to follow landscape specification guidelines for Baltimore Washington Metro area approved by LCAMW.
- No substitutions to be made without consent of Landscape Architect or Owner.
- All beds to be topped with three inches of hardwood mulch.
- Landscape Contractor to verify location of utilities with Owner before planting.
- Landscape Architect/Owner shall select, verify and/or approve all plant material. At Owner's discretion, specimen and other plant material will be selected.
- Landscape Contractor shall coordinate plant bed filling operations and plant material installation with General Contractor and Utilities Contractor. At the time of final inspection with acceptance, all electric, water, drainage, and fountain utilities, as well as all plant materials, shall remain undamaged. Likewise, Landscape Contractor and Utilities Contractor shall coordinate efforts to ensure that surface utilities are at the proper elevation relative to final grades.
- Contractor shall notify Mies Utility 72 hours prior to construction.
- The owner, tenant, and/or their agents shall be responsible for maintenance of the required landscaping, including both plant materials and berms, fences and walls. All plant materials shall be maintained in good growing condition, and when necessary, replaced with new materials to ensure continued compliance with applicable regulations. All other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.
- This plan has been prepared in accordance with the provisions of Section 16.124 of the Ho. Co. code. Financial surety for the required landscaping in the amount of \$43,350 must be posted as part of the developer's agreement. (104 shade, 01 evergreen).
- Developer's/Builder's Certificate

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

NAME: James A. Sullivan DATE: 3/23/04

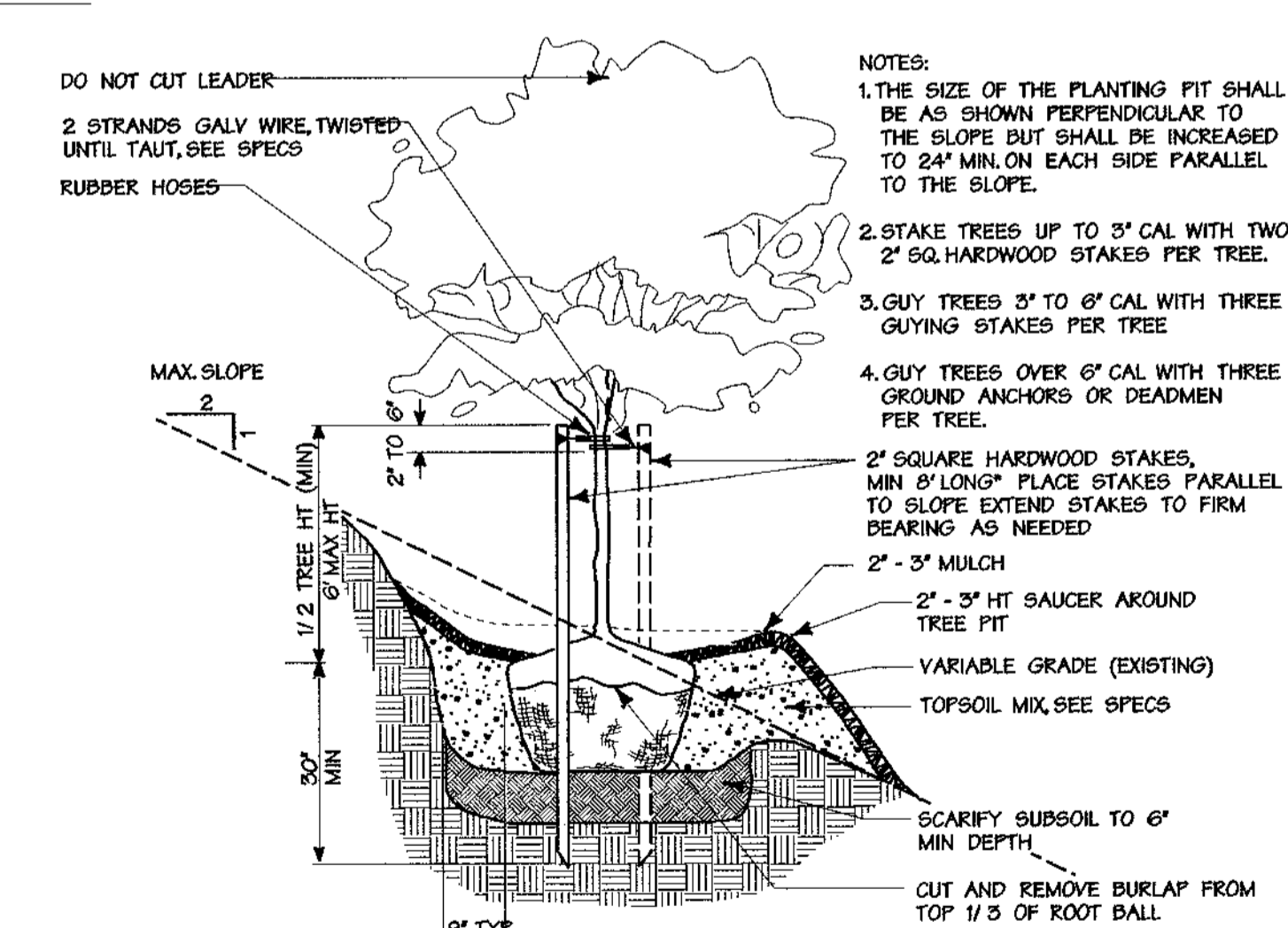
Evergreen Tree Planting

Not To Scale



Evergreen Tree Planting on Slope

Not To Scale



Tree Planting on Slope

Not To Scale

Less Than 3" Cal. Tree Planting

Not To Scale

DATA SOURCES:
 BOUNDARY PER DMW FIELD SURVEY DATED DECEMBER 2001.
 TOPO FLOWN BY VIRGINIA RESOURCE MAPPING, DECEMBER 2001.
 APPROX WETLAND LOCATION PER DMW FIELD VISIT DATED APRIL 2002. OFF SITE SEPTIC RESERVE AREAS PER RECORD PLATS, LOCATIONS OF WELLS NOT AVAILABLE.

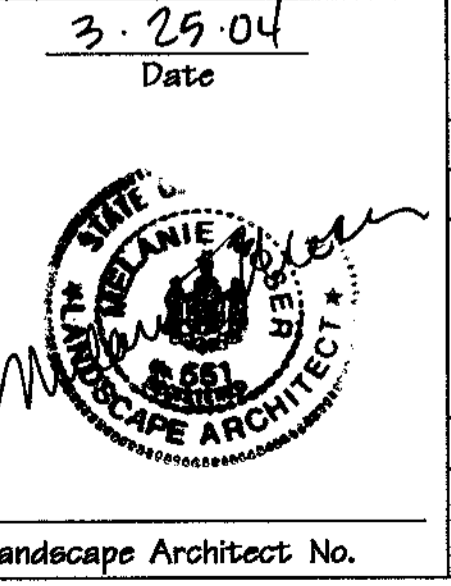
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <u>William F. White</u> <u>4-13-04</u> CHIEF, BUREAU OF HIGHWAYS	
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING <u>Mick DeWitt</u> <u>4/20/04</u> CHIEF, DEPARTMENT ENGINEERING DIVISION	
<u>Linda J. Daniels</u> <u>4/29/04</u> CHIEF, DIVISION OF LAND DEVELOPMENT, JA	
DIRECTOR: _____ DATE: _____	

Date	No.	Revision Description

OWNER: NORTHBRIDGE DEVELOPMENT, LLC
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DEVELOPER: JAMES F. McFRIDGE BUILDERS, INC.
 14045 GARED DRIVE
 GLENWOOD, MD 21738

DMW Duff-McCune-Walker, Inc. 200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 396-3333 Fax 396-4706		A Team of Land Planners, Landscape Architects, Engineers, Surveyors & Environmental Professionals	
SUBDIVISION NAME FOX MEADOW	SECTION/AREA BLOCK 15	DATE 3/23/04	DATE 167
TITLE FOX MEADOW (FORMERLY PFEFFERKORN PROPERTY) LANDSCAPE NOTES & DETAILS			
Des By BKC	Scale NONE	Proj. No. 00042.B	
Drn By BKC	Date 11/07/04		
Chk By MM	Approved	24 OF 24	



3-29-04
Date