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2	SNOW CHIEF ROAD - PLAN & PROFILE
3	SNOW CHIEF ROAD - PLAN, BOLD VENTURE DRIVE - PLAN & PROFILE
4	BOLD RULER COURT - PLAN AND PROFILE, HEADPLAY COURT - PLAN & PROFILE
5	BURNT WOODS ROAD - PLAN, PROFILE, & CROSS SECTIONS & FILLET PROFILES
6	STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
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18	OFFSITE REFOREST PLAN
19	OFFSITE REFOREST PLAN DETAILS & SPECIFICATIONS

FINAL ROAD CONSTRUCTION, GRADING AND STORMWATER MANAGEMENT PLANS

THE PADDOCKS

LOTS 1 THRU 33

AND

PRESERVATION PARCELS 'A' AND 'B'

ZONING "RR-DEO"

TAX MAP No. 22, PARCEL NO'S. 141 & 234, GRID NO'S. 1 & 7,

THIRD ELECTION DISTRICT

HOWARD COUNTY, MARYLAND

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Sauer 6-20-00
 CHIEF, BUREAU OF HIGHWAYS DATE

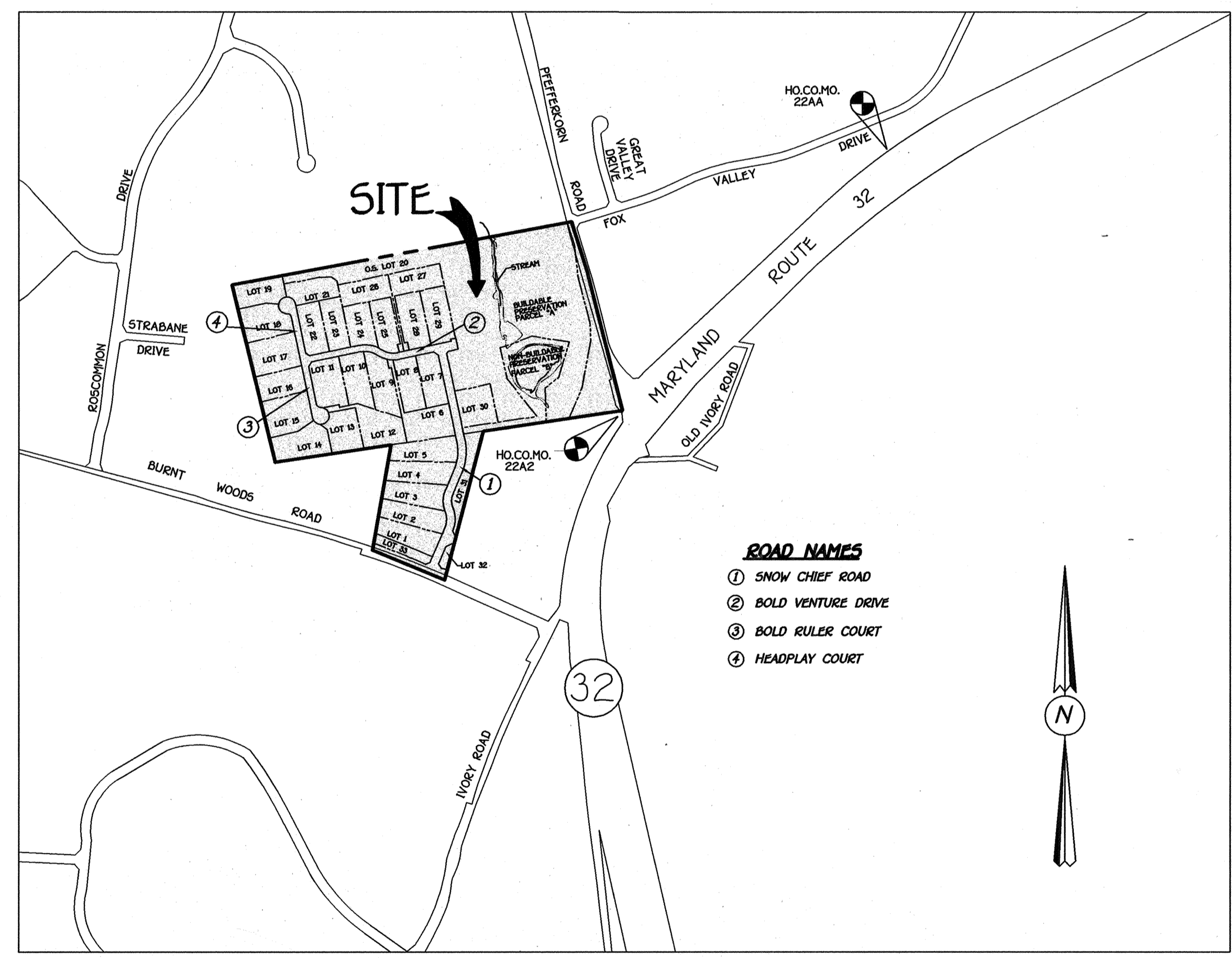
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Karl Sheelrock 6-27-00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. ... 6/21/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ROAD CLASSIFICATION		
ROAD NAME	CLASSIFICATION	R/W
SNOW CHIEF ROAD	ACCESS STREET	50'
BOLD VENTURE DRIVE	ACCESS STREET	40'
HEADPLAY COURT	PUBLIC ACCESS PLACE	40'
BOLD RULER COURT	PUBLIC ACCESS PLACE	40'

TRAFFIC CONTROL SIGNS				
STREET NAME	CL. STATION	OFFSET	POSTED SIGN	SIGN CODE
SNOW CHIEF ROAD	0+40	16'L	STOP	(R1-1)
SNOW CHIEF ROAD	3+90	14'R	SPEED LIMIT 30	(R2-1)
SNOW CHIEF ROAD	10+05	0' E	KEEP RIGHT	(R4-7)
SNOW CHIEF ROAD	10+80	0' E	KEEP RIGHT	(R4-7)
SNOW CHIEF ROAD	13+89	23'R	STOP	(R1-1)
SNOW CHIEF ROAD	12+50	14'L	SPEED LIMIT 30	(R2-1)
BOLD VENTURE DRIVE	1+90	13'R	SPEED LIMIT 25	(R2-1)
BOLD VENTURE DRIVE	8+14	15'R	STOP	(R1-1)
BOLD VENTURE DRIVE	6+35	13'L	SPEED LIMIT 25	(R2-1)

STREET LIGHT CHART				
DWG. NO.	STREET NAME	STATION	OFFSET	FIXTURE/POLE TYPE
2	SNOW CHIEF ROAD	9+57	18'R	100-WATT "TRADITIONAIRE" H.P.S. VAPOR FIXTURE POST TOP MOUNTED ON A 14-FOOT BLACK FIBERGLASS POLE.
2,5	SNOW CHIEF ROAD	0+35	25'R	150-WATT HPS VAPOR PENDANT FIXTURE (CUTOFF) MOUNTED AT 30' ON BRONZE FIBERGLASS POLE USING A 12' ARM.



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) 313-1080 AT LEAST (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 SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- 2 FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON AERIAL TOPOGRAPHIC SURVEY PREPARED BY HARTFORD AERIAL DATED DEC. 1998 AND FIELD RUN TOPO BY FISHER COLLINS AND CARTER INC. PERFORMED ON OR ABOUT JULY, 1999.
- THE COORDINATES SHOWN HEREON ARE BASED ON HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 22A2 AND 22AA WERE USED FOR THIS PROJECT.
 22A2: N 17969.6566 (METERS) ELEV. 620.893 FT. 22AA: N 17907.1948 (METERS) ELEV. 569.712 FT.
 E 40120.1472 (METERS) OR 189.2486 M. E 40169.1041 (METERS) OR 173.6486 M.
- WATER IS PRIVATE.
- SEWER IS PRIVATE.
- THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY STREET TRAFFIC STUDIES (APPROVED UNDER 599-04).
- BACKGROUND INFORMATION:
 A. SUBDIVISION NAME: THE PADDOCKS
 B. TAX MAP NO.: 22
 C. PARCEL NOS.: 141 & 234
 D. ZONING: RR-DEO
 E. ELECTION DISTRICT: THIRD
 F. TOTAL TRACT AREA: 62.29 AC.
 G. NO. OF BUILDABLE CLUSTER LOTS: 29
 H. NO. OF BUILDABLE PRESERVATION PARCELS: 1
 I. NO. OF NON-BUILDABLE PRESERVATION PARCELS: 1
 J. TOTAL NO. OF PRESERVATION PARCELS: 2
 K. NO. OF OPEN SPACE LOTS: 4
 L. PRELIMINARY PLAN APPROVAL DATE: JULY 19, 1999
 M. PREVIOUS FILE NOS.: 599-04 AND P99-15
 N. TOTAL AREA OF OPEN SPACE REQUIRED: (62.29 AC. x 5%) = 3.11 AC.
 O. TOTAL AREA OF OPEN SPACE PROVIDED: 3.41 AC.
- REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF THE PIPE / FLAG STEM AND THE ROAD R/W AND NOT ON THE PIPE / FLAG STEM DRIVEWAY.
- NO CEMETERIES EXIST ON THE PROPERTY.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-150.
- THE WETLANDS WERE DELINEATED BY MCCARTHY & ASSOCIATES AND FOREST STAND DELINEATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. AND WAS APPROVED UNDER 599-04 ON 12/17/98 AND P99-15 ON 7/19/99.
- NOISE STUDY WAS PREPARED BY WILDMAN ENVIRONMENTAL SERVICES, DATED 3/13/98 AND WAS APPROVED UNDER 599-04 AND P99-15.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
 NOTE: THE FOREST CONSERVATION OBLIGATION WILL BE MET BY PROVIDING 1.742 ACRES OF RETENTION ON LOTS 14 THRU 18 AND AN AFFORESTATION AREA IN THE AMOUNT OF 0.78 ACRES ON LOTS 31 AND 32 OF THE PADDOCKS SUBDIVISION. THE REMAINING FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION WILL BE MET BY PROVIDING 6.478 ACRES OFF-SITE PLANTING ON WELLINGTON WEST, SECTION 2, (P98-18), TAX MAP NO. 14, GRID NO. 20, PARCEL NO. 69.
 THE SURETY AMOUNT WILL BE \$102,435.69 FOR THIS PROJECT.
- STORMWATER MANAGEMENT FACILITY:
 TYPE - RETENTION FACILITY
 OWNER - PRIVATELY OWNED (H.O.A.) AND JOINTLY MAINTAINED w/ HOWARD COUNTY
 MAINTENANCE - MAINTENANCE BY HOWARD COUNTY & HOMEOWNER'S ASSOCIATION.
 THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWER DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENTS INTO THE PRIVATE SEWERAGE EASEMENT. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- A.P.F.O. MITIGATION IS FULLFILLED BY PAYMENT OF A FEE-IN-LIEU IN THE AMOUNT OF \$34,000.00 TO CAPITAL PROJECT NUMBER J-4124 ACCOUNT NO. 016-99J-4134-1134-9000.
- M.D.E. PERMIT TRACKING NUMBER FOR WETLAND PERMIT IS 199966274, W.M.A. NO. 99-PO-2102. PERMIT EFFECTIVE DATE IS APRIL 14, 2000. PERMIT EXPIRATION DATE IS APRIL 14, 2003.
- BIO-RETENTION FACILITY: (PRIVATE)
 TYPE - BIO-RETENTION
 OWNER - THE PADDOCKS HOMEOWNER'S ASSOCIATION
 MAINTENANCE - THE PADDOCKS HOMEOWNER'S ASSOCIATION
- STREET LIGHTS WILL BE REQUIRED IN THIS DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENT (JUNE 1993)." THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- LANDSCAPE OBLIGATIONS ARE MET ON-SITE AND HAVE BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE 218 REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$51,300.00.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10775 BALTIMORE NATIONAL PIKE
 ELLSWORTH CITY, MARYLAND 21042
 (410) 461-2855

OWNERS
 GRETCHEN MOBBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 22418
 15-Bur175 2/17/03

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 22418
 Zacharia J. Fisch

THE PADDOCKS
 LOTS 1 - 33
 AND PRESERVATION PARCELS 'A' AND 'B'
 ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NOS. 141 & 234 GRID NOS. 1 & 7
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 1 OF 19

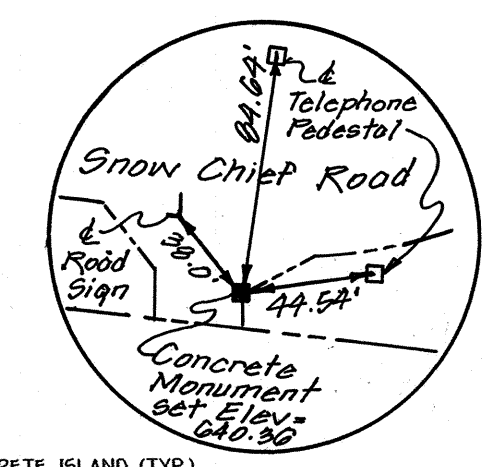
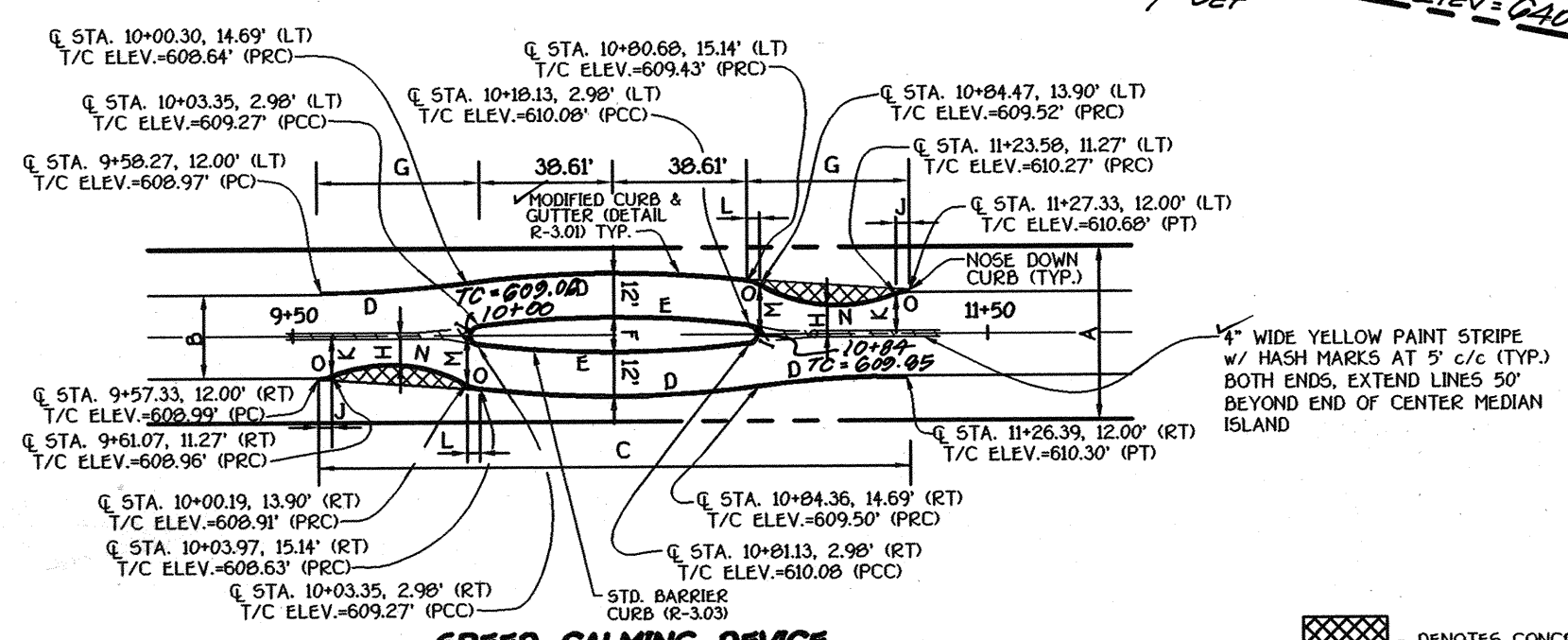
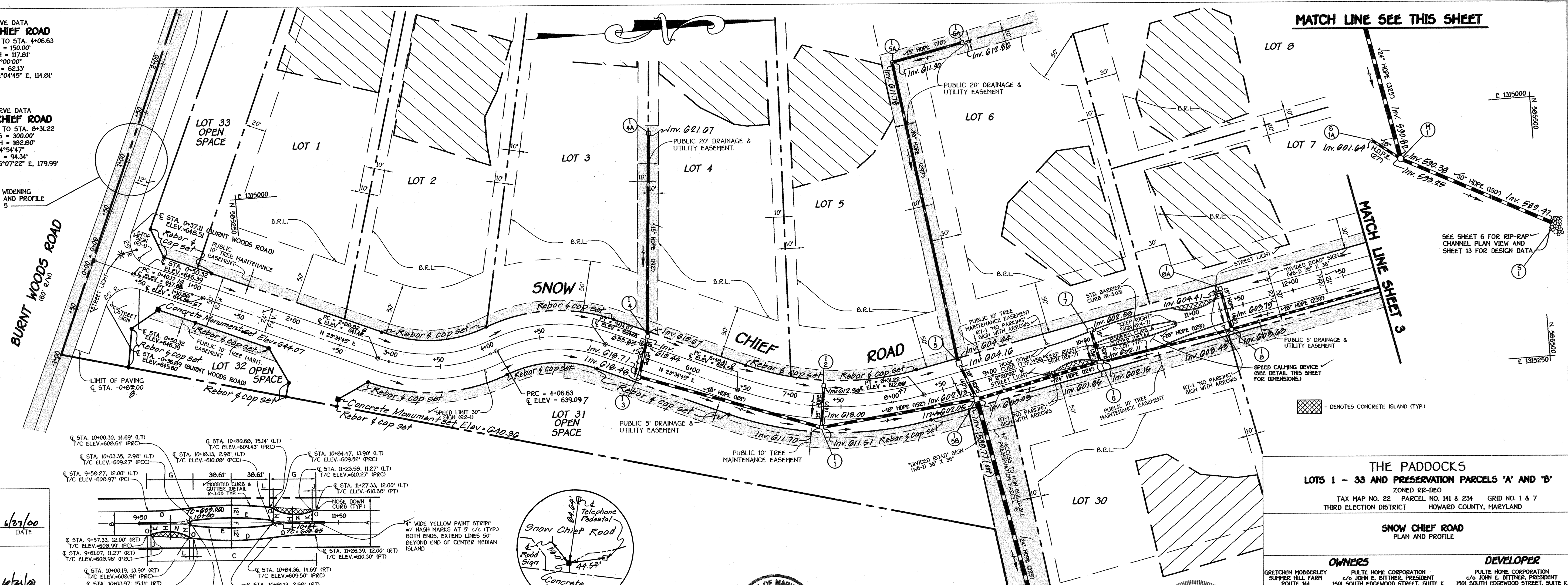
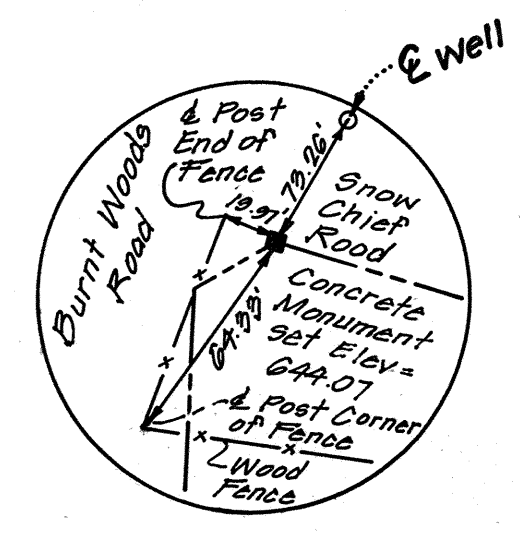
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SNOW CHIEF ROAD
 STA. 0+40.17 TO STA. 1+10.08
 RADIUS = 57,162.85
 LENGTH = 70.70'
 $\Delta = 0^{\circ}04'19"$
 TAN. = 35.35'
 CHORD = N 23°36'53" E, 70.70'

G CURVE DATA
SNOW CHIEF ROAD
 STA. 2+08.02 TO STA. 4+06.63
 RADIUS = 150.00'
 LENGTH = 117.81'
 $\Delta = 45^{\circ}00'00"$
 TAN. = 62.13'
 CHORD = N 01°04'45" E, 114.81'

G CURVE DATA
SNOW CHIEF ROAD
 STA. 4+06.63 TO STA. 5+14.07
 RADIUS = 136.79'
 LENGTH = 107.43'
 $\Delta = 45^{\circ}00'00"$
 TAN. = 62.13'
 CHORD = N 01°04'45" E, 104.69'

G CURVE DATA
SNOW CHIEF ROAD
 STA. 6+48.41 TO STA. 8+31.22
 RADIUS = 300.00'
 LENGTH = 102.80'
 $\Delta = 34^{\circ}54'47"$
 TAN. = 94.34'
 CHORD = N 06°07'22" E, 179.99'

NOTE: FOR ROAD WIDENING
 PLAN VIEW AND PROFILE
 SEE SHEET 5



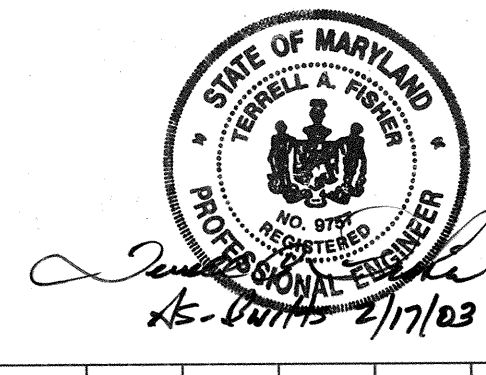
APPROVED
 DEPARTMENT OF PLANNING AND ZONING
Karl H. [Signature] 6/27/00
 CHIEF, DIVISION OF ROAD DEVELOPMENT
 DATE

APPROVED
 DEPARTMENT OF PLANNING AND ZONING
[Signature] 6/21/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

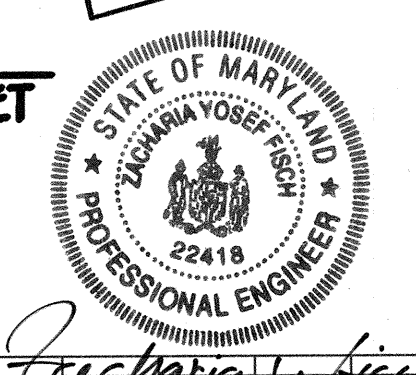
APPROVED
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Robert M. [Signature] 6-20-00
 CHIEF, BUREAU OF HIGHWAYS
 DATE

SPEED CALMING DEVICE
 SCALE: 1" = 50'

CLASSIFICATION	DESIGN SPEED (M.P.H.)	SECTION TYPE (OPEN/CLOSED)	DIMENSIONS														
			A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
ACCESS STREET	30	OPEN	50'	24'	170'	330'	318'	10.75'	46.39'	8.00'	3'R	3.74'	11.27'	3.53'	13.90'	45'R	10'R



PLAN
 SCALE: 1" = 50'



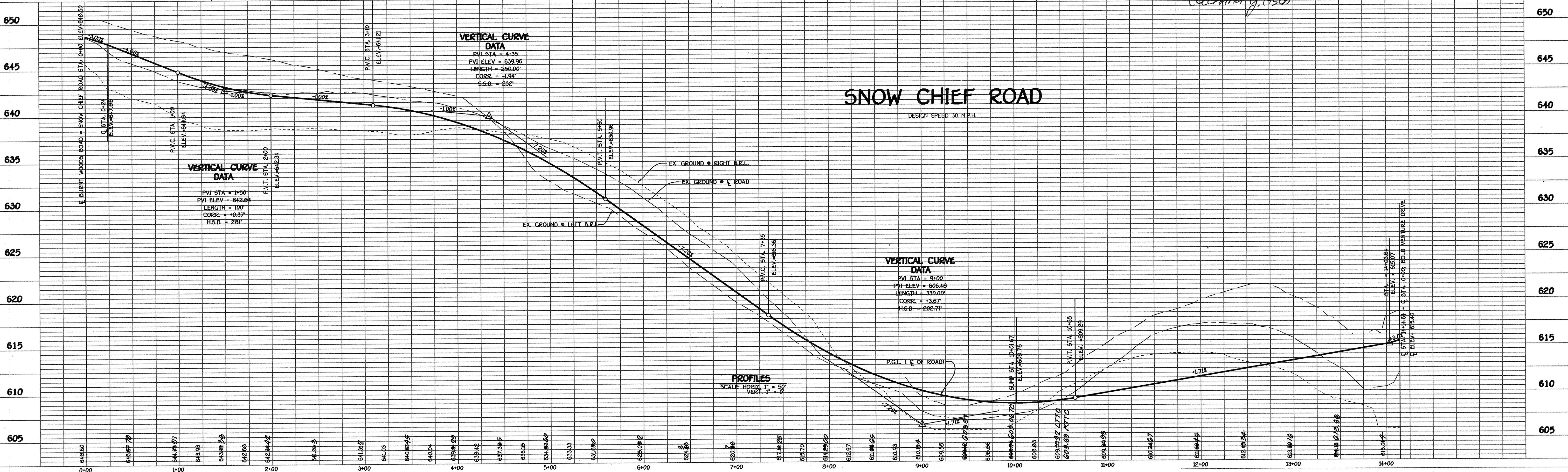
THE PADDOCKS
 LOTS 1 - 33 AND PRESERVATION PARCELS 'A' AND 'B'
 ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NO. 141 & 234 GRID NO. 1 & 7
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

OWNERS
 GRETCHEN MORRERLEY
 SUPPER HILL FARM
 1501 SOUTH EDGEWOOD STREET, SUITE K
 WEST FRIENDSHIP, MARYLAND 21794

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

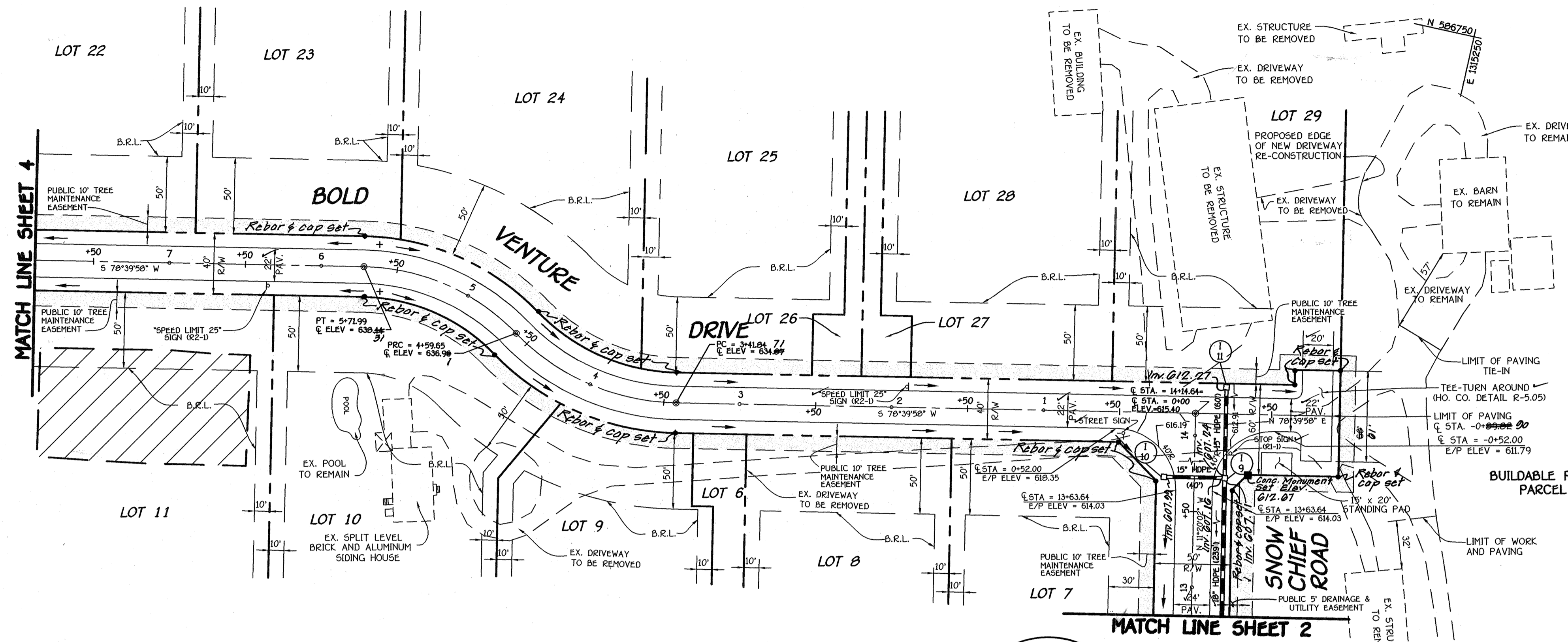
SCALE: AS SHOWN DATE: APRIL 7, 2000 DWG. NO. 2 OF 19
 DES. F.M. / R.I. DRN. F.M. / R.I. CHK. Z. Y. FISCH

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 100 NATIONAL SQUARE OFFICE PARK - 1022 BALTIMORE NATIONAL PIZ
 ELICOTT CITY, MARYLAND 21042
 4100 401 - 2955



C CURVE DATA
BOLD VENTURE DRIVE
 STA. 4+59.65 TO STA. 5+71.99
 RADIUS = 143.03
 LENGTH = 112.34'
 $\Delta = 45^{\circ}00'00''$
 TAN = 59.24'
 CHORD = N 78°50'02" E, 109.47'

C CURVE DATA
BOLD VENTURE DRIVE
 STA. 3+41.84 TO STA. 4+59.65
 RADIUS = 150.00'
 LENGTH = 117.81'
 $\Delta = 45^{\circ}00'00''$
 TAN = 62.13'
 CHORD = N 78°50'02" E, 114.81'



NOTE: THE HORIZONTAL LOCATION OF THE EXISTING DRIVEWAYS WILL NOT BE DISTURBED. VERTICALLY, THE EXISTING DRIVEWAYS WILL BE FILLED IN TO MATCH THE GRADE AT THE END OF THE EXISTING TIE-URN AROUND. ANY GRASSSED AREA DUE TO THIS DISTURBANCE WILL BE MAINTAINED BY RE-CONSTRUCTING ONE HALF OF THE ROAD AT A TIME AND ALLOWING TRAFFIC TO BY-PASS FREELY TO THE BARN.

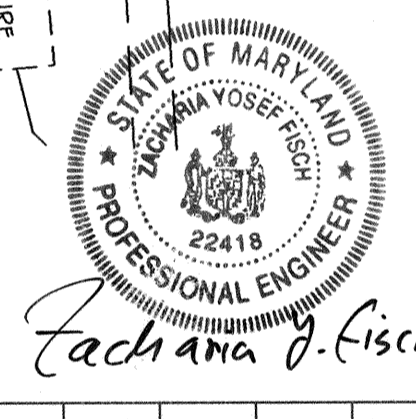
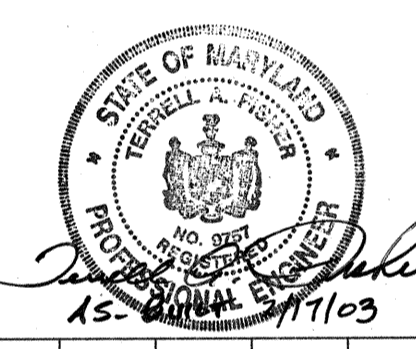
APPROVED
 DEPARTMENT OF PLANNING AND ZONING
K. J. [Signature] 6/27/00
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

APPROVED
 DEPARTMENT OF PLANNING AND ZONING
[Signature] 6/27/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

APPROVED
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 6-20-00
 CHIEF, BUREAU OF HIGHWAYS
 DATE

NOTE: ACCESS TO THE EXISTING HOUSE ON LOT 10 WILL BE MAINTAINED BY PROVIDING ACCESS TO THE HOUSE VIA A NEW DRIVEWAY TO BE CONNECTED TO BOLD VENTURE DRIVE.

PLAN
 SCALE: 1" = 50'



THE PADDOCKS
 LOTS 1 - 33 AND PRESERVATION PARCELS 'A' AND 'B'
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 TAX MAP NO. 22 PARCEL NOS. 141 & 234 GRID NOS. 1 & 7
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SNOW CHIEF ROAD
 PLAN

BOLD VENTURE DRIVE
 PLAN AND PROFILE

OWNERS
 GRETCHEN MOBERLEY
 SUMMER HILL FARM
 SOUTH 144
 WEST FRIENDSHIP
 MARYLAND 21794

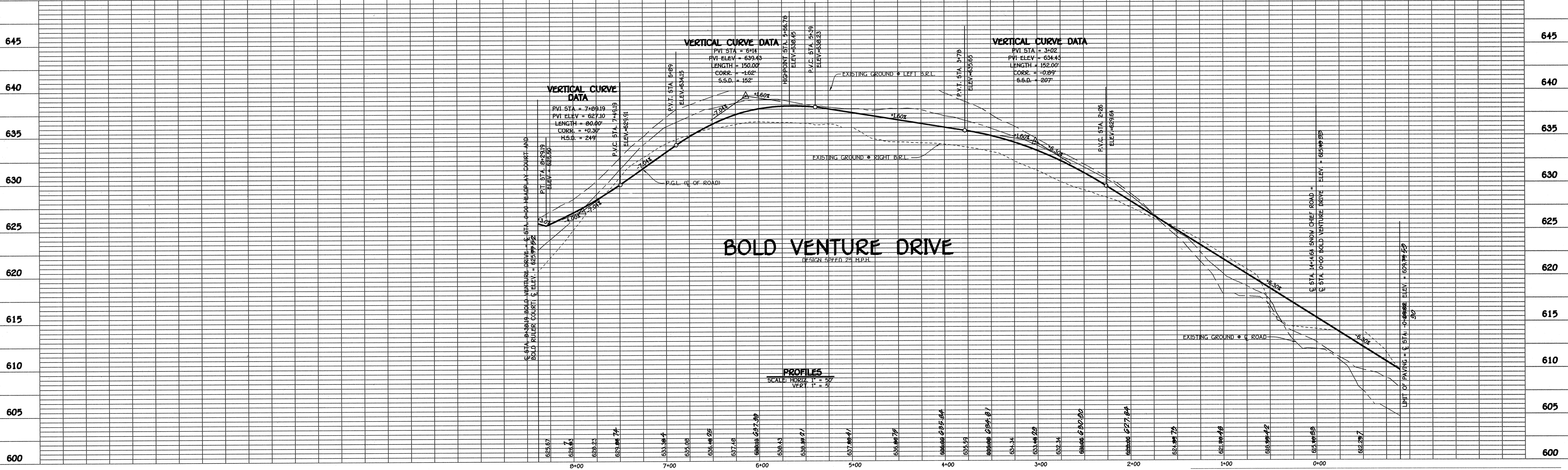
DEVELOPER
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 c/o JOHN E. BITTNER, PRESIDENT
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 BALTIMORE, MARYLAND 21227

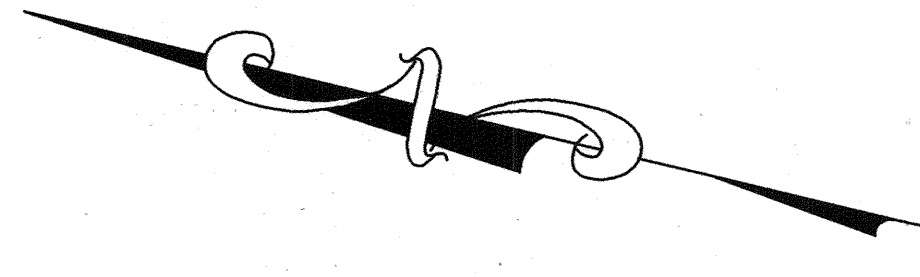
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 DES. F.M. / R.I. CHK. Z. Y. FISCH

DATE: APRIL 7, 2000
 DRN. F.M. / R.I. CHK. Z. Y. FISCH

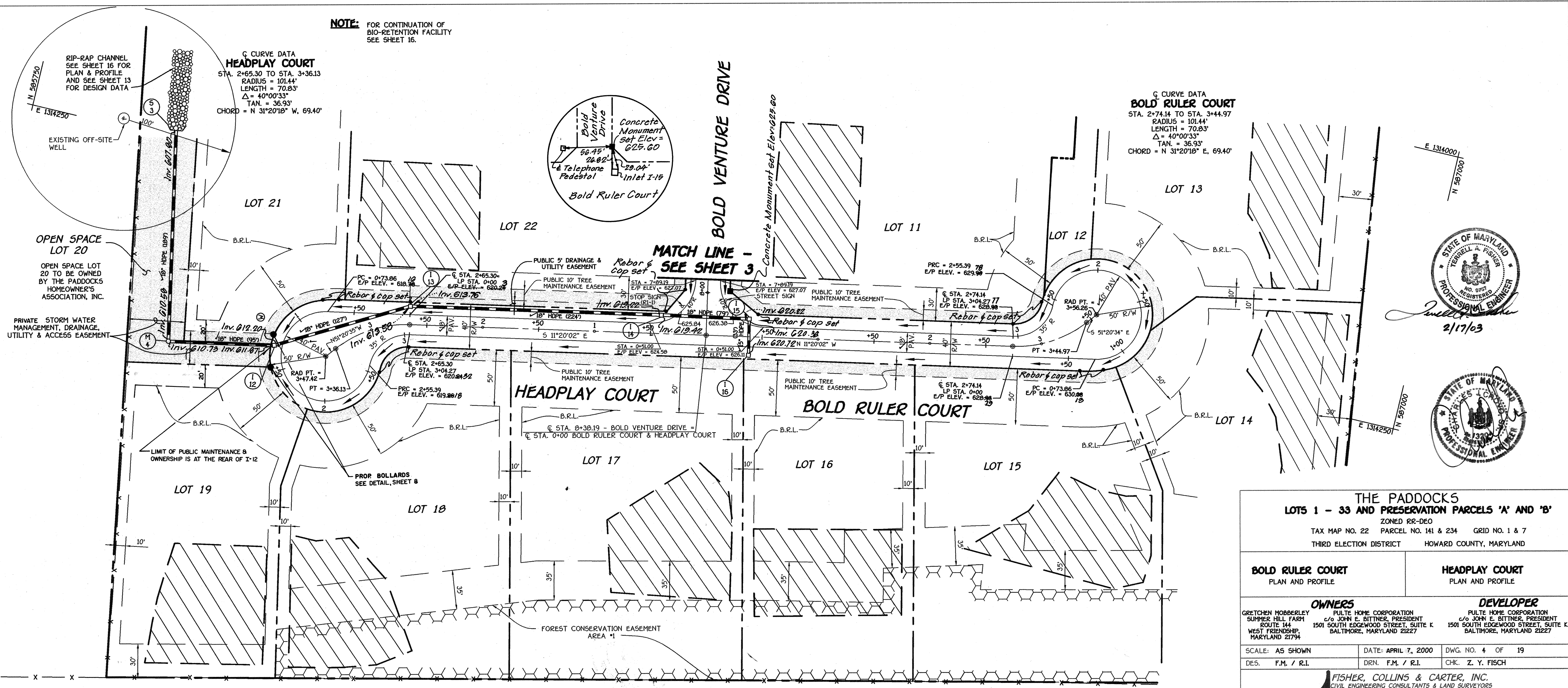
DWG. NO. 3 OF 19
 CHK. Z. Y. FISCH

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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 1822 BALTIMORE NATIONAL FREE
 ELLICOTT CITY, MARYLAND 21114
 (410) 481-2995





NOTE: FOR CONTINUATION OF BIO-RETENTION FACILITY SEE SHEET 16.



APPROVED
 DEPARTMENT OF PLANNING AND ZONING
Katherine L. ... 6/2/00
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED
 DEPARTMENT OF PLANNING AND ZONING
... 6/2/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. ... 6-20-00
 CHIEF, BUREAU OF HIGHWAYS



THE PADDOCKS
 LOTS 1 - 33 AND PRESERVATION PARCELS 'A' AND 'B'
 ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NO. 141 & 234 GRID NO. 1 & 7
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

BOLD RULER COURT PLAN AND PROFILE	HEADPLAY COURT PLAN AND PROFILE
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OWNERS
 GRETCHEN MORBERLY
 SUMMER HILL FARM
 SOUTH 144
 WEST FRIENDSHIP
 MARYLAND 21294

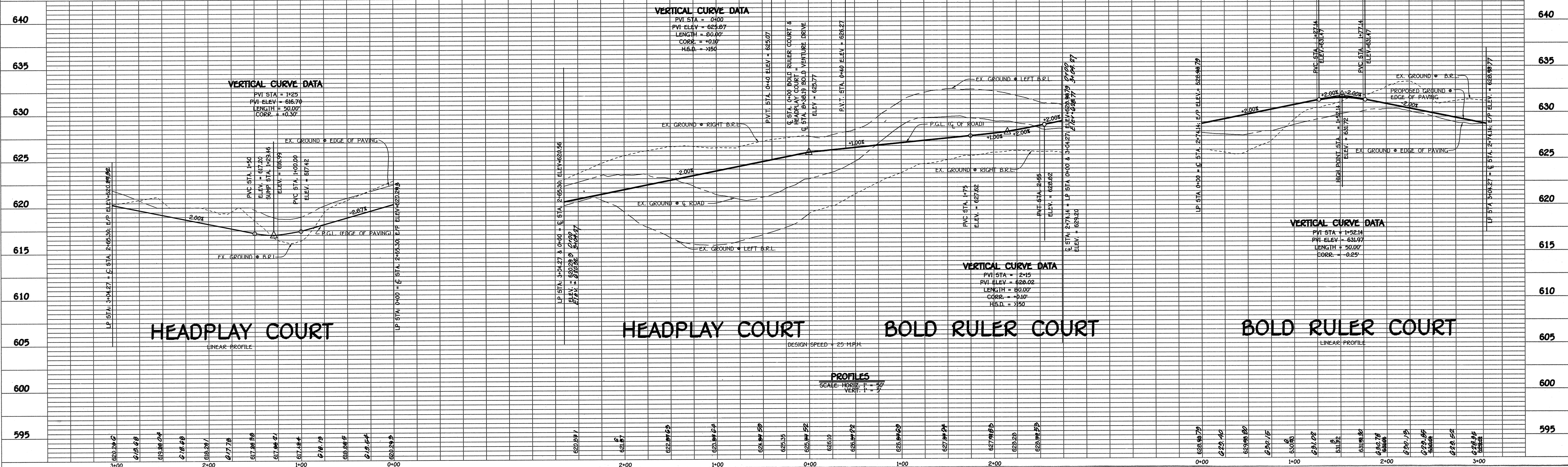
DEVELOPER
 RULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

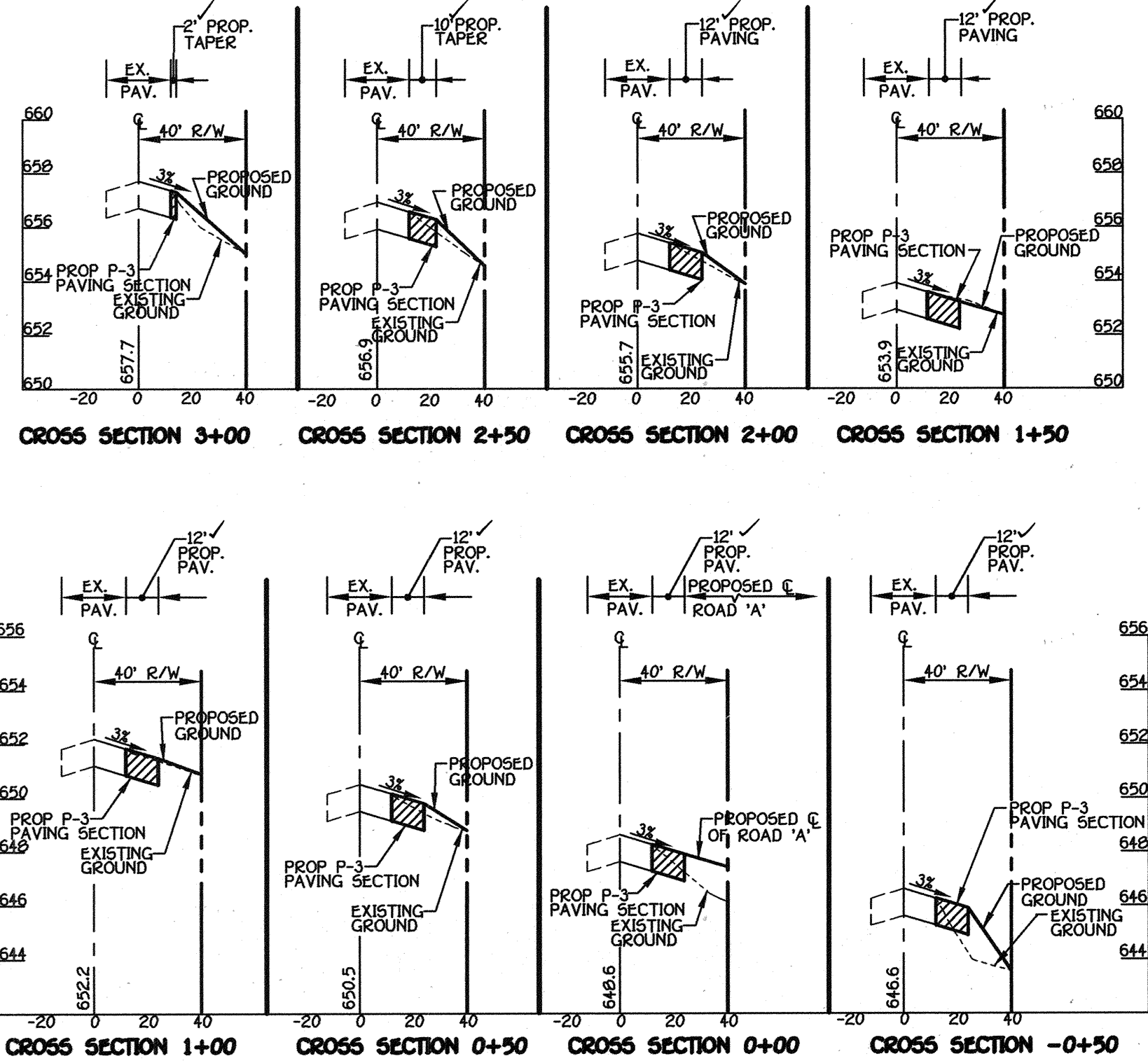
SCALE: AS SHOWN
 DES. F.M. / R.I.

DATE: APRIL 7, 2000
 DRN. F.M. / R.I.

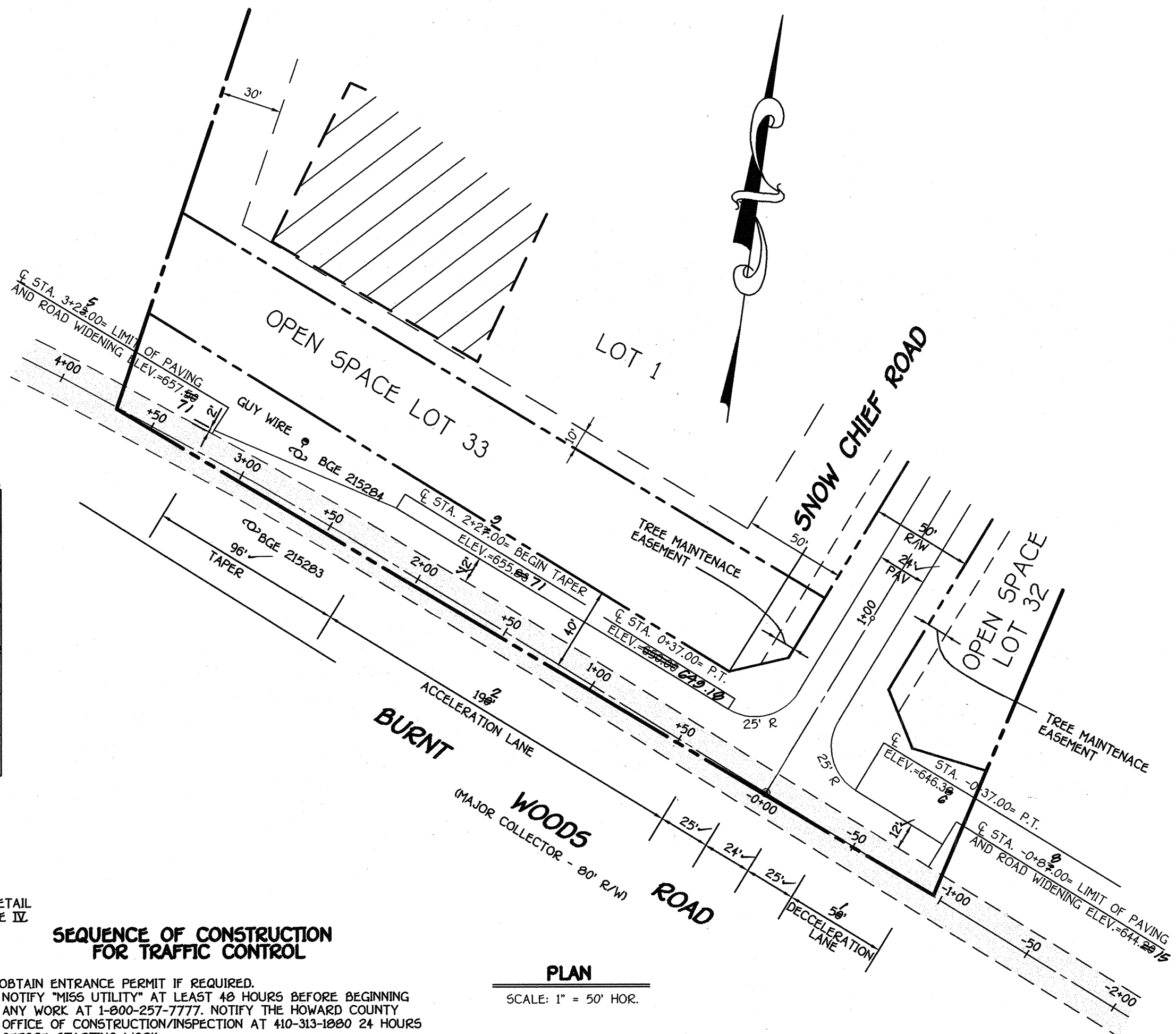
DWG. NO. 4 OF 19
 CHK. Z. Y. FISCH

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL FREE
 ELICOTT CITY, MARYLAND 21042
 4101 481 - 2895





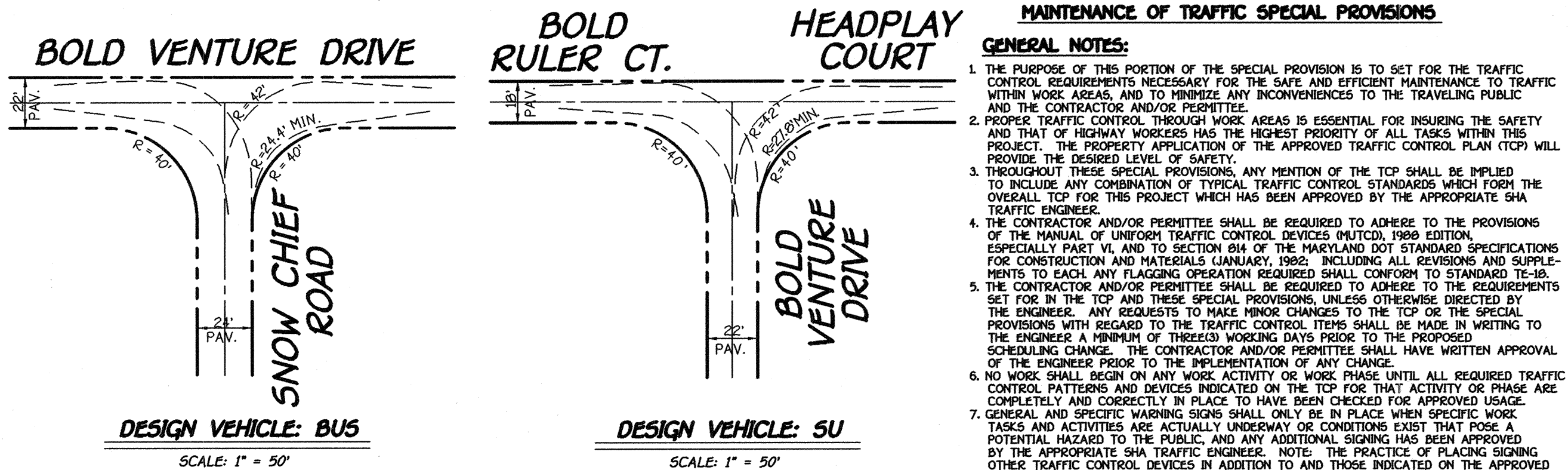
CROSS SECTIONS
SCALE: 1" = 50' HOR.
1" = 5' VERT.



PLAN
SCALE: 1" = 50' HOR.

SEQUENCE OF CONSTRUCTION FOR TRAFFIC CONTROL

- OBTAIN ENTRANCE PERMIT IF REQUIRED.
- NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION INSPECTION AT 410-313-8800 24 HOURS BEFORE STARTING WORK.
- INSTALL ROAD CONSTRUCTION SIGNS AS SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLAN.
- INSTALL CHANNELIZING DEVICES AS SHOWN ON THE TEMPORARY TRAFFIC CONTROL PLAN. INSTALL SEDIMENT CONTROL DEVICES AS SHOWN ON SHEET 6 IN THE VICINITY OF ROAD WIDENING.
- GRADE ROAD WIDENING TO SURGRADE.
- INSTALL BASE COURSE'S AS SHOWN ON P-3 PAVING SECTION, HO. CO., DETAIL R-2.01.
- INSTALL SURFACE COURSE. SEE HOCO. DETAIL R-2.01.
- STABILIZE ALL DISTURBED AREAS OUTSIDE OF THE ROAD WIDENING WITH SEED & MULCH.
- REMOVE SEDIMENT CONTROL DEVICES, UPON APPROVAL FROM INSPECTOR
- REMOVE CHANNELIZING DEVICES AND ROAD CONSTRUCTION SIGNS.



MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS GENERAL NOTES: (CONT'D)

- THE CONTRACTOR AND/OR PERMITTEE SHALL PROVIDE, MAINTAIN IN NEW CONDITION, AND MOVE WHEN NECESSARY, OR AS DIRECTED BY THE ENGINEER, ALL TRAFFIC CONTROL DEVICES USED FOR THE GUIDANCE AND PROTECTION OF MOTORISTS, PEDESTRIANS, AND WORKERS.
- ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE TCP SHALL BE KEPT IN GOOD CONDITION, FULLY PERFORMING AS SET FORTH IN THE TCP. THE MUTCO, AND/OR SECTION 814 OF THE SPECIFICATIONS, FOR REFLECTIVE DEVICES, A PARTICULAR DEVICE IS ASSUMED TO HAVE FAILED TO MEET MINIMUM OPERATIONAL STANDARDS WHEN THE DEVICE NO LONGER HAS RETRO-REFLECTANCE CAPABILITY OF AT LEAST 80% OF THE SPECIFIED MINIMUM VALUE OVER AT LEAST 90% OF THE VISIBLE REFLECTIVE SURFACE.
- ALL TRAFFIC CONTROL DEVICES NOT REQUIRED FOR THE SAFE CONDUCT OF TRAFFIC SHALL BE PROMPTLY REMOVED, COMPLETELY COVERED, TURNED AWAY FROM TRAFFIC, OR OTHERWISE TAKEN OUT OF SERVICE. IT IS INTENDED THAT NO TRAFFIC CONTROL DEVICE IS TO BE IN SERVICE WHEN THERE IS NO CLEAR CUT REASON FOR THE DEVICE.
- THROUGHOUT THE PERIODS OF WORK ACTIVITIES, TRAFFIC SHALL BE MAINTAINED BY IMPLEMENTING THE APPROVED TCP. IN LIEU OF THE TCP PREPARED FOR THIS PROJECT, AND/OR INDIVIDUAL TYPICAL TRAFFIC CONTROL STANDARDS, THE CONTRACTOR AND/OR PERMITTEE HAS THE OPTION OF PREPARING AND SUBMITTING A TCP, WHOLLY OR IN PART, OF HIS OWN DESIGN, FOLLOWING GUIDELINES SET FORTH IN THE MUTCO AND PRESCRIBED BY THE ADMINISTRATION. A TCP DEVELOPED BY THE CONTRACTOR AND/OR PERMITTEE SHALL NOT BE IMPLEMENTED UNTIL ADVANCE WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. TCP'S MAY BE IMPLEMENTED WITHIN A SINGLE PROJECT OR JOINTLY BETWEEN TWO OR MORE PROJECTS. IN SITUATIONS WHERE TCP'S JOINTLY IMPLEMENTED, CARE SHALL BE EXERCISED TO PRESENT CORRECT AND NON-CONFLICTING GUIDANCE TO THE TRAVELING PUBLIC.
- THROUGHOUT THESE SPECIAL PROVISIONS, WHERE SPEED OF TRAFFIC IS NOTED, THIS MEANS THE POSTED SPEED OR PREVAILING TRAVEL SPEED, WHICHEVER IS HIGHER, UNLESS OTHERWISE NOTED.
- TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT, UNLESS OTHERWISE NOTED. NO TRAVEL LANES OTHER THAN THOSE DESIGNATED FOR POSSIBLE CLOSURE IN THE TCP SHALL BE CLOSED WITHOUT OBTAINING PRIOR APPROVAL FROM THE ENGINEER. ALL INGRESS AND EGRESS TO THE WORK AREA BY THE CONTRACTOR AND/OR PERMITTEE SHALL BE PERFORMED WITH THE FLOW OF TRAFFIC.

THE PADDOCKS
LOTS 1 - 33 AND PRESERVATION PARCELS 'A' - 'B'
ZONED RR-DEO
TAX MAP NO. 22 PARCEL NO. 141 & 234 GRID NO. 1 & 7
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

BURNT WOODS ROAD
PLAN, PROFILE, TRAFFIC MAINTENANCE, CROSS SECTIONS, TURNING MOVEMENTS AND FILLET PROFILES FOR SNOW CHIEF ROAD, BOLD VENTURE DRIVE, HEAD PLAY COURT AND BOLD RULER COURT

OWNERS	DEVELOPER
GRETCHEN MOBERLEY SUMMER HILL FARM 1501 SOUTH EDGEWOOD STREET, WEST FRIENDSHIP, MARYLAND 21794	PULTE HOME CORPORATION C/O JOHN E. BITTNER, PRESIDENT 1501 SOUTH EDGEWOOD STREET, SUITE K BALTIMORE, MARYLAND 21227

SCALE: AS SHOWN DATE: APRIL 7, 2000 DWG. NO. 5 OF 19
DES. F.M. / R.I. DRN. F.M. / R.I. CHK. Z.Y. FISCH

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 8072 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21115
410.381.2855

DWG. 30564 FINAL SHEETS.DWG



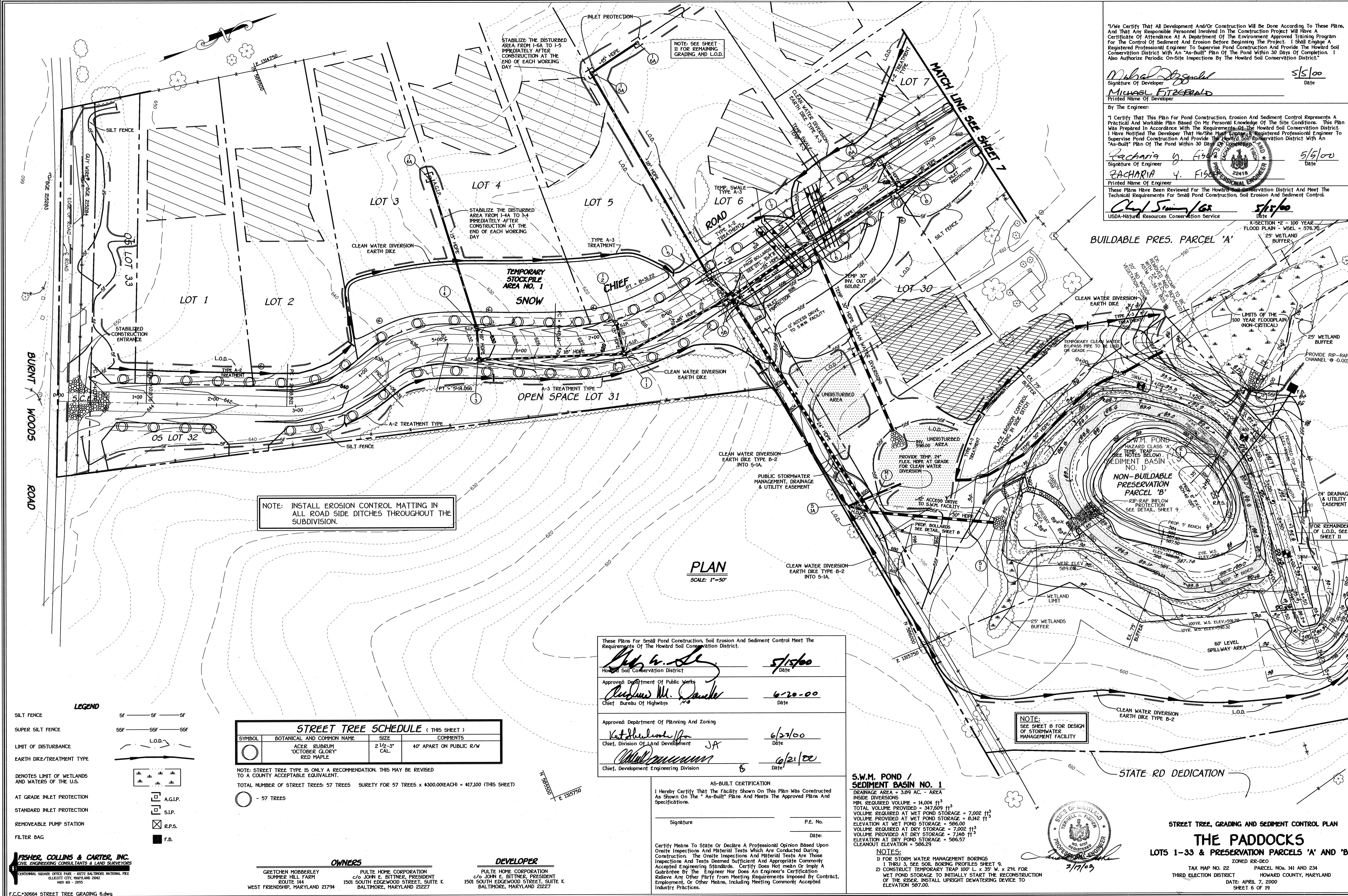
APPROVED
DEPARTMENT OF PLANNING AND ZONING
Karl Schaefer / *JA* 6/27/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED
DEPARTMENT OF PLANNING AND ZONING
John DeWitt 4/21/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 6-20-00
CHIEF, BUREAU OF HIGHWAYS DATE

STATE OF MARYLAND
PROFESSIONAL ENGINEER
No. 21103

STATE OF MARYLAND
PROFESSIONAL ENGINEER
No. 22418
Zachary J. Fisher



I/We Certify That All Development And/Or Construction Will Be Done According To These Plans, And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program For The Control Of Sediment And Erosion Before Beginning The Project. I Shall Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion. I Also Authorize Periodic On-Site Inspections By The Howard Soil Conservation District.

Signature Of Developer: *Michael Fitzgerald* 5/5/00 Date
 Printed Name Of Developer: MICHAEL FITZGERALD

By The Engineer:
 Signature Of Engineer: *Zacharia Y. Fiso* 5/5/00 Date
 Printed Name Of Engineer: ZACHARIA Y. FISO
 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 Of Engineer: *Cheryl Smith/68* 5/17/00 Date
 USDA-Natural Resources Conservation Service

NOTE: INSTALL EROSION CONTROL MATTING IN ALL ROAD SIDE DITCHES THROUGHOUT THE SUBDIVISION.

PLAN
SCALE: 1"=50'

These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.

Signature: *[Signature]* 5/15/00 Date
 Howard Soil Conservation District

Approved: Department Of Public Works
 Signature: *[Signature]* 6-20-00 Date
 Chief, Bureau Of Highways

Approved: Department Of Planning And Zoning
 Signature: *[Signature]* 6/27/00 Date
 Chief, Division Of Land Development

Signature: *[Signature]* 6/21/00 Date
 Chief, Development Engineering Division

AS-BUILT CERTIFICATION

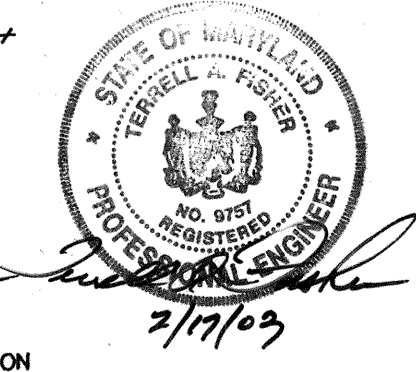
I Herby Certify That The Facility Shown On This Plan Was Constructed As Shown On The "As-Built" Plans And Meets The Approved Plans And Specifications.

Signature: _____ P.E. No. _____
 Date: _____

Certify Means To State Or Declare A Professional Opinion Based Upon Onsite Inspections And Material Tests Which Are Conducted During Construction. The Onsite Inspections And Material Tests Are Those Inspections And Tests Deemed Sufficient And Appropriate 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.

S.W.M. POND / SEDIMENT BASIN NO. 1
 DRAINAGE AREA = 3.89 AC. - AREA INSIDE DIVERSIONS
 MIN. REQUIRED VOLUME = 14,004 ft³
 TOTAL VOLUME PROVIDED = 347,609 ft³
 VOLUME REQUIRED AT WET POND STORAGE = 7,002 ft³
 VOLUME PROVIDED AT WET POND STORAGE = 8,342 ft³
 ELEVATION AT WET POND STORAGE = 586.00
 VOLUME REQUIRED AT DRY STORAGE = 7,002 ft³
 VOLUME PROVIDED AT DRY STORAGE = 7,148 ft³
 ELEVATION AT DRY POND STORAGE = 586.57
 CLEANOUT ELEVATION = 586.29

NOTE: SEE SHEET 8 FOR DESIGN OF STORMWATER MANAGEMENT FACILITY



STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
THE PADDOCKS
 LOTS 1-33 & PRESERVATION PARCELS 'A' AND 'B'
 ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NOS. 141 AND 234
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 6 OF 19

LEGEND

SILT FENCE: SF — SF — SF

SUPER SILT FENCE: SSF — SSF — SSF

LIMIT OF DISTURBANCE: L.O.D. —

EARTH DIKE/TREATMENT TYPE: —

Denotes Limit of Wetlands and Waters of the U.S.: [Symbol]

AT GRADE INLET PROTECTION: [Symbol] A.G.I.P.

STANDARD INLET PROTECTION: [Symbol] S.I.P.

REMOVABLE PUMP STATION: [Symbol] R.P.S.

FILTER BAG: [Symbol] F.B.

STREET TREE SCHEDULE (THIS SHEET)

SYMBOL	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
○	ACER RUBRUM 'OCTOBER GLORY' RED MAPLE	2 1/2" - 3" CAL.	40' APART ON PUBLIC R/W

NOTE: STREET TREE TYPE IS ONLY A RECOMMENDATION. THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIVALENT.

TOTAL NUMBER OF STREET TREES: 57 TREES SURETY FOR 57 TREES @ \$300.00/EACH = \$17,100 (THIS SHEET)

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETTTS CITY, MARYLAND 21042
 410.661-2955

OWNERS
 GRETCHEN MOBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

PROPOSED BIO-RETENTION CELLS, FOR DETAILS, SEE SHEET 16

NOTE: INSTALL R.R.S. AND FILTER BAG TO DEWATER THIS AREA UNTIL 12" UNDERDRAIN AND SAND ARE IN PLACE.

FOR CONTINUATION SEE SHEET 16

SEE SHEET 11 FOR REMAINING L.O.D.

By The Developer:
 I/We Certify That All Development And/Or Construction Will Be Done According To These Plans, And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program For The Control Of Sediment And Erosion Before Beginning The Project. I Shall Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion. I Also Authorize Periodic On-Site Inspections By The Howard Soil Conservation District.

Michael Fitzgerald 4/25/00
 Signature Of Developer
MICHAEL FITZGERALD
 Printed Name Of Developer

By The Engineer:
 I Certify That This Plan For Pond Construction, Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Conditions. This Plan Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District. I Have Notified The Developer, Myself, Engage A Registered Professional Engineer To Supervise Pond Construction, To Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion.

Zachary V. Fisch 4/26/00
 Signature Of Engineer
ZACHARY V. FISCH
 Printed Name Of Engineer
 22418
 PROFESSIONAL ENGINEER

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.

Clay Swinglas 5/15/00
 Signature Of Engineer
CLAY SWINGLAS
 Printed Name Of Engineer
 USDA-Natural Resources Conservation Service

These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.

Andrew M. Paule 6-20-00
 Signature Of Engineer
ANDREW M. PAULE
 Printed Name Of Engineer
 Chief, Bureau Of Highways

Approved: Department Of Planning And Zoning
Walter D. ... 6/23/00
 Signature Of Engineer
WALTER D. ...
 Printed Name Of Engineer
 Chief, Division Of Land Development

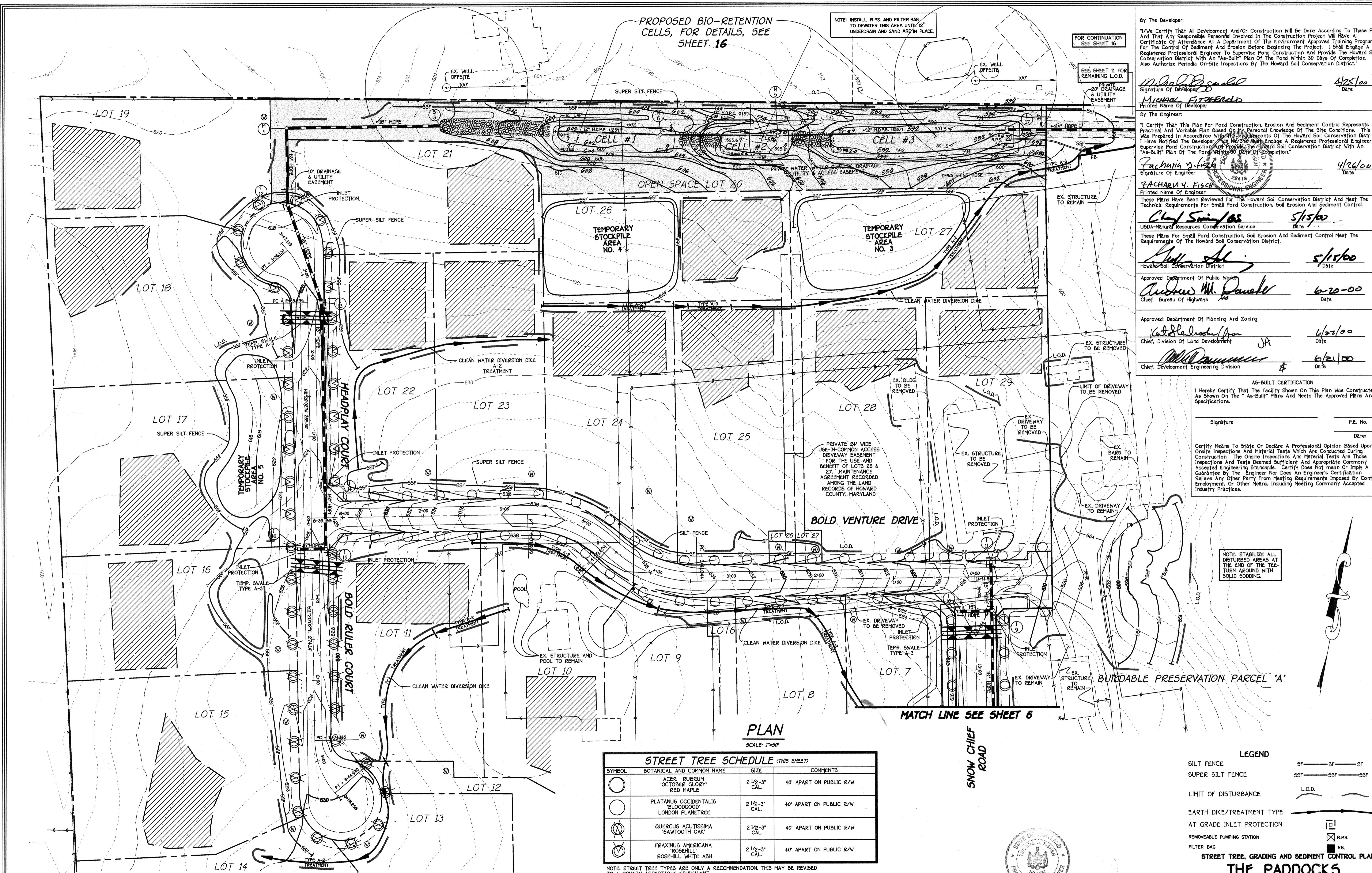
... 6/21/00
 Signature Of Engineer
...
 Printed Name Of Engineer
 Chief, Development Engineering Division

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 _____ P.E. No. _____
 Date: _____

Certify Means To State Or Declare A Professional Opinion Based Upon Onsite Inspections And Material Tests Which Are Conducted During Construction. The Onsite Inspections And Material Tests Are Those Inspections And Tests Deemed Sufficient And Appropriate 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.

NOTE: STABILIZE ALL DISTURBED AREAS AT THE END OF THE TURN AROUND WITH SOLID SODDING.



PLAN
 SCALE: 1"=50'

MATCH LINE SEE SHEET 6

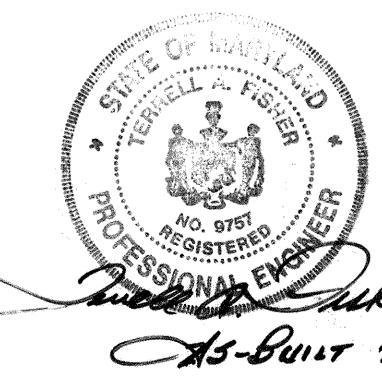
STREET TREE SCHEDULE (THIS SHEET)

SYMBOL	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
○	ACER RUBRUM 'OCTOBER GLORY' RED MAPLE	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W
○	PLATANUS OCCIDENTALIS 'BLOODGOOD' LONDON PLANETREE	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W
○	QUERCUS ACUTISSIMA 'SAWTOOTH OAK'	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W
○	FRAXINUS AMERICANA 'ROSEHILL' ROSEHILL WHITE ASH	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W

NOTE: STREET TREE TYPES ARE ONLY A RECOMMENDATION. THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIVALENT.

○ - 6 TREES ○ - 21 TREES
 ○ - 43 TREES ○ - 21 TREES

TOTAL NUMBER OF STREET TREES: 91 TREES (SURETY AMOUNT = 91 TREES X \$300.00 = \$27,300.00 (THIS SHEET)
 TOTAL SURETY AMOUNT DUE FOR THIS JOB = \$27,300.00 + \$17,100.00 = \$44,400.00 (148 STREET TREES TOTAL)



Zachary V. Fisch
 AS-Built 2/17/03

LEGEND

SILT FENCE 5F — 5F — 5F
 SUPER SILT FENCE 55F — 55F — 55F
 LIMIT OF DISTURBANCE L.O.D.
 EARTH DIKE/TREATMENT TYPE ————
 AT GRADE INLET PROTECTION [Symbol]
 REMOVABLE PUMPING STATION [Symbol]
 FILTER BAG [Symbol]

STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
THE PADDOCKS
 LOTS 1-33 & PRESERVATION PARCELS 'A' AND 'B'
 ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NOS. 141 AND 234
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 7 OF 19

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10222 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 481-2855

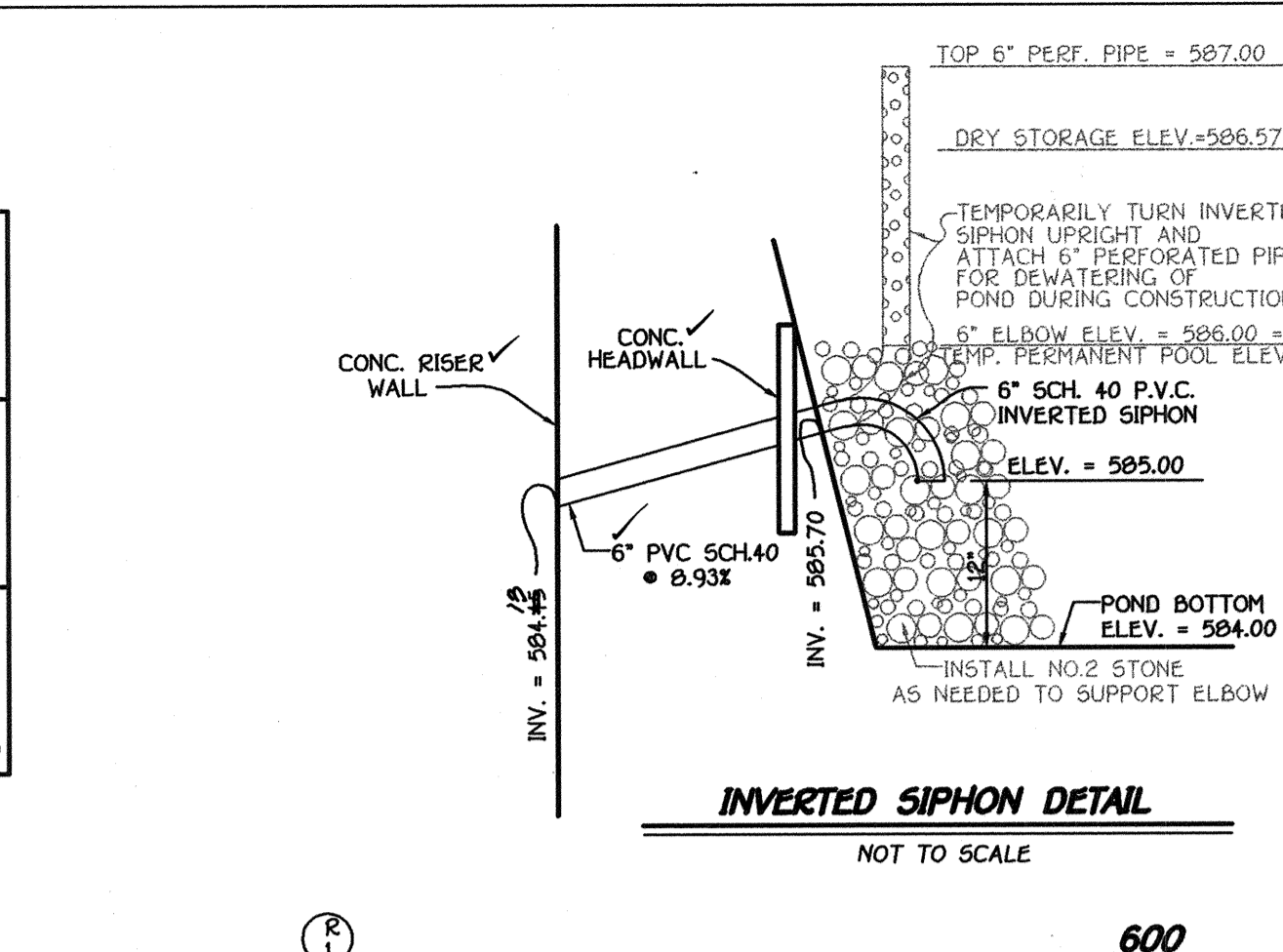
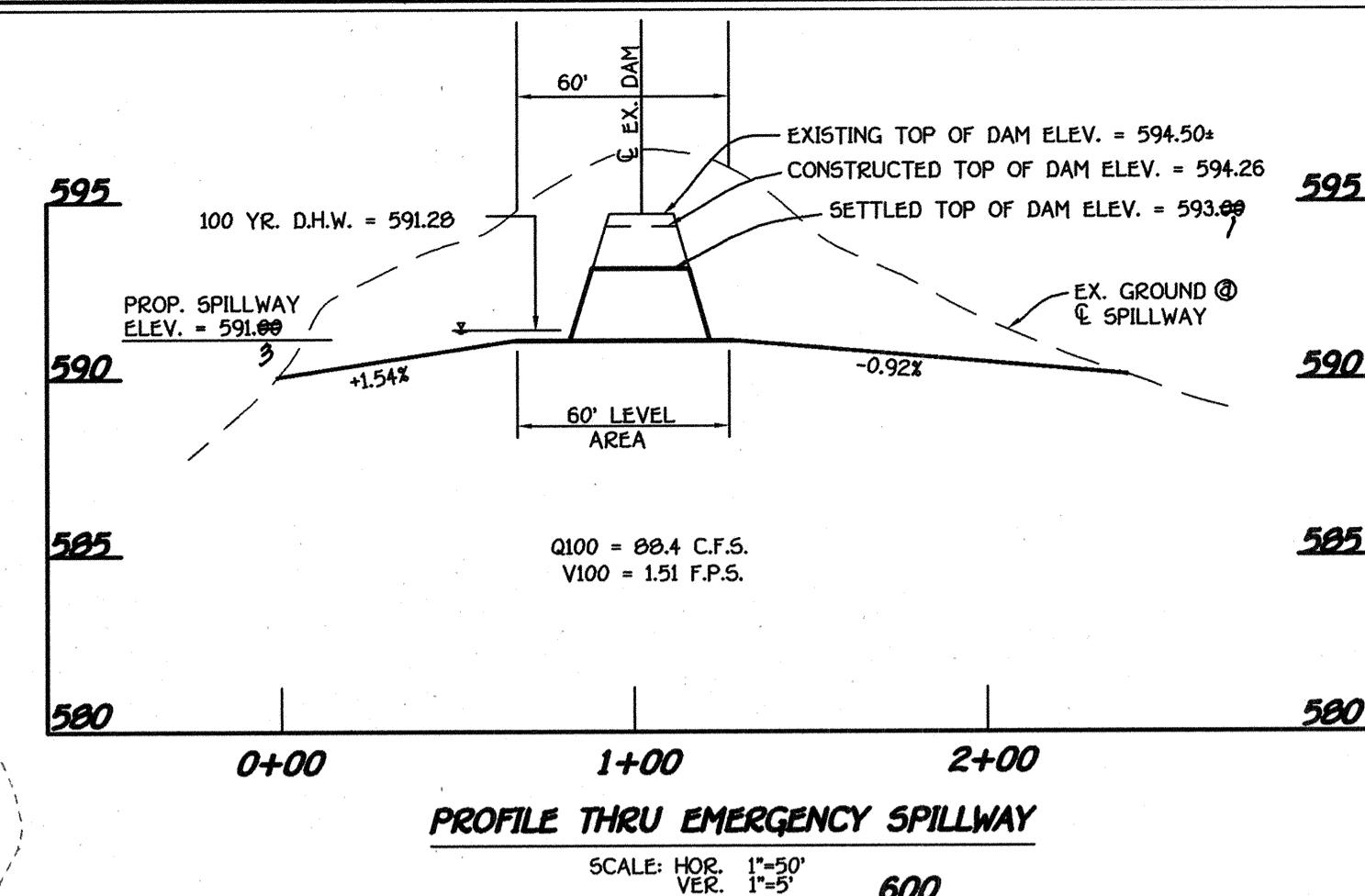
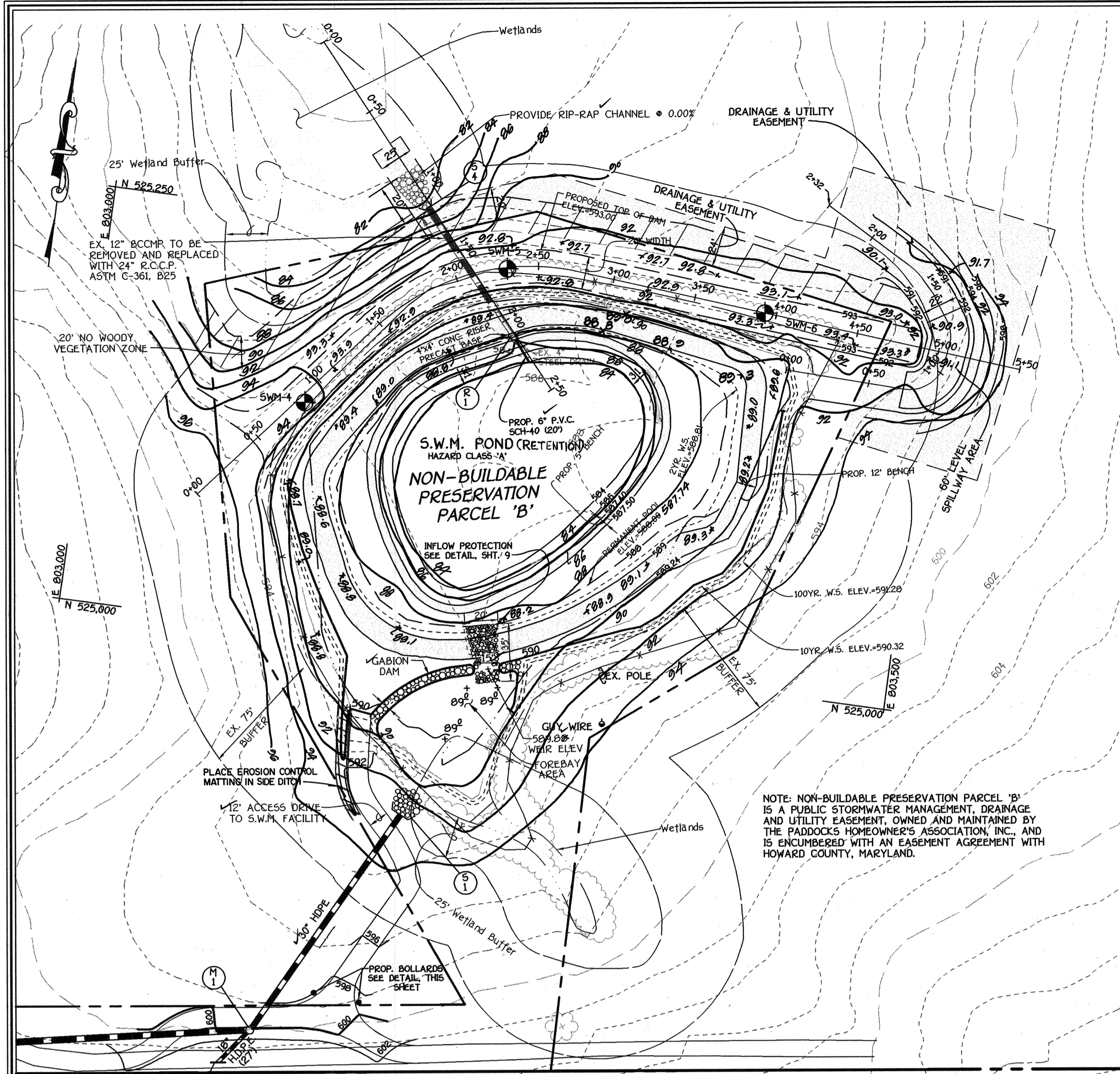
OWNERS

GRETCHEN MOBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

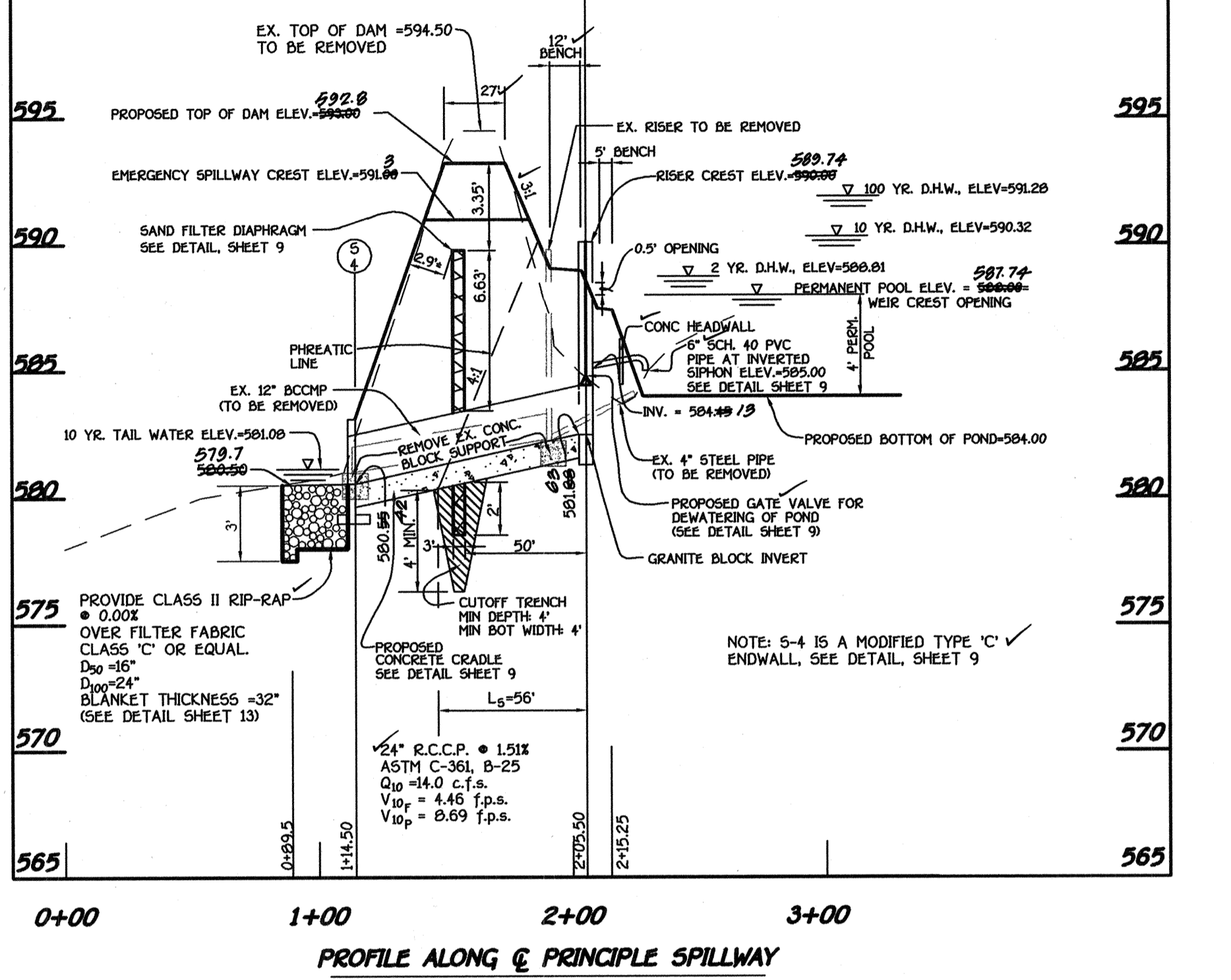
DEVELOPER

PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227



BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100 - YEAR FLOODPLAINS

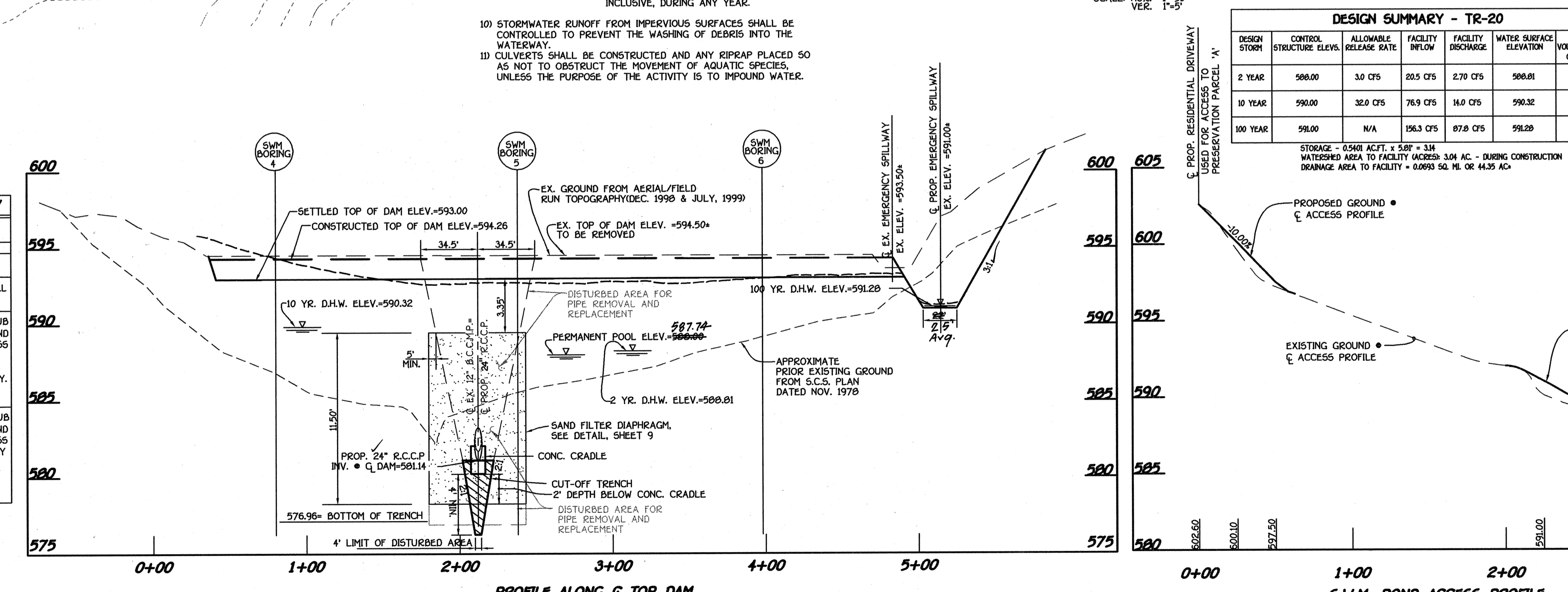
- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
- PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
- REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, OR WATERWAYS, OR PERMANENT MODIFICATION OF THE 100-YEAR FLOODPLAIN IN EXCESS OF THAT LOST UNDER THE ORIGINALLY AUTHORIZED STRUCTURE OR FILL.
- RECTIFY ANY NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
- ANY STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LULIUM MULTICOLOR), HILLET (SETARIA ITALICA), BARLEY HOODEUM SP.), OATS (UNIOLA SP.) AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION, KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
- AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
- TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM.



GENERAL RECOMMENDATIONS FOR TREE REMOVAL IN EXISTING POND 1/

TREE LOCATION ZONE	TREE TYPE A (TAP ROOTS)				TREE TYPE B (SPREADING ROOTS)			
	DBH < 8"	DBH > 8"	DBH < 8"	DBH > 8"	DBH < 8"	DBH > 8"	DBH < 8"	DBH > 8"
1/	CUT & KILL STUMPS.	CUT & KILL STUMPS.	CUT & KILL STUMPS.	CUT & KILL STUMPS.	CUT & KILL STUMPS.	CUT & KILL STUMPS.	CUT & KILL STUMPS.	CUT & KILL STUMPS.
2/	CUT & KILL STUMPS AND ROOT MASS TO 18" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 24" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 24" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 24" DEPTH UNIFORMLY.	CUT & KILL STUMPS.	CUT & GRUB STUMPS AND ROOT MASS TO 12" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 12" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 12" DEPTH UNIFORMLY.
3/	CUT & KILL STUMPS.	CUT & GRUB STUMPS AND ROOT MASS TO 18" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 18" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 18" DEPTH UNIFORMLY.	CUT & KILL STUMPS.	CUT & GRUB STUMPS AND ROOT MASS TO 12" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 12" DEPTH UNIFORMLY.	CUT & GRUB STUMPS AND ROOT MASS TO 12" DEPTH UNIFORMLY.

- Tree growth smaller than 2" DBH will be removed by spraying, injection or cutting and stump killing. Trees and shrubs planted for shoreline protection in Zone 1 shall be maintained at heights < 4 feet.
- In embankment type (a) dispersed soil-cut stumps 12 inches below surface and backfill with compacted soil.
- In embankment type (b) stumps with low piping potential-cut and kill stumps.
- In riprapped or heavy rock fill sections, grubbing is not required.
- For water-loving trees such as willows, remove stump and root mass in twice the crown width area.
- For water-loving trees such as willows, remove stumps and root mass to 18" depth uniformly.
- Individual large trees in this zone may need the special treatment as described in Section 3.



By the Developer:
 Signature of Developer: *Michael Fitzgerald* Date: 4/25/00
 Printed Name of Developer: MICHAEL FITZGERALD

By the Engineer:
 Signature of Engineer: *Zacharia V. Fisch* Date: 4/26/00
 Printed Name of Engineer: ZACHARIA V. FISCH

These Plans Have Been Reviewed For Wetlands Soil Conservation District And Meet The Technical Requirements For Small Pond Construction, Soil Erosion And Sediment Control.

Signature of Developer: *Chief Samma Lee* Date: 5/15/00
 Printed Name of Developer: Chief Samma Lee
 Signature of Engineer: *Andrew M. Dwyer* Date: 6-20-00
 Printed Name of Engineer: Andrew M. Dwyer

Signature of Engineer: *Kat Shephard* Date: 6/27/00
 Printed Name of Engineer: Kat Shephard
 Signature of Engineer: *Chief Development Engineering Division* Date: 6/21/00
 Printed Name of Engineer: Chief, Development Engineering Division

AS-BUILT CERTIFICATION

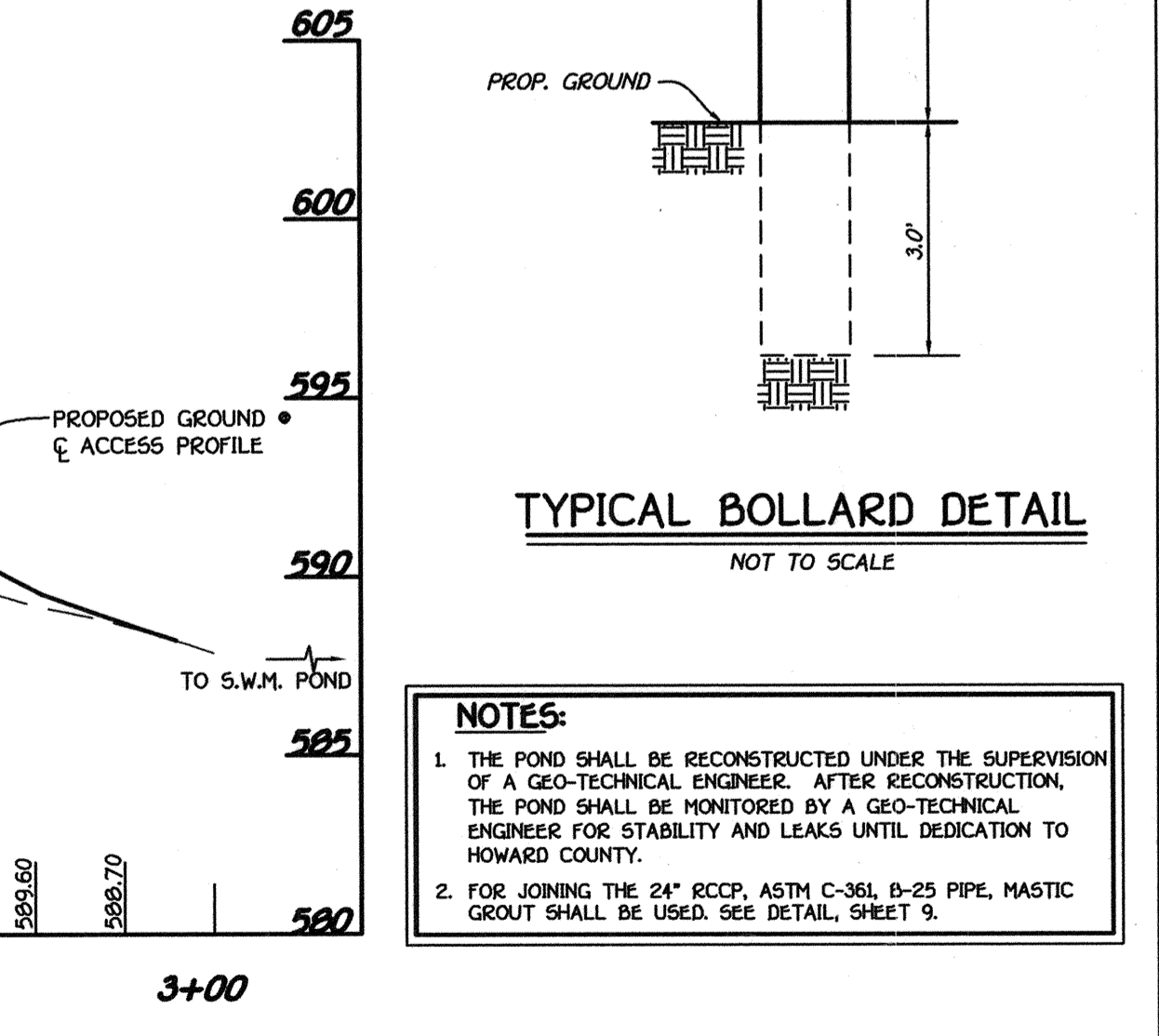
I Herby Certify That The Facility Shown On This Plan Was Constructed As Shown On The "As-Built" Plans And Meets The Approved Plans And Specifications.

Signature: _____ P.E. No. _____
 Date: _____

Certify Means To State Or Declare A Professional Opinion Based Upon Onsite Inspections And Material Tests Which Are Conducted During Construction. The Onsite Inspections And Material Tests Are Those Inspections And Tests Deemed Sufficient And Appropriate 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.

OPERATION, MAINTENANCE AND INSPECTION

Inspection of the ponds shown hereon shall be performed at least annually, in accordance with the checklist and requirements contained within USGA, SCS Standards And Specifications For Ponds (MD-376). The pond owner and any heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, surveillance, inspection, and maintenance thereof. The pond owner shall promptly notify the Soil Conservation District of any unusual observations that may be indications of distress such as excessive seepage, turbid seepage, sliding or slumping.

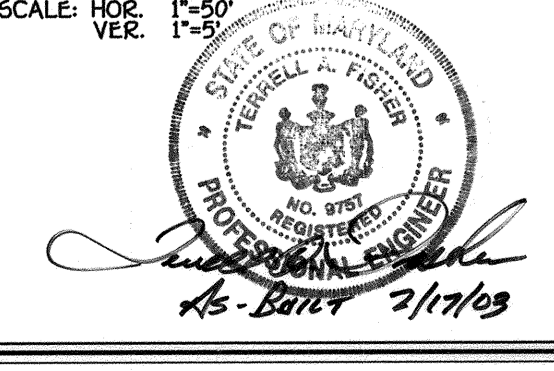


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 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 481-2995

OWNERS
 GRETCHEN HOBBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

THEODORE C. AND BETTY J. OWENS
 c/o MISSY RUTH
 ROUTE 1
 P.O. BOX 170
 STAUNTON, VIRGINIA 24401

DEVELOPER
 HAILEY DEVELOPMENT, L.C.
 c/o RICHARD THOMETZ
 7013 HELMSDALE CT.
 CLARKSVILLE, MARYLAND 21029



STORM WATER MANAGEMENT PLAN AND PROFILES
THE PADDOCKS
 LOTS 1 THRU 33 AND PARCELS 'A' AND 'B'
 ZONED R-20
 TAX MAP NO. 22 PARCEL NO. 141 AND 234
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 8 OF 19

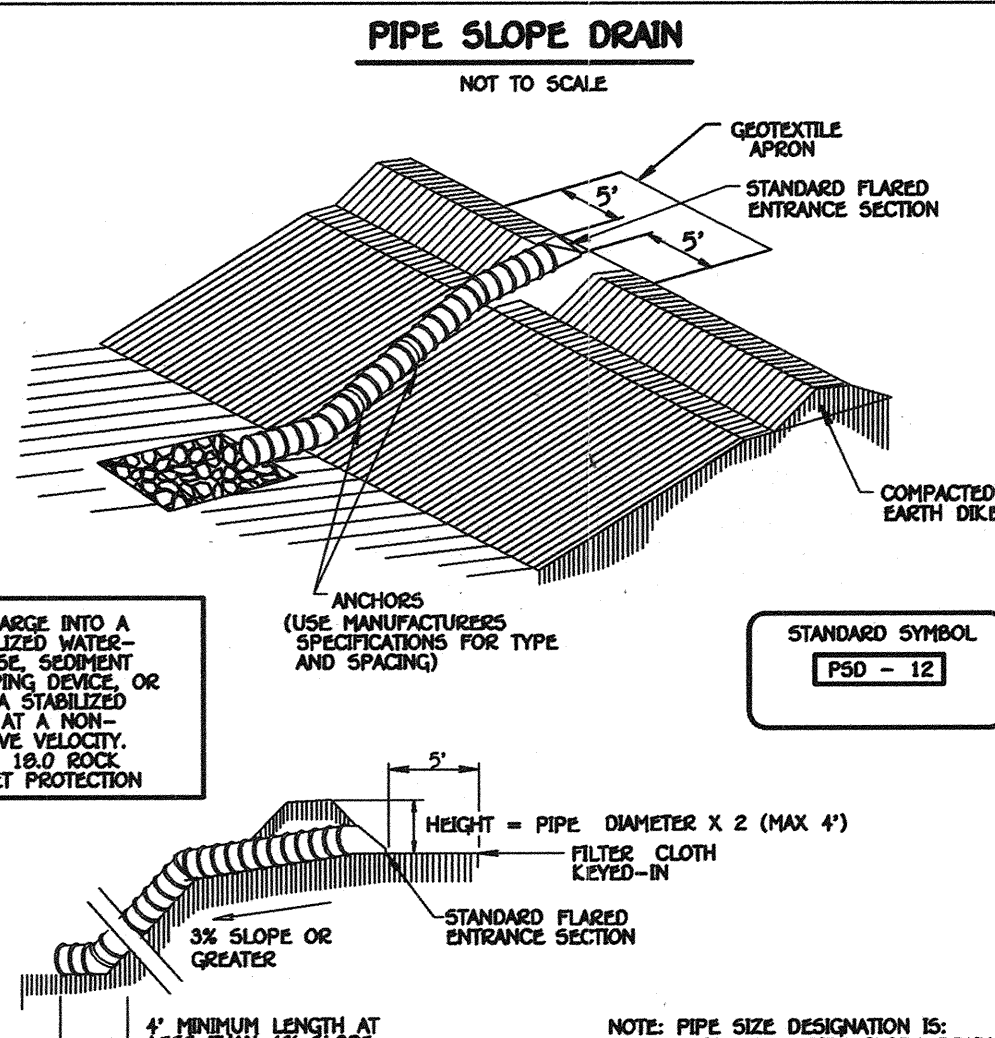
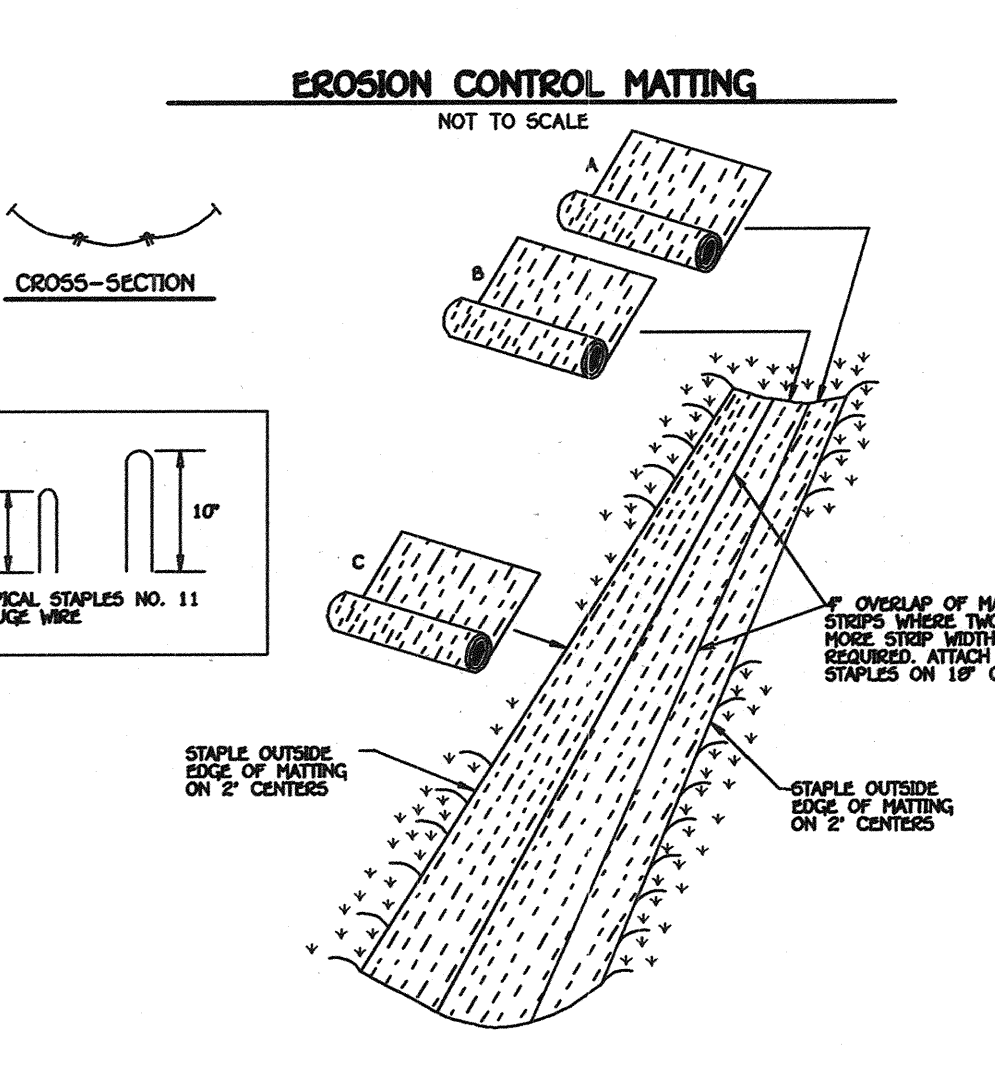
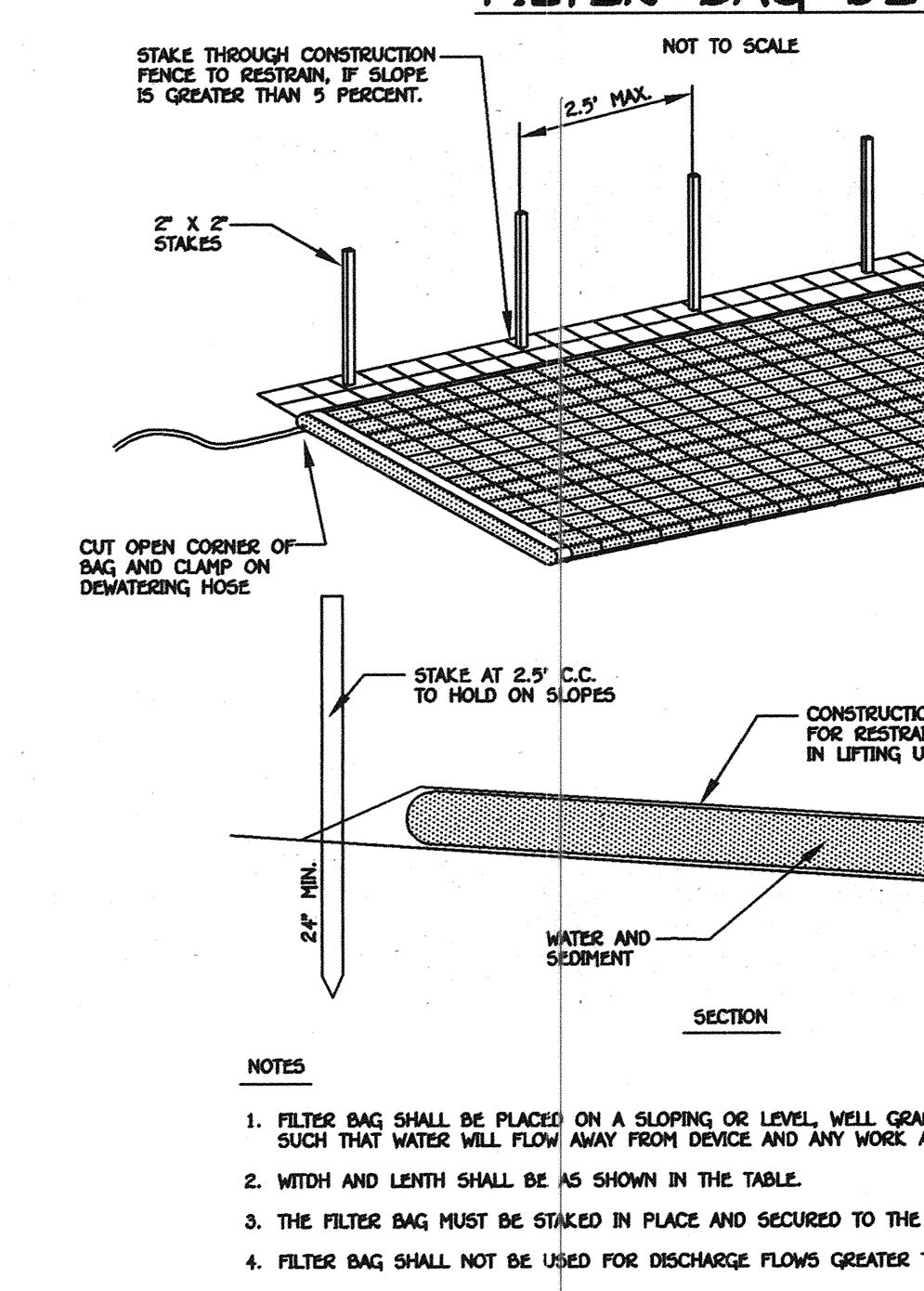


Table 6 Design Criteria for Pipe Slope Drain

Size	Pipe/Tubing Diameter (D) in	Maximum Drainage Area (Acres)
PSD-12	12	0.5
PSD-18	18	1.5
PSD-21	21	2.5
PSD-24	24	3.5
PSD-24 (2)	24	5.0

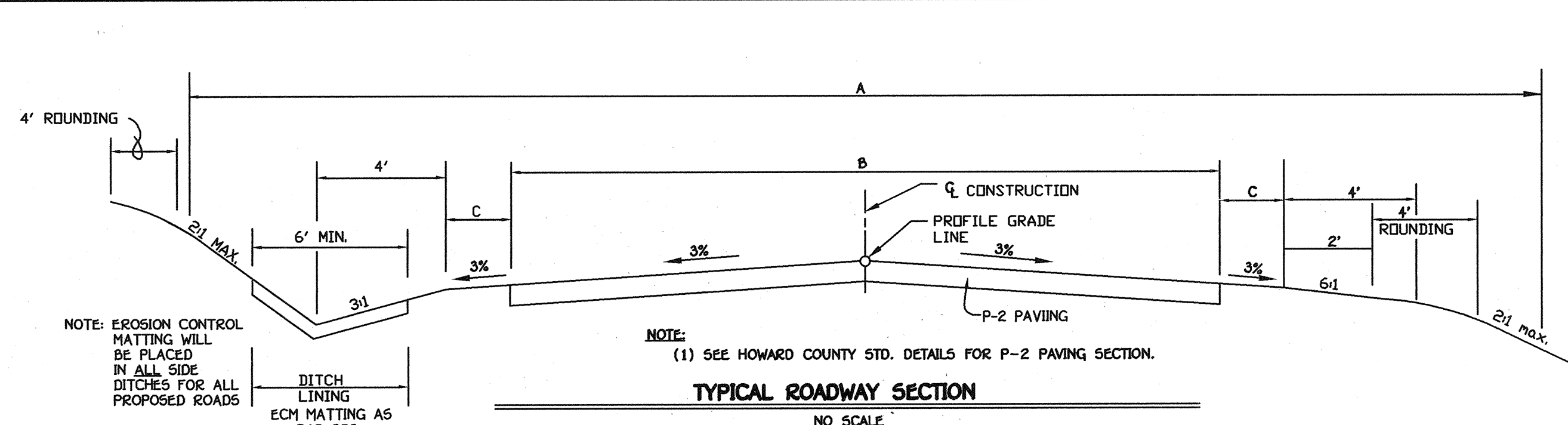


FILTER BAG DETAIL NOT TO SCALE

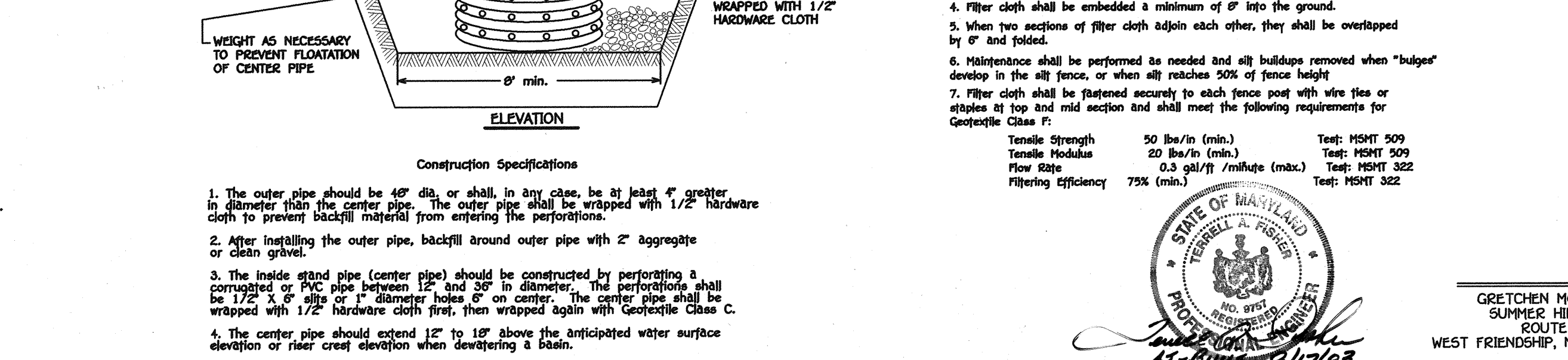
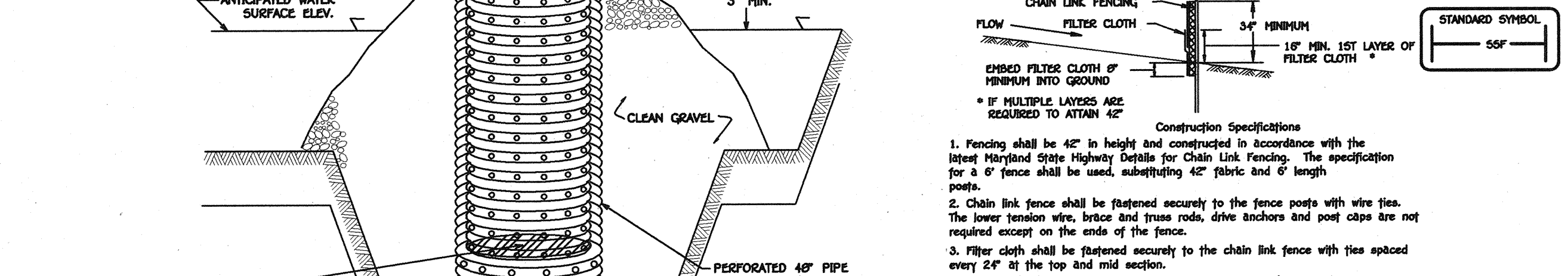
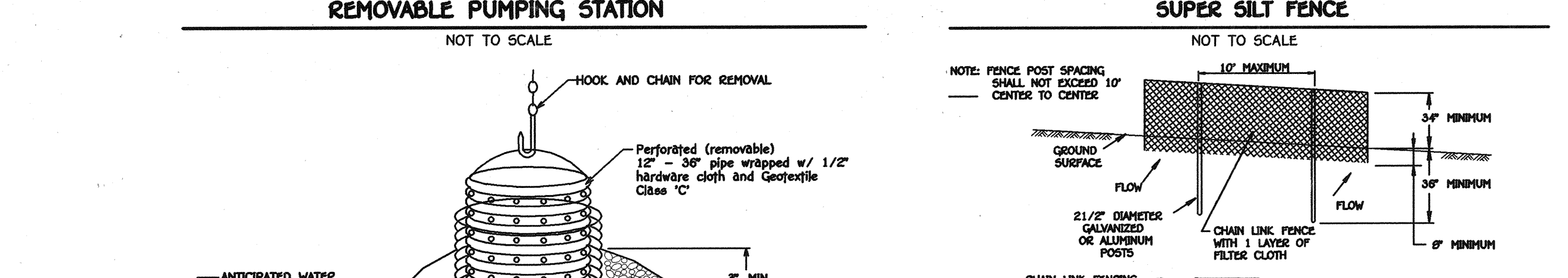
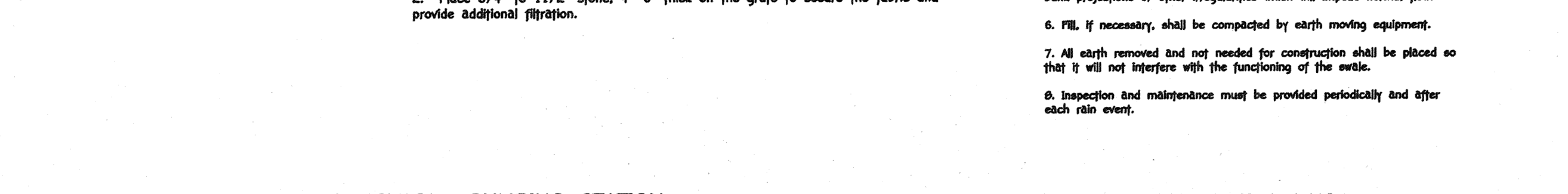
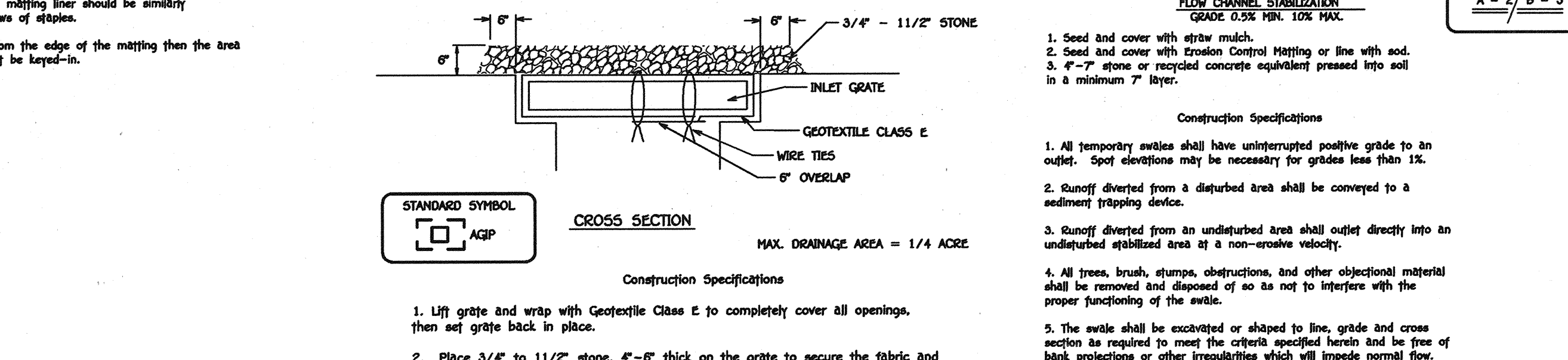
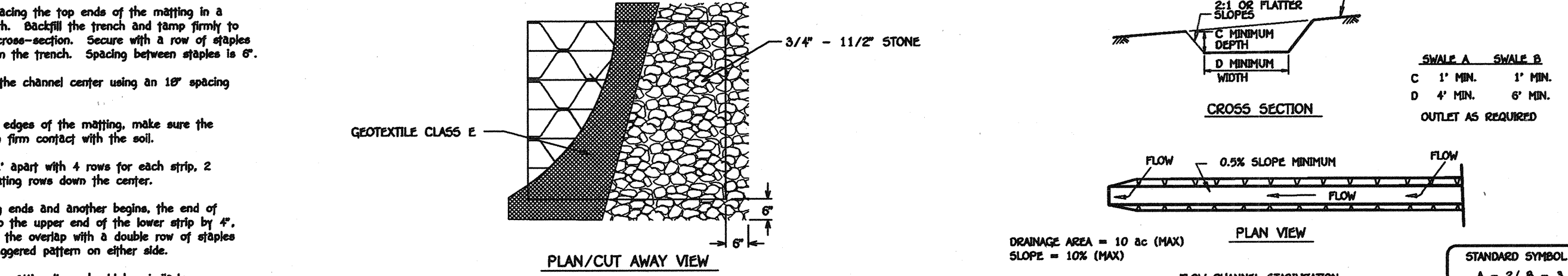
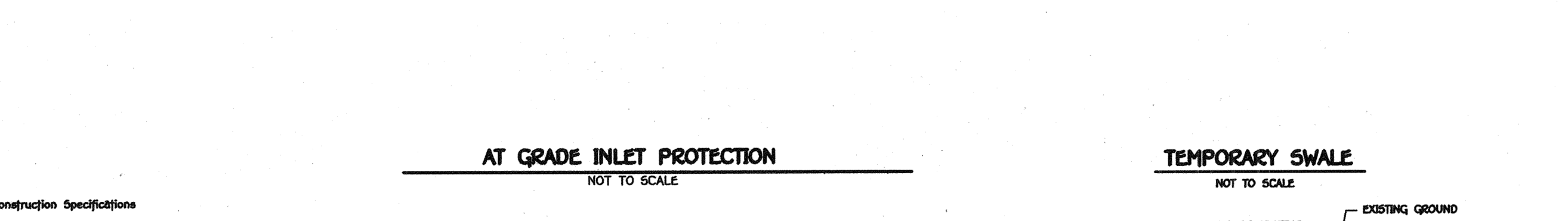


NOTES:
 1. FILTER BAG SHALL BE PLACED ON A SLOPING OR LEVEL, WELL GRADED VEGETATED SITE SUCH THAT WATER WILL FLOW AWAY FROM DEVICE AND ANY WORK AREAS.
 2. WIDTH AND LENGTH SHALL BE AS SHOWN IN THE TABLE.
 3. THE FILTER BAG MUST BE STAKED IN PLACE AND SECURED TO THE PUMP DISCHARGE LINE.
 4. FILTER BAG SHALL NOT BE USED FOR DISCHARGE FLOWS GREATER THAN 300 GPM.
 5. DEVICE SHALL BE REMOVED AND DISPOSED OF AFTER BAG IS FILLED WITH SEDIMENT. SEDIMENT FROM BAG SHALL BE SPREAD IN AN UPLAND AREA.

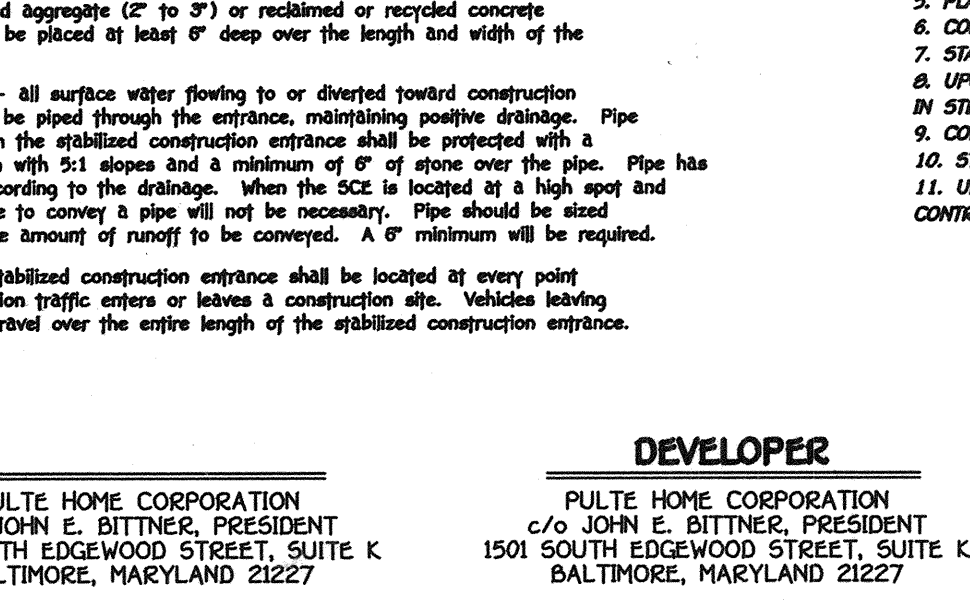
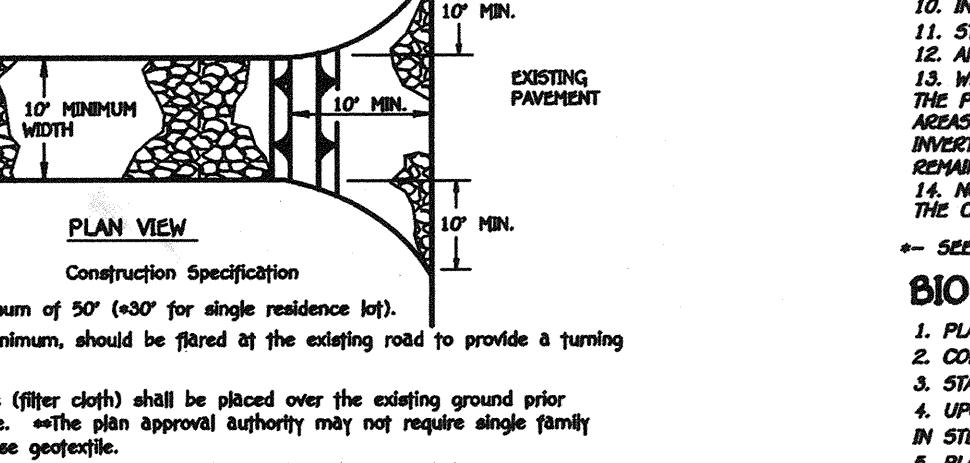
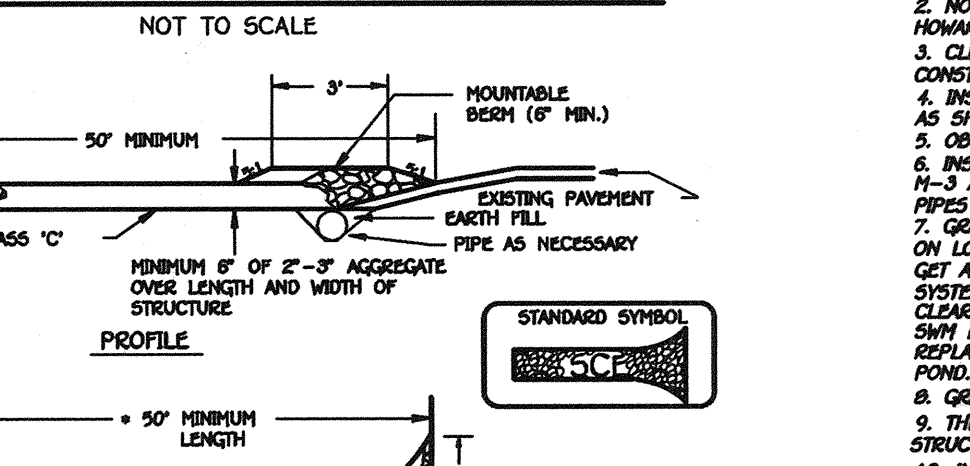
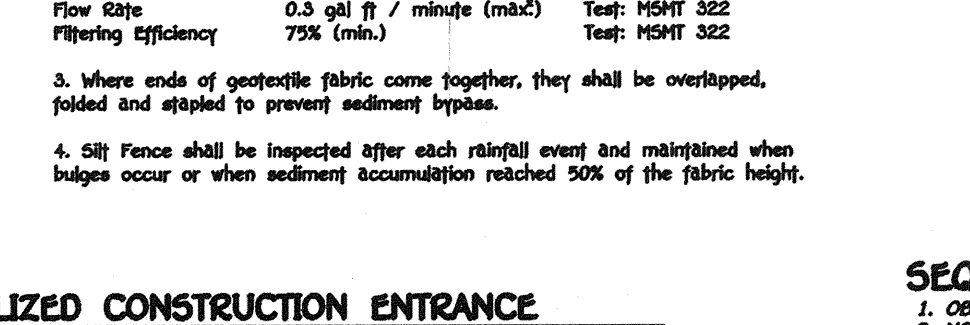
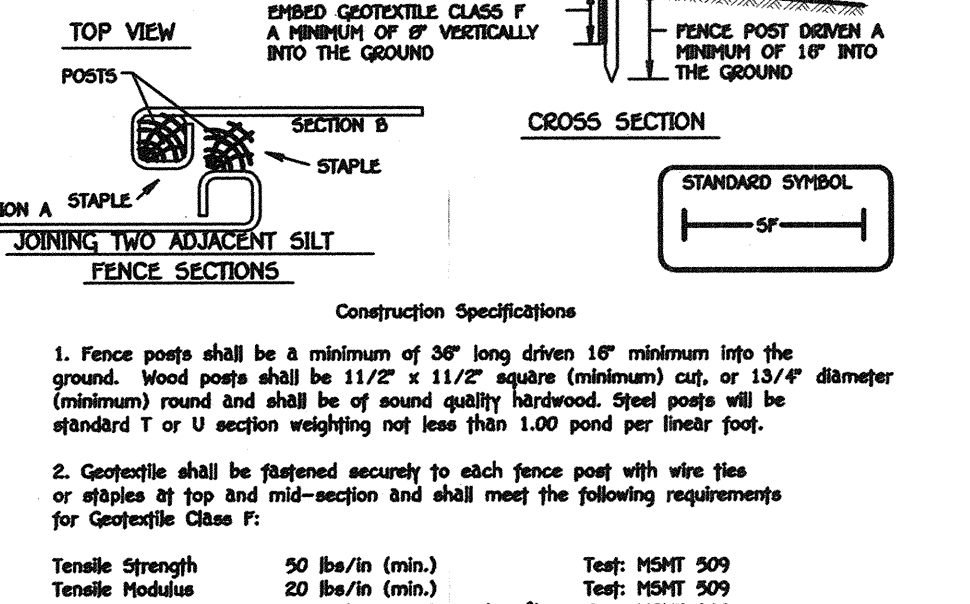
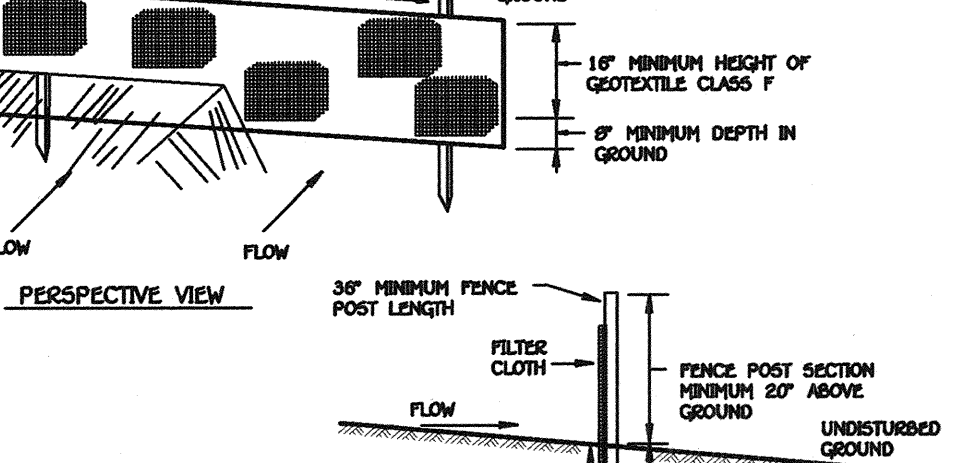
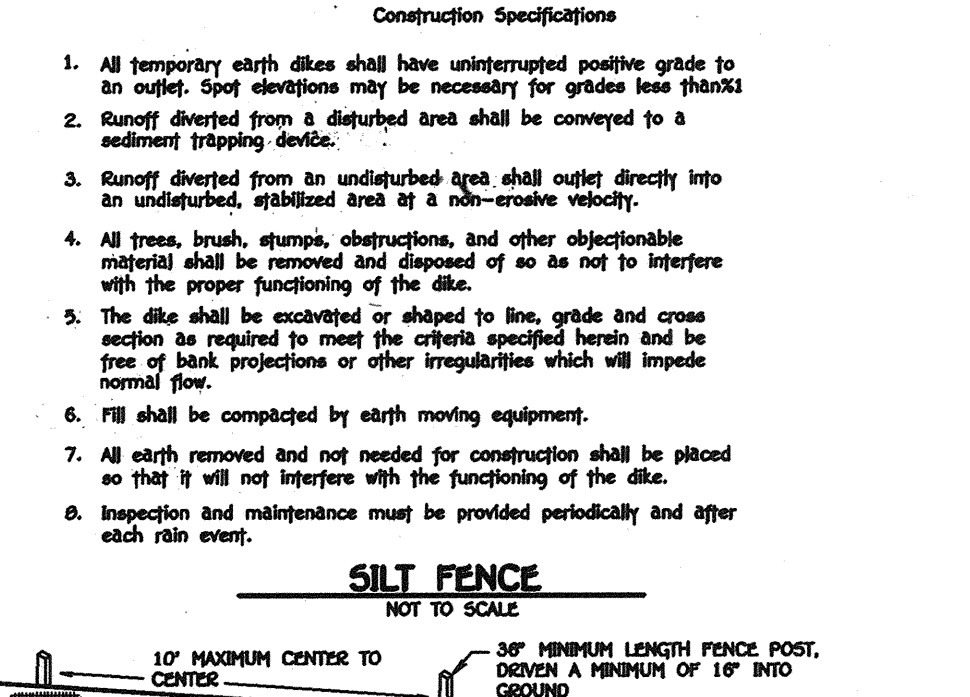
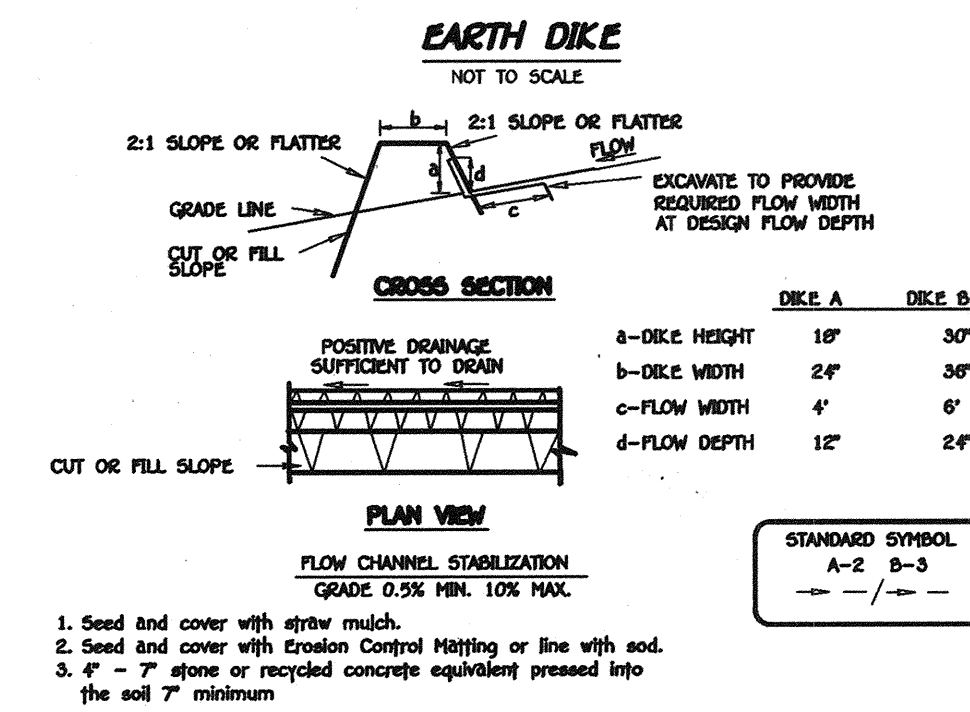
AVAILABLE FROM:
 INDIAN VALLEY INDUSTRIES, INC. P.O. BOX 810 JOHNSTON, VIRGINIA 22627 (800) 699-5111
 A.C.F. ENVIRONMENTAL 1801-A WILLES ROAD ROCKHURST, VIRGINIA 22837 TOLL FREE 1-800-448-3636
 PRICE AND COMPANY, INC. 425 36TH STREET WYOMING, NE 49140 (616) 530-8230



ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	R. STATION LIMITS	A	B	C	PAVING SECTION
SNOW CHIEF ROAD	LOCAL ROAD	30 M.P.H.	RR-DEO	0+00 TO 14+14.64	50'	24'	4'	P-2
BOLD VENTURE DRIVE	ACCESS STREET	25 M.P.H.	RR-DEO	0+00 TO 8+38.19	40'	22'	4'	P-2
BOLD VENTURE DRIVE	ACCESS STREET	25 M.P.H.	RR-DEO	0+00 TO -0+89.82	60'	18'	4'	P-2
HEADPLAY COURT	ACCESS PLACE	25 M.P.H.	RR-DEO	0+00 TO 3+56.26	40'	18'	4'	P-2
BOLD RULER COURT	ACCESS PLACE	25 M.P.H.	RR-DEO	0+00 TO 3+47.42	40'	18'	4'	P-2



NOTES:
 1. The outer pipe should be 40\"/>



STANDARD SYMBOL:
 PSD-12
 AGP
 SSF

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND THAT ANY RESPONSIBLE PERSONNEL IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
 Signature of Developer: [Signature] 5/15/00
 DATE

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Engineer: [Signature] 5/15/00
 DATE

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 Signature of Reviewer: [Signature] 5/15/00
 DATE
 U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Signature of Approver: [Signature] 5/15/00
 DATE
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature of Approver: [Signature] 6/27/00
 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature of Approver: [Signature] 6/21/00
 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Signature of Approver: [Signature] 6-20-00
 DATE
 CHIEF, BUREAU OF HIGHWAYS

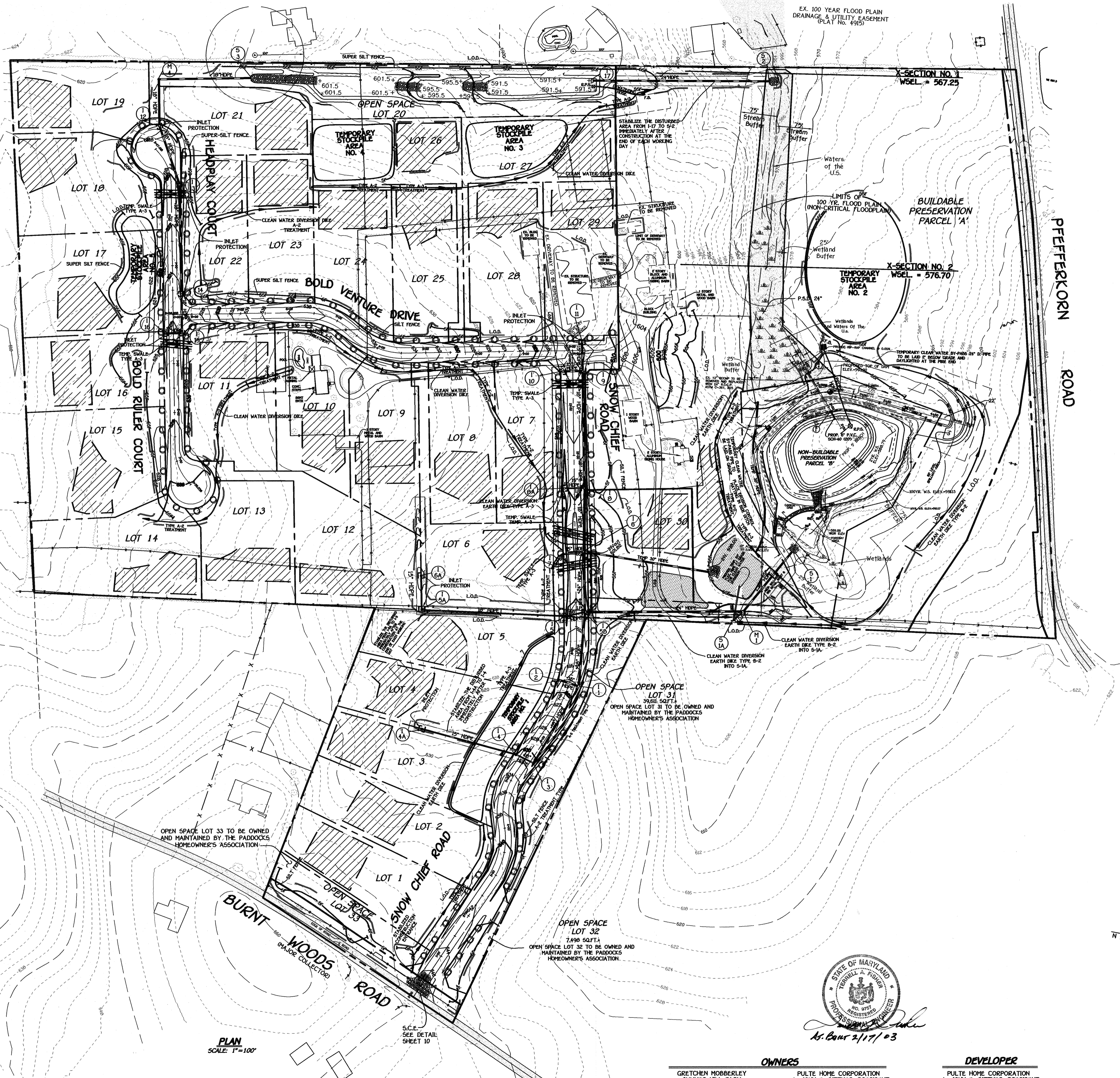
SEDIMENT CONTROL NOTES
 1. A minimum of 48 hours notice must be given to the HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, and the HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, DIVISION OF LAND DEVELOPMENT, for the installation and maintenance of sediment control structures.
 2. ALL VEGETATION AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PREVIOUS EDITIONS OF THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE AND SEDIMENT CONTROL, WHICH IS INCORPORATED BY REFERENCE INTO THIS SPECIFICATION.
 3. FOLLOWING INITIAL SOIL DISTURBANCE OR EXISTING DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 DAYS AND ALL OTHER DISTURBANCE SHALL BE COMPLETED WITHIN 30 DAYS.
 4. ALL SEDIMENT TRAP/BAGS SHALL BE FULLY INSPECTED AND MAINTAINED BY THE CONTRACTOR AT THE END OF EACH WORKING DAY.
 5. ALL DISTURBED AREAS SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION AND SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 HOWARD COUNTY DESIGN MANUAL, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE AND SEDIMENT CONTROL, WHICH IS INCORPORATED BY REFERENCE INTO THIS SPECIFICATION.
 6. ONLY BE DONE WITH RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
 7. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THESE STRUCTURES HAVE BEEN OBTAINED FROM THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS.
 8. TOTAL AREA OF SITE: 18.6287 ACRES
 TOTAL AREA TO BE STABILIZED OR PLANTED: 1.824 ACRES
 TOTAL AREA TO BE VEGETATIVELY STABILIZED: 6,000 CU YDS.
 TOTAL CUT: 6,000 CU YDS.
 TOTAL FILL: 6,000 CU YDS.
 OFFSITE WASTE/ROCKWALL AREA LOCATION: N/A CU YDS.
 9. ANY SEDIMENT CONTROL STRUCTURE WHICH IS DISTURBED BY SOILING ACTIVITY FOR REPAIR OR REPLACEMENT MUST BE REPAIRED ON THE SAME DAY.
 10. ADDITIONAL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES.
 11. SEDIMENT CONTROL STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE COMPLETION OF INSTALLATION OF PERMITS FOR EROSION AND SEDIMENT CONTROL, BUT BEFORE PROCEEDING WITH ANY OTHER DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVED BY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SHALL BE MAINTAINED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
 12. TRINCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SEQUENCE OF CONSTRUCTION
 1. OBTAIN A GRADING PERMIT.
 2. NOTIFY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-513-1880 24 HOURS BEFORE STARTING WORK.
 3. CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES WHOSE NEEDS: INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 week)
 4. INSTALL EARTH DIKE, TEMPORARY SWALES, SUPER-SILT FENCE, SILT FENCE AND TREE PROTECTION FENCE AS SHOWN ON THE PLANS. (1 week)
 5. OBTAIN PERMIT OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO PROCEEDING.
 6. INSTALL MATTING, P-2, P-3, AND 30\"/>

BIO-RETENTION FACILITY SUB-SEQUENCE OF CONSTRUCTION:
 1. PLACE SUPER SILT FENCE (SSF) DOWNGRADE OF CELL #1. SEE SHEETS 11 AND 16. (1/2 DAY)
 2. CONSTRUCT BIO-RETENTION CELL #1. (1 WEEK)
 3. STABILIZE THE AREA WITH MULCH. (1/2 DAY)
 4. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE THE EXISTING SSF INSTALLED IN STEP NUMBER 1. (1/2 DAY)
 5. PLACE SSF DOWNGRADE OF CELL #2. SEE SHEETS 11 AND 16. (1/2 DAY)
 6. CONSTRUCT BIO-RETENTION CELL #2. (1 WEEK)
 7. STABILIZE THE AREA WITH MULCH. (1/2 DAY)
 8. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE THE EXISTING SSF INSTALLED IN STEP NUMBER 3. (1/2 DAY)
 9. CONSTRUCT BIO-RETENTION CELL #3. (1 WEEK)
 10. STABILIZE THE AREA WITH MULCH. (1/2 DAY)
 11. UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL MEASURES WITHIN THE BIO-RETENTION AREA. (1/2 DAY)

ROADWAY SECTION AND SEDIMENT CONTROL DETAILS
THE PADDOCKS
 LOTS 1-33 & PRESERVATION PARCELS 'A' AND 'B'
 ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NOS. 141 AND 234
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 10 OF 19

As Built 2/17/03 FOO-71



EX. 100 YEAR FLOOD PLAN
DRAINAGE & UTILITY EASEMENT
(PLAT No. 4915)

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND THAT ANY RESPONSIBLE PERSONNEL IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Michael J. Smith 5/5/00
SIGNATURE OF DEVELOPER DATE

ENGINEER'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Catharina V. Liscio 5/5/00
SIGNATURE OF ENGINEER DATE

REVIEW FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Paul Simon 5/5/00
U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John A. Hays 5/5/00
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Robert Shalwale 6/27/00
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

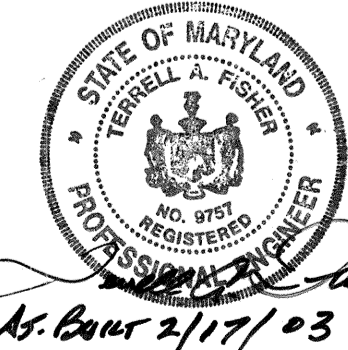
William J. ... 6/21/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. ... 6-28-00
CHIEF, BUREAU OF HIGHWAYS DATE

LEGEND

- SILT FENCE SF
- SUPER SILT FENCE SSF
- LIMIT OF DISTURBANCE
- EARTH DIKE/TREATMENT TYPE
- DENOTES LIMIT OF WETLANDS AND WATERS OF THE U.S.
- AT GRADE INLET PROTECTION
- REMOVEABLE PUMPING STATION R.P.S.
- FILTER BAG F.B.



PLAN SCALE: 1"=100'

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 8022 BALTIMORE NATIONAL FREE
ELLSWORTH CITY, MARYLAND 21042
4100 461 - 2255

OWNERS
GRETCHEN MOBBRELEY
SUMNER HILL FARM
SOUTE 144
WEST FRIENDSHIP, MARYLAND 21794

DEVELOPER
FULTE HOME CORPORATION
c/o JOHN E. BITTNER, PRESIDENT
1501 SOUTH EDGEWOOD STREET, SUITE K
BALTIMORE, MARYLAND 21227

**COMPOSITE
SEDIMENT CONTROL PLAN
THE PADDOCKS
LOTS 1 - 33
AND PRESERVATION PARCELS 'A' AND 'B'**

ZONED RR-DEO
TAX MAP NO. 22 PARCEL NOS. 141 & 234
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: APRIL 17, 2000
SHEET II OF 19

STRUCTURE SCHEDULE

STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	ROAD NAME	ROAD STA.	OFFSET	TYPE	REMARKS
I-1	* 616.88 45	612.59 00	616.88 45	SNOW CHIEF ROAD	C.L. STA. 7+32.97	20' RT.	OPEN END GRATE	S.D. 4.36
I-2	* 616.88 45	617.72 00	616.88 45	SNOW CHIEF ROAD	C.L. STA. 7+32.97	20' LT.	OPEN END GRATE	S.D. 4.36
I-3	* 623.78 34	619.78 34	623.78 34	SNOW CHIEF ROAD	C.L. STA. 5+50	20' RT.	OPEN END GRATE	S.D. 4.36
I-4	* 623.78 34	619.78 34	623.78 34	SNOW CHIEF ROAD	C.L. STA. 5+50	20' LT.	OPEN END GRATE	S.D. 4.36
I-4A	** 625.00 30	625.00 30	625.00 30	SNOW CHIEF ROAD	C.L. STA. 8+71.74	0' RT.	'D' INLET	S.D. 4.11
I-5	* 609.88 20	609.88 20	609.88 20	SNOW CHIEF ROAD	C.L. STA. 8+71.74	0' LT.	OPEN END GRATE	S.D. 4.36
I-5A	* 620.00 61.78	620.00 61.78	620.00 61.78	SNOW CHIEF ROAD	C.L. STA. 10+46.67	16.5' RT.	A-5	S.D. 4.40
I-6	* 620.00 61.78	620.00 61.78	620.00 61.78	SNOW CHIEF ROAD	C.L. STA. 10+46.67	16.5' LT.	A-5	S.D. 4.40
I-7	* 608.00 45	608.00 45	608.00 45	SNOW CHIEF ROAD	C.L. STA. 11+33.95	20' RT.	OPEN END GRATE	S.D. 4.36
I-8	* 608.00 45	608.00 45	608.00 45	SNOW CHIEF ROAD	C.L. STA. 11+33.95	20' LT.	OPEN END GRATE	S.D. 4.36
I-9	* 612.82 16	607.98 16	612.82 16	SNOW CHIEF ROAD	C.L. STA. 13+72.38	20' RT.	OPEN END GRATE	S.D. 4.36
I-10	* 612.82 16	607.98 16	612.82 16	SNOW CHIEF ROAD	C.L. STA. 13+72.38	20' LT.	OPEN END GRATE	S.D. 4.36
I-11	* 612.28 7	608.58 7	612.28 7	BOLD VENTURE DRIVE	C.L. STA. 0+42.00	16.5' LT.	A-5	S.D. 4.40
I-12	* 616.07 0	612.48 20	616.07 0	HEADPLAY COURT	L.P. STA. 1+29.36	0' RT.	OPEN END GRATE	S.D. 4.36
I-13	* 618.88 03	613.78 6	618.88 03	HEADPLAY COURT	C.L. STA. 2+15.00	19.5' RT.	OPEN END GRATE	S.D. 4.36
I-14	* 623.78 34	619.78 34	623.78 34	HEADPLAY COURT	C.L. STA. 0+75.00	17.5' RT.	OPEN END GRATE	S.D. 4.36
I-15	* 624.38 22	620.88 22	624.38 22	BOLD RULER COURT	C.L. STA. 0+37.00	16.5' LT.	OPEN END GRATE	S.D. 4.36
I-16	* 624.38 22	620.88 22	624.38 22	BOLD RULER COURT	C.L. STA. 0+37.00	16.5' RT.	OPEN END GRATE	S.D. 4.36
I-17	* 592.88 16	581.88 16	592.88 16	BOLD VENTURE DRIVE	C.L. STA. 8+71.74	0' RT.	'D' INLET	S.D. 4.11
I-5B	608.78 607.56	608.78 607.56	608.78 607.56	SNOW CHIEF ROAD	C.L. STA. 8+71.74	0' RT.	OPEN END GRATE	S.D. 4.36
M-1	601.88 38	596.22 38	601.88 38	SNOW CHIEF ROAD	C.L. STA. 1+29.36	0' RT.	STD. MANHOLE	G 5.01
M-4	617.88 03	610.88 78	617.88 03	HEADPLAY COURT	C.L. STA. 2+15.00	19.5' RT.	STD. MANHOLE	G 5.01
M-5	595.88 00	590.88 74	595.88 00	---	C.L. STA. 0+37.00	16.5' RT.	STD. MANHOLE	G 5.01
M-6	601.50	594.88 42	601.50	---	C.L. STA. 8+71.74	0' RT.	STD. MANHOLE	G 5.01
R-1	588.00 589.74	588.00 589.74	588.00 589.74	---	C.L. STA. 8+71.74	0' RT.	CONC. RISER	S.D. 5.21
S-1	588.00 589.74	588.00 589.74	588.00 589.74	---	C.L. STA. 8+71.74	0' RT.	H.D.P.E. END SECTION *** ADS FLARED END SEC.	S.D. 5.21
S-1A	603.88 39	601.78 64	603.88 39	---	C.L. STA. 0+37.00	16.5' RT.	TYPE 'C' ENDWALL	S.D. 5.21
S-2	588.00 589.74	588.00 589.74	588.00 589.74	---	C.L. STA. 8+71.74	0' RT.	H.D.P.E. END SECTION *** ADS FLARED END SEC.	S.D. 5.21
S-3	609.88 20	607.98 16	609.88 20	---	C.L. STA. 8+71.74	0' RT.	H.D.P.E. END SECTION *** ADS FLARED END SEC.	S.D. 5.21
S-4	588.00 589.74	588.00 589.74	588.00 589.74	---	C.L. STA. 8+71.74	0' RT.	TYPE 'C' HEADWALL	S.D. 5.21

* DENOTES TOP OF GRATE ELEVATION
 ** DENOTES THROAT ELEVATION
 *** A.D.S. - ADVANCED DRAINAGE SYSTEMS, INC.
 CORPORATE OFFICE: 3300 RIVERSIDE DRIVE, COLUMBUS, OHIO 43221, PHONE: 1-800-733-7473
 ADVANCED DRAINAGE SYSTEMS, INC. LOCAL SALES REPRESENTATIVE: MR. EDWARD C. MAULDIN, 8103 HARRIS AVENUE, BALTIMORE, MD. 21234, PHONE: 410-665-3658, 1-800-733-9554

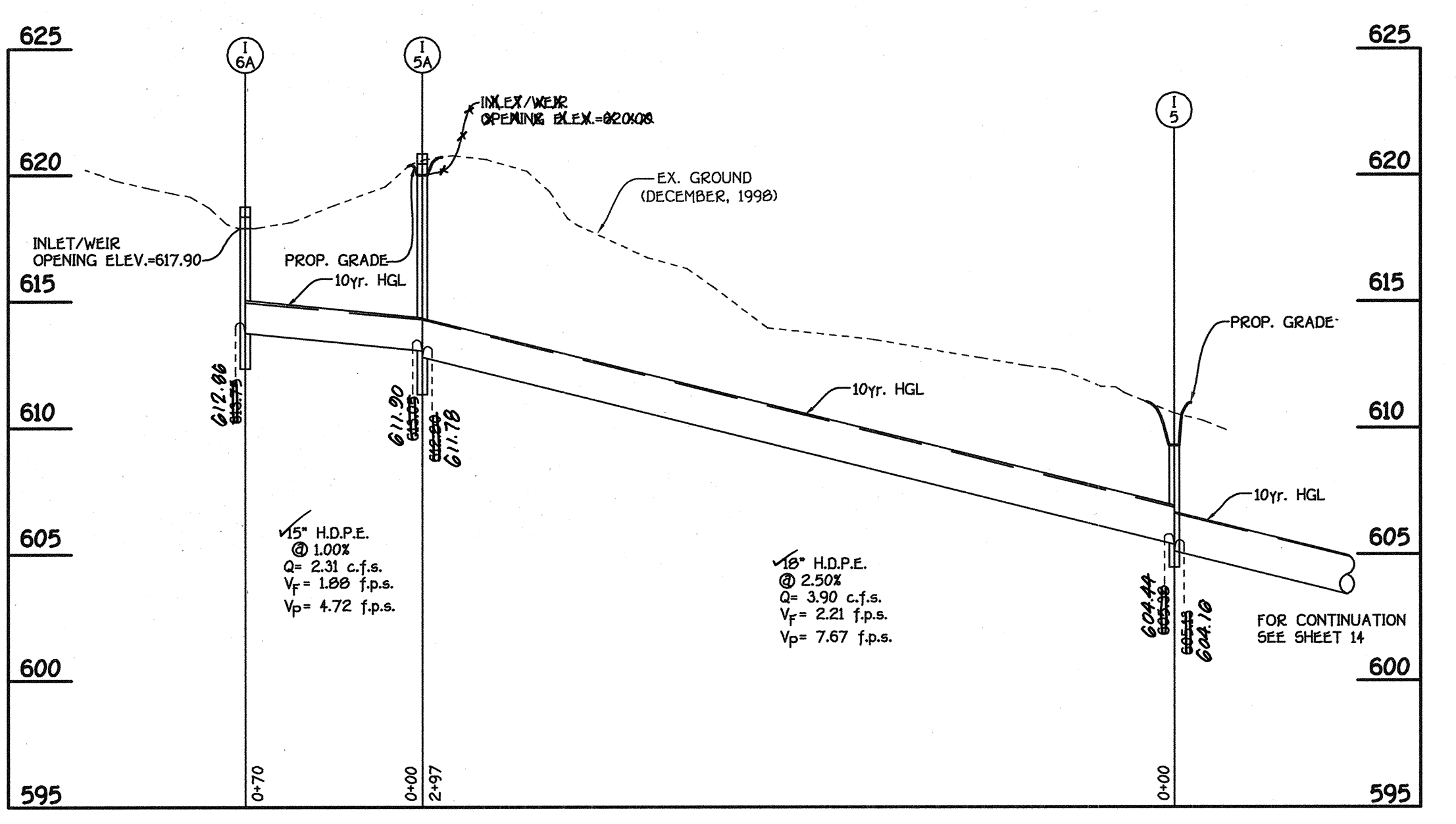
PIPE SCHEDULE (TOTAL)

SIZE	CLASS	LENGTH
12"	PERFORATED HDPE	550'
15"	HDPE	519'
18"	HDPE	1779'
24"	HDPE	449'
30"	HDPE	160'

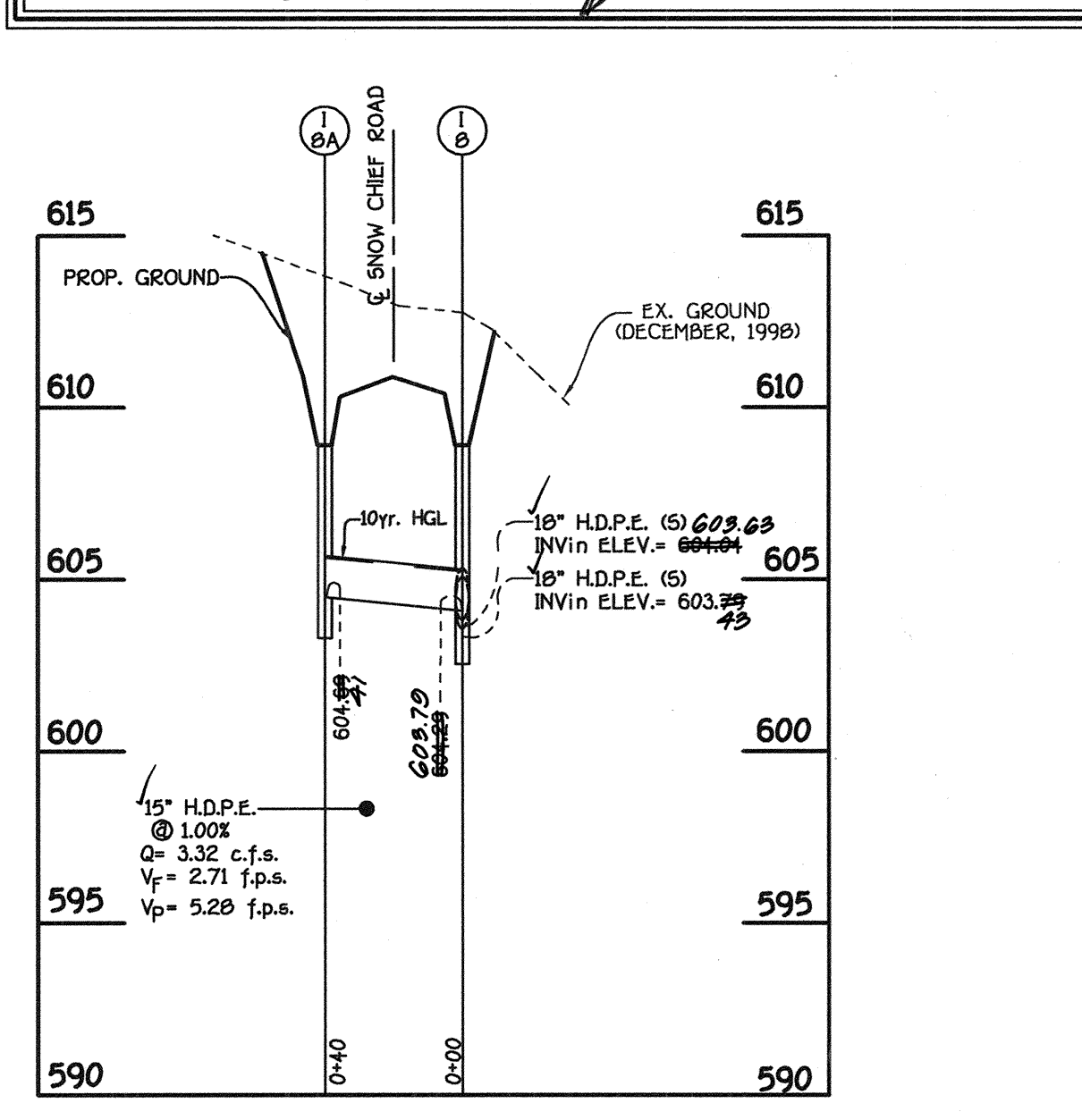
PIPE SCHEDULE (THIS SHEET)

SIZE	CLASS	LENGTH
15"	HDPE	143'
18"	HDPE	1,011'

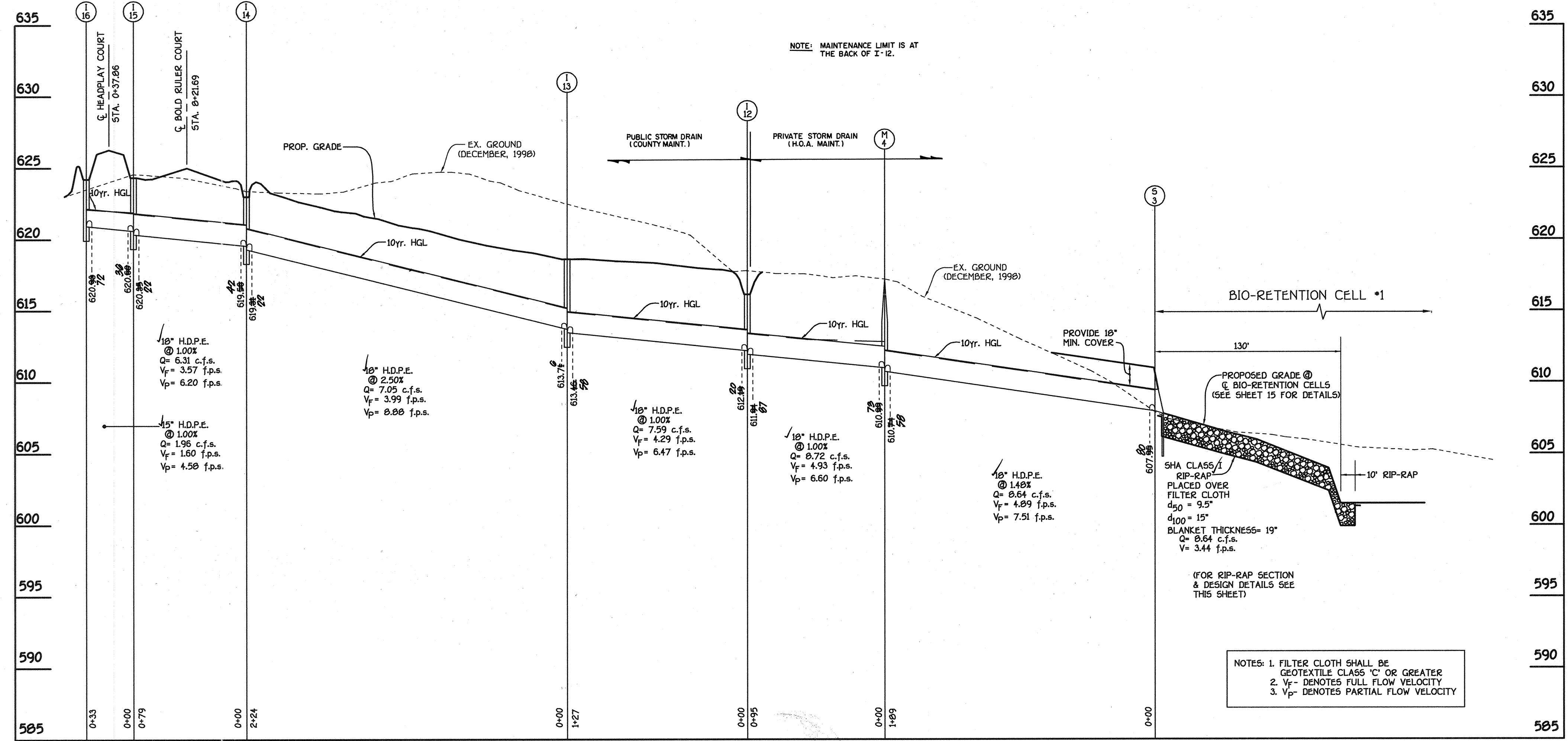
Approved: Department of Public Works
Andrew M. Parker 6-20-00
 Chief, Bureau of Highways
 Approved: Department of Planning And Zoning
Kat Hledworn 6/21/00
 Chief, Division Of Land Development
Mike Pannunzi 6/21/00
 Chief, Development Engineering Division



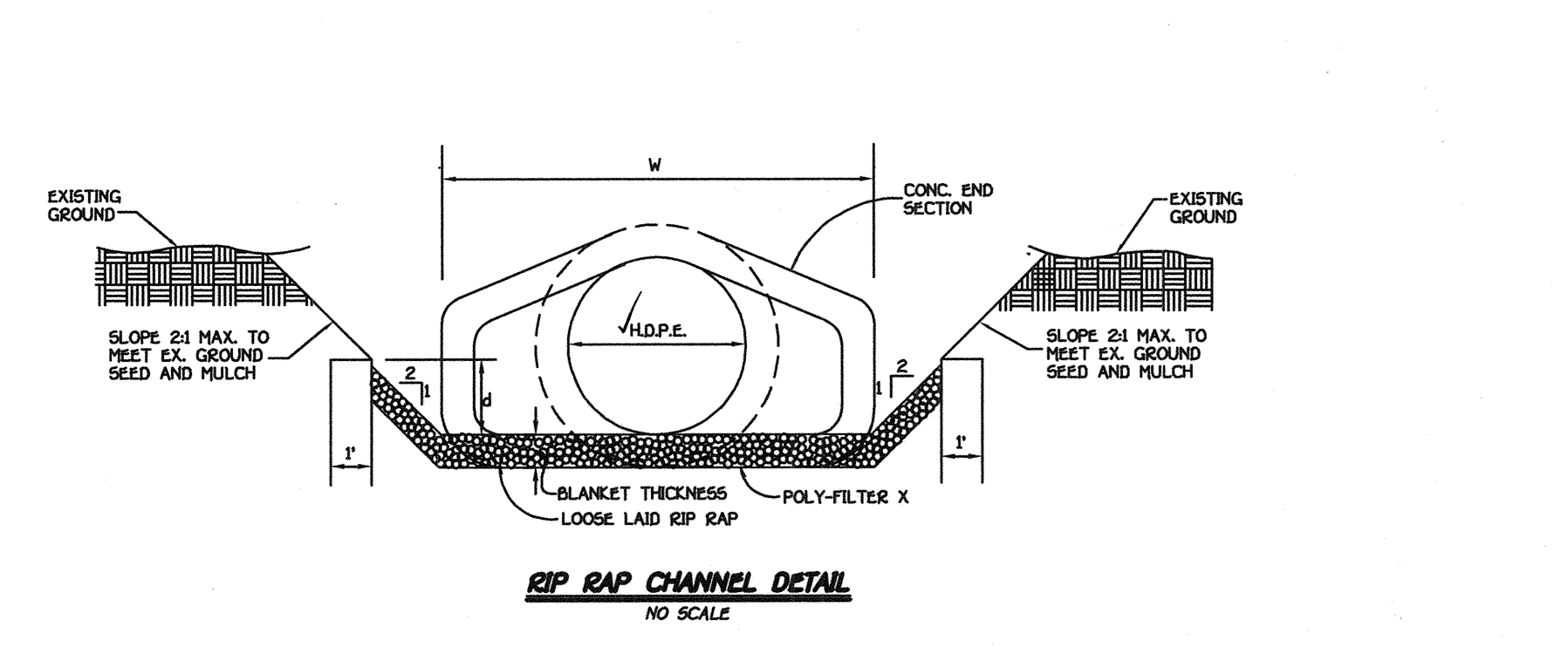
PROFILE
 SCALE: HORIZ. : 1" = 50'
 VERT. : 1" = 5'



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



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



RIP-RAP CHANNEL DESIGN DATA

STRUCTURE	AREA	WETTED PERIMETER	R	R ^{2/3}	S	S ^{1/2}	W	d	N	V (f.p.s.)	Q (c.f.s.)	SP-RAP SIZE (D ₅₀)	BLANKET THICKNESS
S-1	14.23	12.98	1.0963	1.064	0.0050	0.0707	6.0'	1.56'	0.04	2.79	40.02	9.5" 15"	19"
S-2	10.40	11.04	0.9420	0.9608	0.0050	0.0707	5.0'	1.39'	0.04	2.52	25.05	9.5" 15"	19"
S-3	2.62	6.33	0.4139	0.5538	0.0280	0.1673	4.0'	0.52'	0.04	3.44	8.64	9.5" 15"	19"
S-4	7.00	9.472	0.7390	0.8186	0.0050	0.0707	5.0'	1.00'	0.04	2.14	14.00	16" 24"	32"

CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALLS

- The subgrade for the filter, riprap or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the riprap or filter.
- Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.
- Stone for the riprap or gabion outlets may be placed by equipment. Both shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
James C. Cable
 16-0000 2/17/03

NOTE:
 V_F = DENOTES FULL FLOW VELOCITY
 V_P = DENOTES PARTIAL FLOW VELOCITY
 10yr. HGL = DENOTES 10 YEAR HYDRAULIC GRADIENT LINE

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 THE PADDOCKS
 22418

STORM DRAIN PROFILE AND DETAILS
THE PADDOCKS
 LOTS 1 THRU 33
 AND PRESERVATION PARCELS 'A' AND 'B'
 ZONED R-20
 TAX MAP NO. 22 PARCEL NO'S. 141 & 234 GRID NO'S. 1 & 7
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 13 OF 19

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 (410) 481-2800

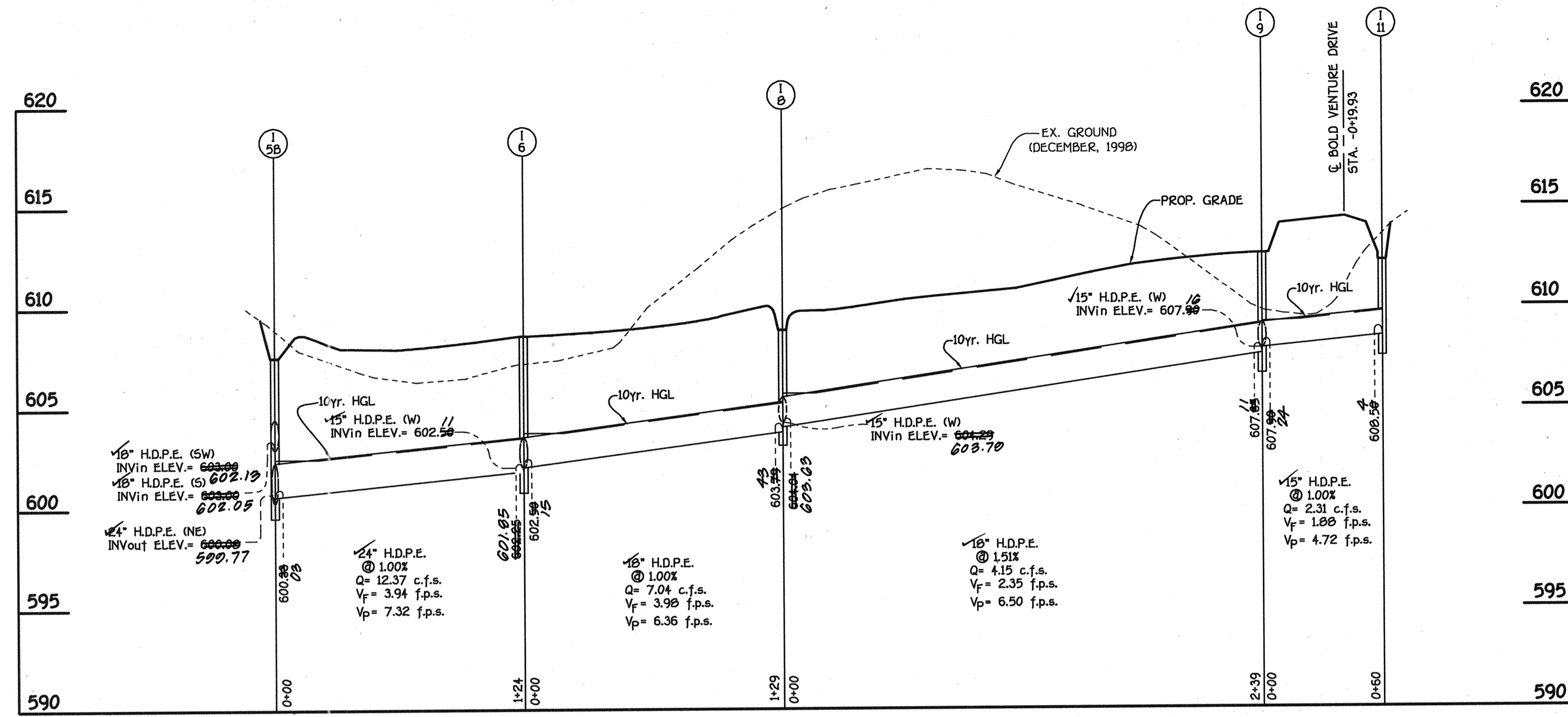
OWNERS
 GRETCHEN MOBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

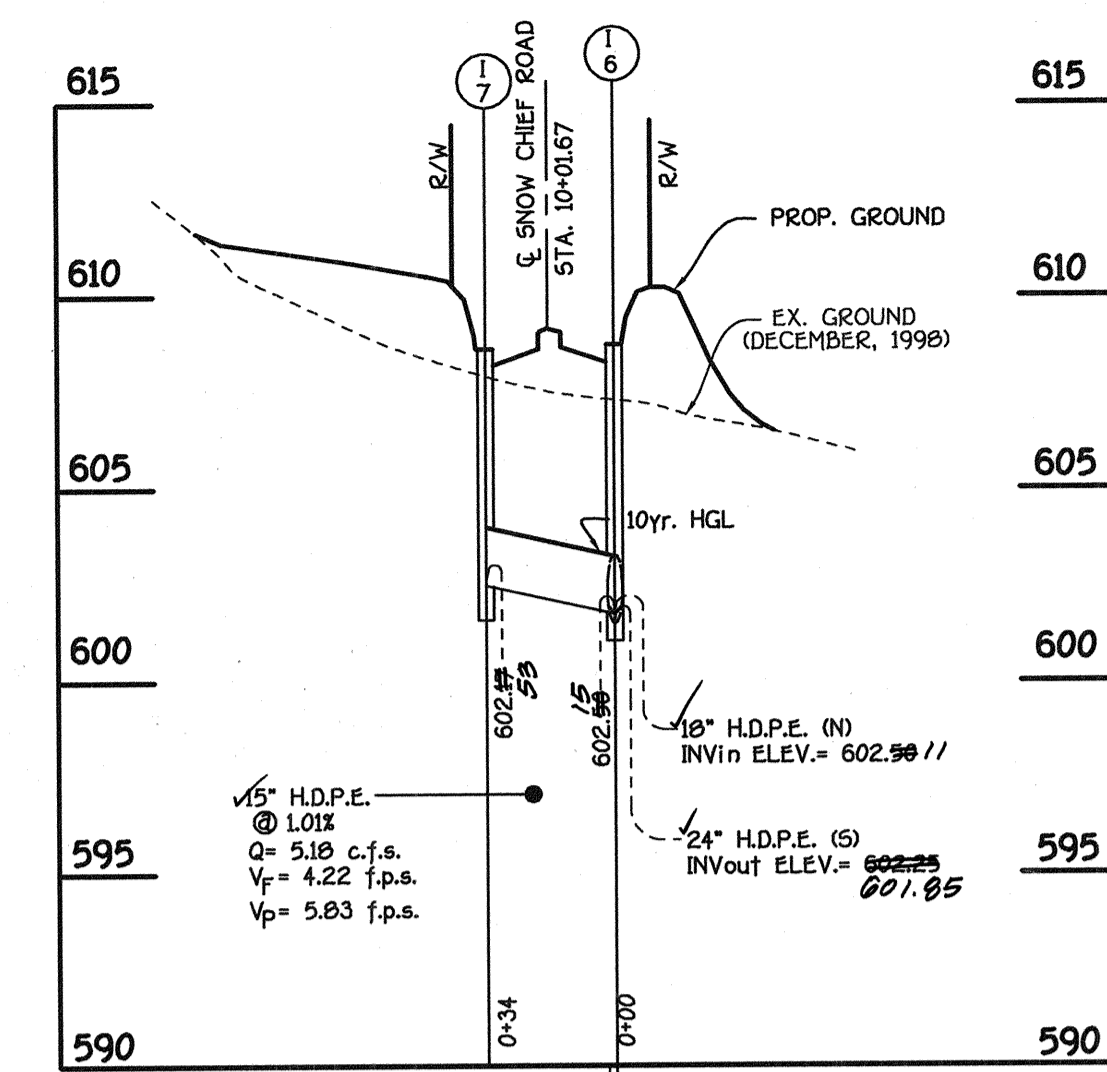
Approved: Department Of Public Works
Andrew M. Danaker 6-20-00
 Chief, Bureau Of Highways Date

Approved: Department Of Planning And Zoning
John E. Bittner 6/27/00
 Chief, Division Of Land Development Date

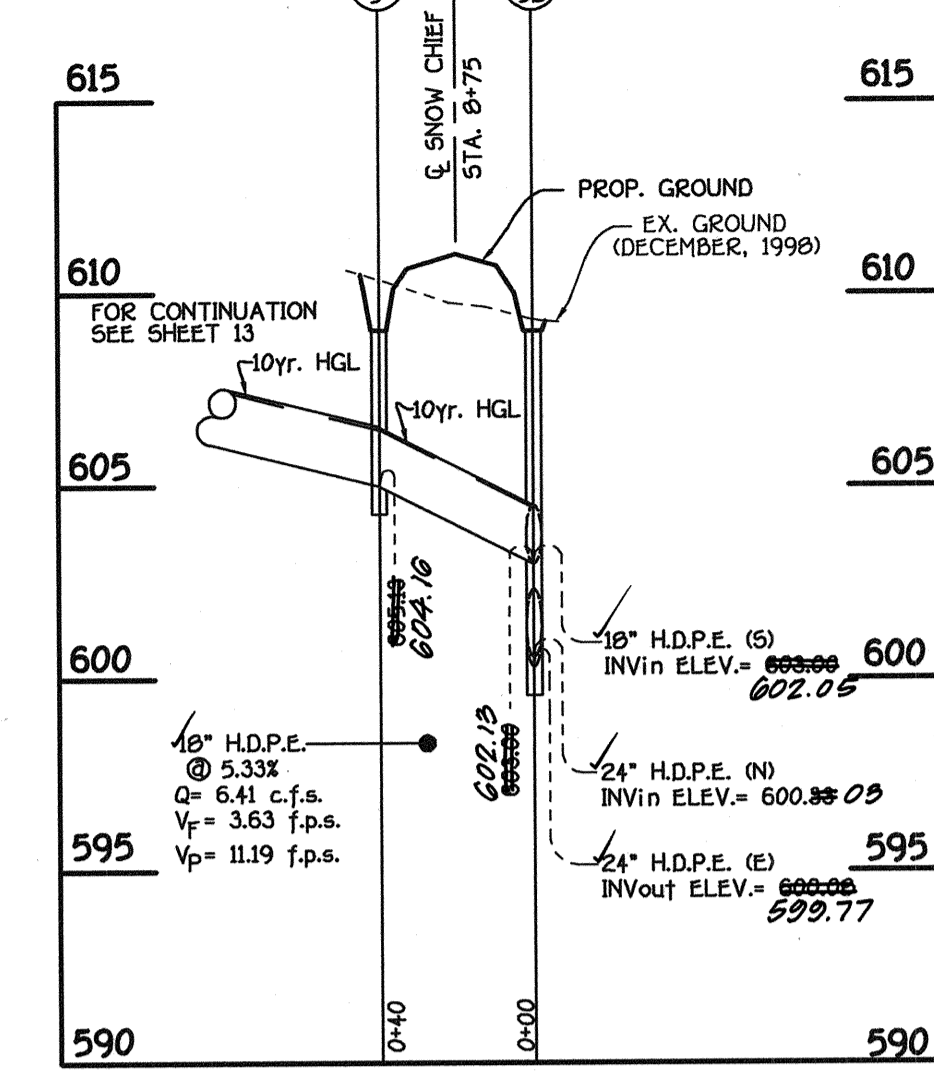
Michael J. Fisher 6/21/00
 Chief, Development Engineering Division Date



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



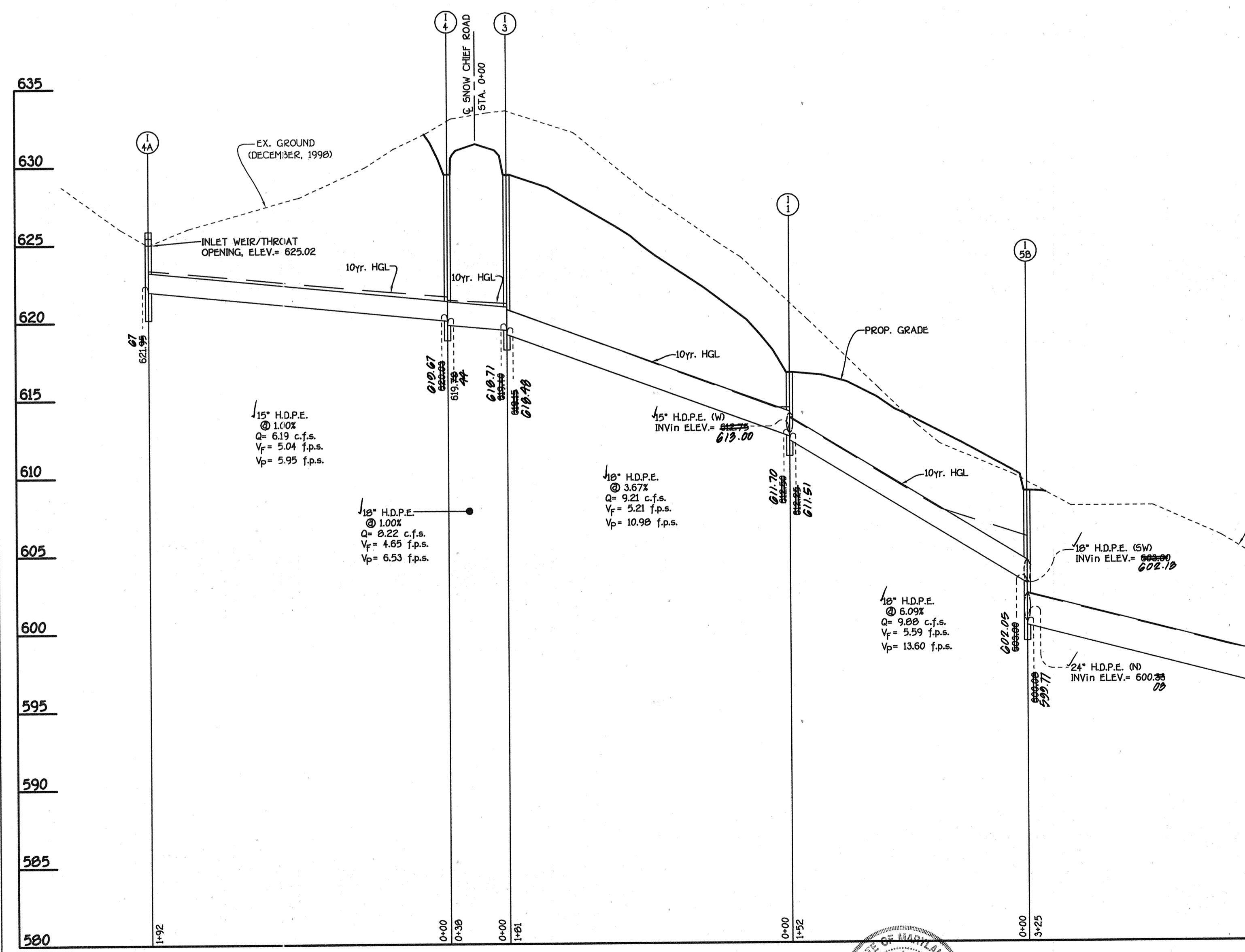
PROFILE
 SCALE: HORIZ. : 1" = 50'
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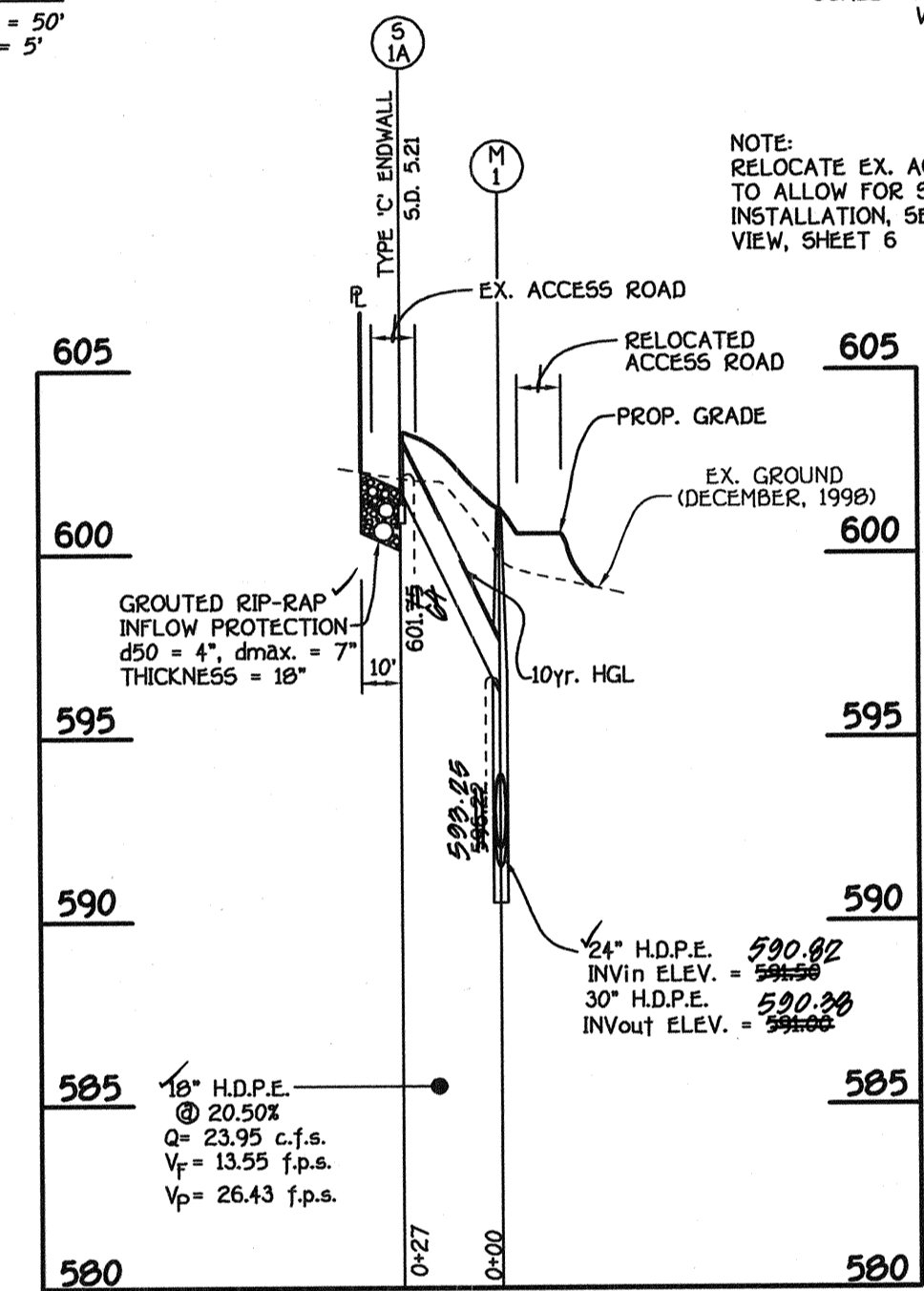
PROFILE
 SCALE: HORIZ. : 1" = 50'
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PIPE SCHEDULE (THIS SHEET)

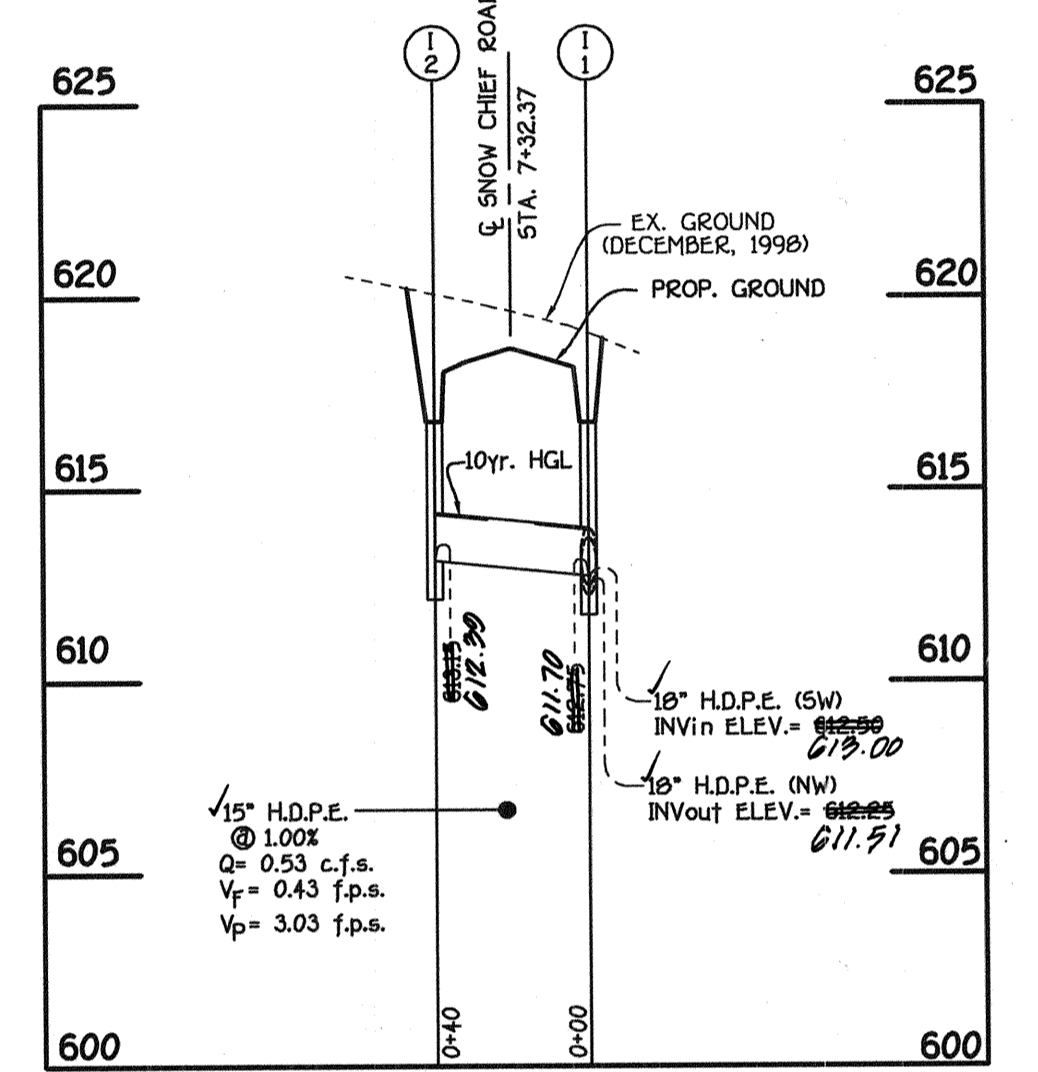
SIZE	CLASS	LENGTH
15"	HDPE	376'
18"	HDPE	768'
24"	HDPE	449'
30"	HDPE	160'



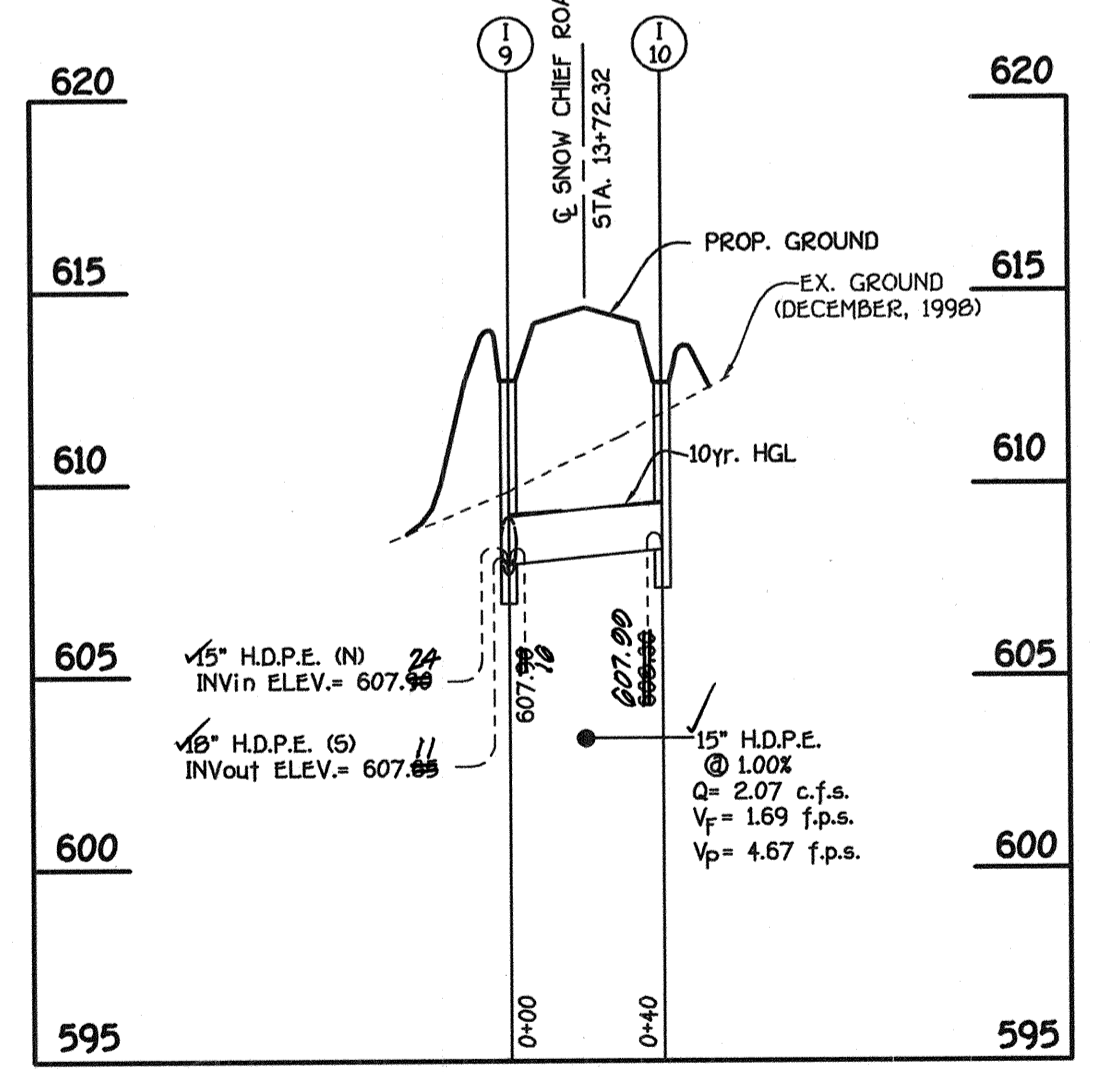
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PROFILE
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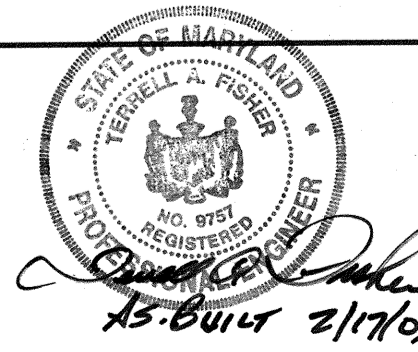


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FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLETTT CITY, MARYLAND 21242
 410-481-2800



OWNERS
 GRETCHEN MOBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

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 BALTIMORE, MARYLAND 21227

NOTE:
 V_F = DENOTES FULL FLOW VELOCITY
 V_P = DENOTES PARTIAL FLOW VELOCITY
 10yr. HGL = DENOTES 10 YEAR HYDRAULIC GRADIENT LINE



STORM DRAIN PROFILES
THE PADDOCKS
 LOTS 1 THRU 33
 AND PRESERVATION PARCELS 'A' AND 'B'
 ZONED R-20
 TAX MAP NO. 22 PARCEL NOS. 141 & 234 GRID NOS. 1 & 7
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 14 OF 19

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Robert L. ... 6/27/00
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. ... 6/28/00
 CHIEF, BUREAU OF HIGHWAYS
 DATE



DRAINAGE AREA DATA					
STRUCTURE NO.	DRAINAGE AREA	AREA AC. ²	'C'	ZONED	% IMP
I-1	A	0.15	0.46	RR-DEO	38%
I-2	B	0.16	0.50	RR-DEO	44%
I-3	C	0.45	0.41	RR-DEO	30%
I-4	D	1.28	0.35	RR-DEO	33%
I-5	F	2.36	0.23	RR-DEO	23%
I-6	H	0.14	0.51	RR-DEO	39%
I-7	J	2.63	0.31	RR-DEO	34%
I-8	K	0.17	0.48	RR-DEO	41%
I-9	M	0.06	0.76	RR-DEO	83%
I-10	N	1.36	0.28	RR-DEO	33%
I-11	O	1.12	0.31	RR-DEO	50%
I-12	P	0.39	0.54	RR-DEO	49%
I-13	Q	0.51	0.43	RR-DEO	31%
I-14	R	0.24	0.64	RR-DEO	66%
I-15	S	2.69	0.30	RR-DEO	33%
I-16	T	1.52	0.24	RR-DEO	26%
I-17	U	7.94	0.25	RR-DEO	20%
I-4A	E	3.69	0.27	RR-DEO	22%
I-5A	G	1.12	0.26	RR-DEO	26%
I-6A	I	1.53	0.26	RR-DEO	26%
I-8A	L	1.90	0.28	RR-DEO	24%
S-1A	M	13.16	0.27	RR-DEO	9%
I-5B	N	0.17	0.46	RR-DEO	24%

OWNERS
 GRETCHEN HOBBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

STATE OF MARYLAND
 VICTORIA GOSSELINK
 PROFESSIONAL ENGINEER
 22418
Zacharia J. Fish

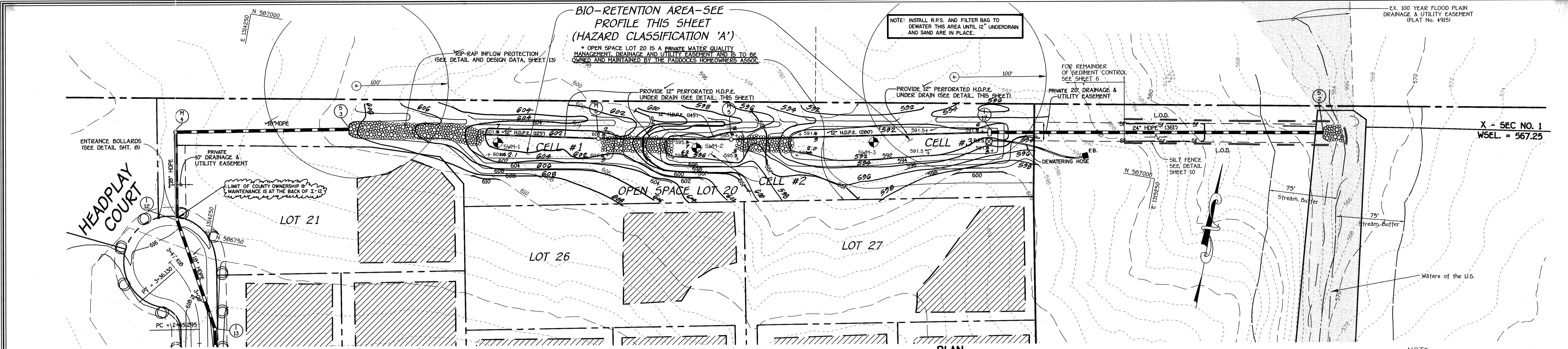
STATE OF MARYLAND
 REBECCAH L. FISHER
 PROFESSIONAL SURVEYOR
 15-B-1117 4/17/03

**DRAINAGE AREA MAP
 THE PADDOCKS
 LOTS 1 - 33
 AND PRESERVATION PARCELS 'A' AND 'B'**

ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NOS. 141 & 234
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2008
 SHEET 15 OF 19

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL FREE
 ELKLOTT CITY, MARYLAND 21042
 4100 461 - 2255

PLAN
 SCALE: 1" = 100'



PLAN
SCALE: 1" = 50'

BIO-RETENTION PLANT MATERIAL CELL No. 1

QUANTITY	TREE SPECIES	NAME	MAXIMUM SPACING (FT.)
10		SWAMP WHITE OAK	12
10		WHITE ASH	12
10		EASTERN RED CEDAR	12
19		WITCH HAZEL	12
19		RED OSLER DOGWOOD	12
19		WINTER BERRY	12
N/A		BLUEJOINT	N/A

BIO-RETENTION PLANT MATERIAL CELL No. 2

QUANTITY	TREE SPECIES	NAME	MAXIMUM SPACING (FT.)
7		BLACK GUM	12
7		WILLOW OAK	12
7		EASTERN RED CEDAR	12
11		WITCH HAZEL	12
11		RED OSLER DOGWOOD	12
11		WINTER BERRY	12
N/A		REDTOP	N/A

BIO-RETENTION PLANT MATERIAL CELL No. 3

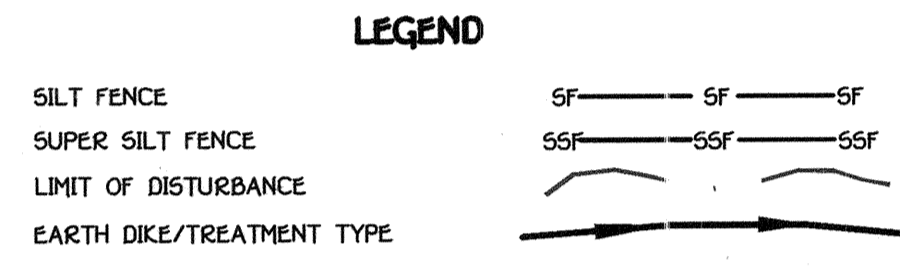
QUANTITY	TREE SPECIES	NAME	MAXIMUM SPACING (FT.)
15		RED MAPLE	12
15		WHITE ASH	12
15		EASTERN RED CEDAR	12
37		WITCH HAZEL	12
37		RED OSLER DOGWOOD	12
36		WINTER BERRY	12
N/A		COMMON PERIWINKLE	N/A

TOTAL SURFACE AREA OF BIO-RETENTION CELLS 1, 2 & 3:
D.A. x Cw x 0.05 (USING SAND BED)
13,294 ac x 0.28 x 0.05 = 0.1861 AC OR 8,105 SQ.FT.
PROVIDED AREA OF BIO-RETENTION CELLS 1, 2 & 3 = 13,062 SQ.FT.
TOTAL NO. OF TREES AND SHRUBS REQUIRED = 13,062/43,560 x 1,000 = 300 PLANTS

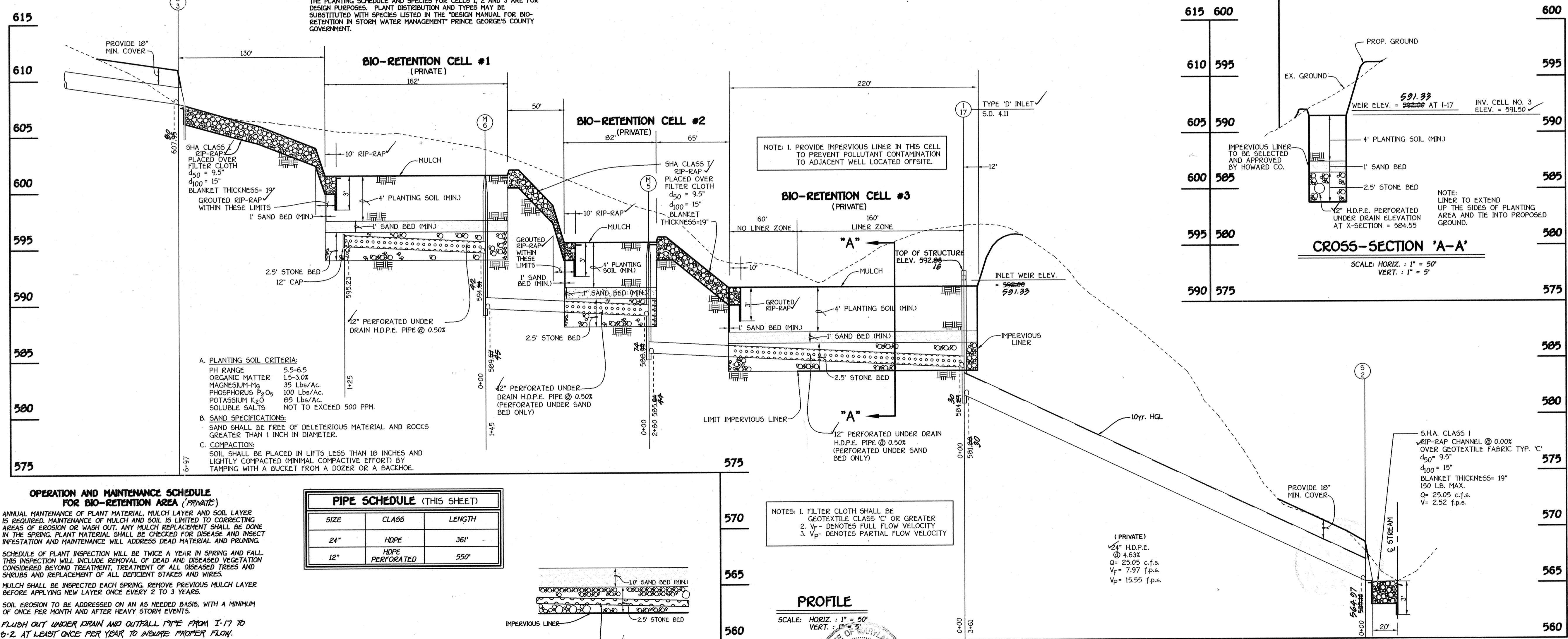
BIO-RETENTION SUMMARY

VOLUME REQUIRED	VOLUME PROVIDED	INLET WEIR ELEV. (L-17)	RELEASE RATE
10,640 SQ. FT.	13,062 SQ. FT.	592.00	25.05 C.F.S.

NOTE:
SEE SHEET 9 FOR BORING LOGS
SWM-1 THRU SWM-3 FOR THE
BIO-RETENTION AREA.



NOTE:
THE PLANTING SCHEDULE AND SPECIES FOR CELLS 1, 2 AND 3 ARE FOR DESIGN PURPOSES. PLANT DISTRIBUTION AND TYPES MAY BE SUBSTITUTED WITH SPECIES LISTED IN THE "DESIGN MANUAL FOR BIO-RETENTION IN STORM WATER MANAGEMENT" PRINCE GEORGE'S COUNTY GOVERNMENT.



- A. PLANTING SOIL CRITERIA:**
PH RANGE: 5.5-6.5
ORGANIC MATTER: 15-30%
MAGNESIUM Mg: 35 Lbs/Ac.
PHOSPHORUS P₂O₅: 100 Lbs/Ac.
POTASSIUM K₂O: 85 Lbs/Ac.
SOLUBLE SALTS: NOT TO EXCEED 500 PPM.
- B. SAND SPECIFICATIONS:**
SAND SHALL BE FREE OF DELETERIOUS MATERIAL AND ROCKS GREATER THAN 1 INCH IN DIAMETER.
- C. COMPACTION:**
SOIL SHALL BE PLACED IN LIFTS LESS THAN 18 INCHES AND LIGHTLY COMPACTED (MINIMAL COMPACTIVE EFFORT) BY TAMPING WITH A BUCKET FROM A DOZER OR A BACKHOE.

PIPE SCHEDULE (THIS SHEET)

SIZE	CLASS	LENGTH
24"	HDP.E	361'
12"	HDP.E PERFORATED	550'

- OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREA (PRIVATE)**
- ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
 - SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
 - MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
 - SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.
 - FLUSH OUT UNDER DRAIN AND OUTFALL PIPE FROM I-17 TO 6-2 AT LEAST ONCE PER YEAR TO INSURE PROPER FLOW.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 18272 BALDREAN NATIONAL FREE
BILLOTT CITY MARYLAND 20646
410-681-2855

OWNERS
GRETCHEN HOBBERLEY
SUMMER HILL FARM
ROUTE 144
WEST FRIENDSHIP, MARYLAND 21794

DEVELOPER
PULTE HOME CORPORATION
c/o JOHN E. BITTNER, PRESIDENT
1501 SOUTH EDGEWOOD STREET, SUITE K
BALTIMORE, MARYLAND 21227

By The Developer:
I/We Certify That All Development And/Or Construction Will Be Done According To These Plans, And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program For The Control Of Sediment And Erosion Before Beginning The Project. I Shall Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion. I Also Authorize Periodic On-Site Inspections By The Howard Soil Conservation District.

Michael Fitzgerald
Signature Of Developer
4/25/00
Date

By The Engineer:
I Certify That This Plan For Pond Construction, Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Conditions. This Plan Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District. I Have Notified The Developer That 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.

Rachmia Y. Fitch
Signature Of Engineer
4/26/00
Date

By The Department of Public Works:
These Plans Have Been Reviewed And Approved For Small Pond Construction, Soil Erosion And Sediment Control. The Requirements Of The Howard Soil Conservation District.

Stephen W. Selmanis
Signature
5/15/00
Date

By The Department of Planning And Zoning:
Approved Department Of Public Works
These Plans Have Been Reviewed And Approved For Small Pond Construction, Soil Erosion And Sediment Control. The Requirements Of The Howard Soil Conservation District.

Andrew M. Daniels
Signature
6-20-00
Date

By The Department of Planning And Zoning:
Approved Department Of Public Works
These Plans Have Been Reviewed And Approved For Small Pond Construction, Soil Erosion And Sediment Control. The Requirements Of The Howard Soil Conservation District.

Michael Cummings
Signature
6/21/00
Date

AS-BUILT CERTIFICATION

I Herby 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: _____ P.E. No. _____
Date: _____

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 Commonly Accepted Engineering Standards. Certify Does Not Mean Or Imply A Guarantee By The Engineer Nor Does An Engineer's Certification Release Any Other Party From Meeting Requirements Imposed By Contract, Employment, Or Other Means, Including Meeting Commonly Accepted Industry Practices.

BIO-RETENTION PLAN, PROFILE, SECTION AND DETAILS
THE PADDOCKS
LOTS 1 THRU 33
AND PRESERVATION PARCELS 'A' AND 'B'
ZONED R-20
TAX MAP NO. 22 PARCEL NOS. 141 & 234
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: APRIL 7, 2000
SHEET 16 OF 19

As-Built 2/17/03 F 00-71

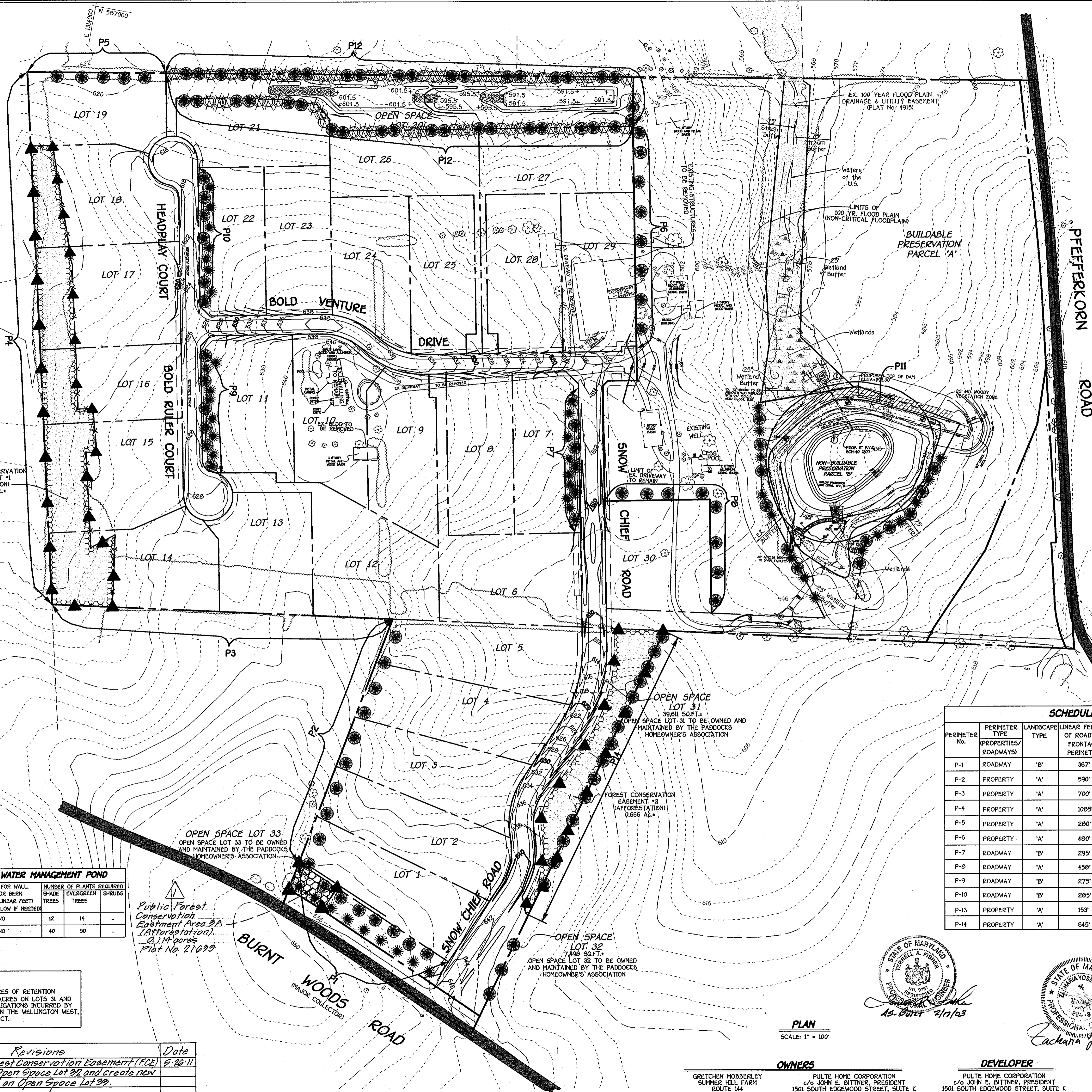
FOREST CONSERVATION WORKSHEET

- 1) GROSS AREA: 62.3 AC.
- 2) PRESERVATION PARCEL: 17.5 AC.
- 3) NET TRACT AREA: 44.8 AC.
- 4) EXISTING FOREST: 1.742 AC.
- 5) AFFORESTATION THRESHOLD: 9.0 AC.
- 6) REFORESTATION THRESHOLD: 11.2 AC.
- 7) AFFORESTATION REQUIRED: 7.258 AC.
- 8) FOREST TO BE CLEARED: 0.0 AC.
- 9) FOREST TO BE RETAINED IN FOREST CONSERVATION EASEMENT: 1.742 AC.
- 10) REFORESTATION REQUIRED: 0.1 AC.
- 11) ON-SITE AFFORESTATION PROPOSED: 0.78 AC.
- 12) OFF-SITE AFFORESTATION REQUIRED: 6.478 AC.
- 13) TOTAL AFFORESTATION PROVIDED: 9.0 AC.

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Dwyer 6-20-00
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
John H. ... 6/22/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Michael ... 6/22/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



FOREST CONSERVATION EASEMENT - LOT 31
(AFFORESTATION)

QTY.	SPECIES	SIZE	SPACING
15	ACER RUBRUM-RED MAPLE	2" CAL.	20' O.C.
15	FRAXINUS AMERICANA-WHITE ASH	2" CAL.	20' O.C.
20	QUERCUS RUBRA-RED OAK	2" CAL.	20' O.C.
20	VIBURNUM DENTATUM-ARROWWOOD	2-3" CONT.	**

FOREST CONSERVATION EASEMENT - LOT 33
(AFFORESTATION)

QTY.	SPECIES	SIZE	SPACING
1	Ex. Evergreen (Credit)		
22	Ex. Deciduous (Credit)		
	Quercus alba - White Oak	2-3" Whips	11' O.C.

KEY:
 CAL - CALIPER WID. MAY BE CONTAINER GROWN OR BARE ROOT CONTAINER GROWN B&B - BALLED AND BURLAPED.
 O.C. - ON CENTER
 *** SHRUBS SHALL BE PLANTED IN GROUPS OF 3-5 PLANTS, WITH SPACING 4'-5" ON CENTER.

PLANTING NOTES:
 1. THE POTENTIAL FOR DEER AND RODENT DAMAGE ON THIS FORESTATION PROJECT IS HIGH. THE PLANTING CONTRACTOR MAY UTILIZE PHYSICAL AND CHEMICAL TECHNIQUES TO IMPROVE THE SUCCESS OF THE PLANTINGS. THESE TECHNIQUES MUST BE APPROVED BY THE OWNER PRIOR TO INITIATION OF WORK.
 2. PLANTING UNITS MAY BE RANDOMLY LOCATED WITHIN PLANTING AREA.

NOTE:
 FOR PLANTING DETAIL AND SPECIFICATIONS, SEE TREE PLANTING DETAIL, SHEET 12.

LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
84	●	ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2 - 2 1/2" CALIPER FULL CROWN, B&B
94	☀	PINUS STROBUS (EASTERN WHITE PINE)	6' - 8.5' HEIGHT
40	○	QUERCUS ACUTISSIMA 'SAWTOOTH OAK'	2 1/2 - 3" CALIPER FULL CROWN, B&B

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE 218 REQUIRED LANDSCAPE TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$51,300.00.

SCHEDULE D PERIMETER LANDSCAPE EDGE FOR STORM WATER MANAGEMENT POND

PERIMETER No.	PERIMETER TYPE (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED		
						TREES	EVERGREEN TREES	SHRUBS
P-11	PROPERTY	'B'	1070'	YES 500'	NO	12	14	-
P-12	PROPERTY	'B'	2200'	NO	NO	40	50	-

SCHEDULE A PERIMETER LANDSCAPE EDGE

PERIMETER No.	PERIMETER TYPE (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED		
						SHRUBS	EVERGREEN TREES	TREES
P-1	ROADWAY	'B'	367'	NO	NO	7	9	-
P-2	PROPERTY	'A'	590'	NO	NO	10	-	-
P-3	PROPERTY	'A'	700'	YES 700'	NO	-	-	-
P-4	PROPERTY	'A'	1085'	YES 1085'	NO	-	-	-
P-5	PROPERTY	'A'	280'	NO	NO	5	-	-
P-6	PROPERTY	'A'	480'	NO	NO	8	-	-
P-7	ROADWAY	'B'	295'	NO	NO	6	7	-
P-8	ROADWAY	'A'	458'	NO	NO	8	-	-
P-9	ROADWAY	'B'	275'	NO	NO	6	7	-
P-10	ROADWAY	'B'	285'	NO	NO	6	7	-
P-13	PROPERTY	'A'	153'	NO	NO	3	-	-
P-14	PROPERTY	'A'	645'	NO	NO	15	-	-

FOREST CONSERVATION SURETY NOTE
 THE FOREST CONSERVATION OBLIGATION WILL BE MET BY PROVIDING 1.742 ACRES OF RETENTION ON LOTS 14 THRU 18 AND AN AFFORESTATION AREA IN THE AMOUNT OF 0.78 ACRES ON LOTS 31 AND 33 OF THE PADDOCKS SUBDIVISION. THE REMAINING FOREST CONSERVATION OBLIGATIONS INCURRED BY THIS SUBDIVISION WILL BE MET BY PROVIDING 6.5 ACRES OFF-SITE PLANTING ON THE WELLINGTON WEST, SECTION 2, P98-101. THE SURETY AMOUNT WILL BE \$102,435.69 FOR THIS PROJECT.

No.	Revisions	Date
1	Remove Forest Conservation Easement (F.C.E.) No. 2 from Open Space Lot 22 and create new F.C.E. No. 2A on Open Space Lot 22.	6-20-11

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 10222 WILLOW HILL ROAD
 ELICOTT CITY, MARYLAND 21042
 410.461.2959

OWNERS
 GRETCHEN MOBBERLEY
 SUMMER HILL FARM
 ROUTE 144
 WEST FRIENDSHIP, MARYLAND 21794

PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

DEVELOPER
 PULTE HOME CORPORATION
 c/o JOHN E. BITTNER, PRESIDENT
 1501 SOUTH EDGEWOOD STREET, SUITE K
 BALTIMORE, MARYLAND 21227

ON-SITE FOREST CONSERVATION PLAN AND LANDSCAPE PLAN
THE PADDOCKS
 LOTS 1 - 33
 AND PRESERVATION PARCELS 'A' AND 'B'

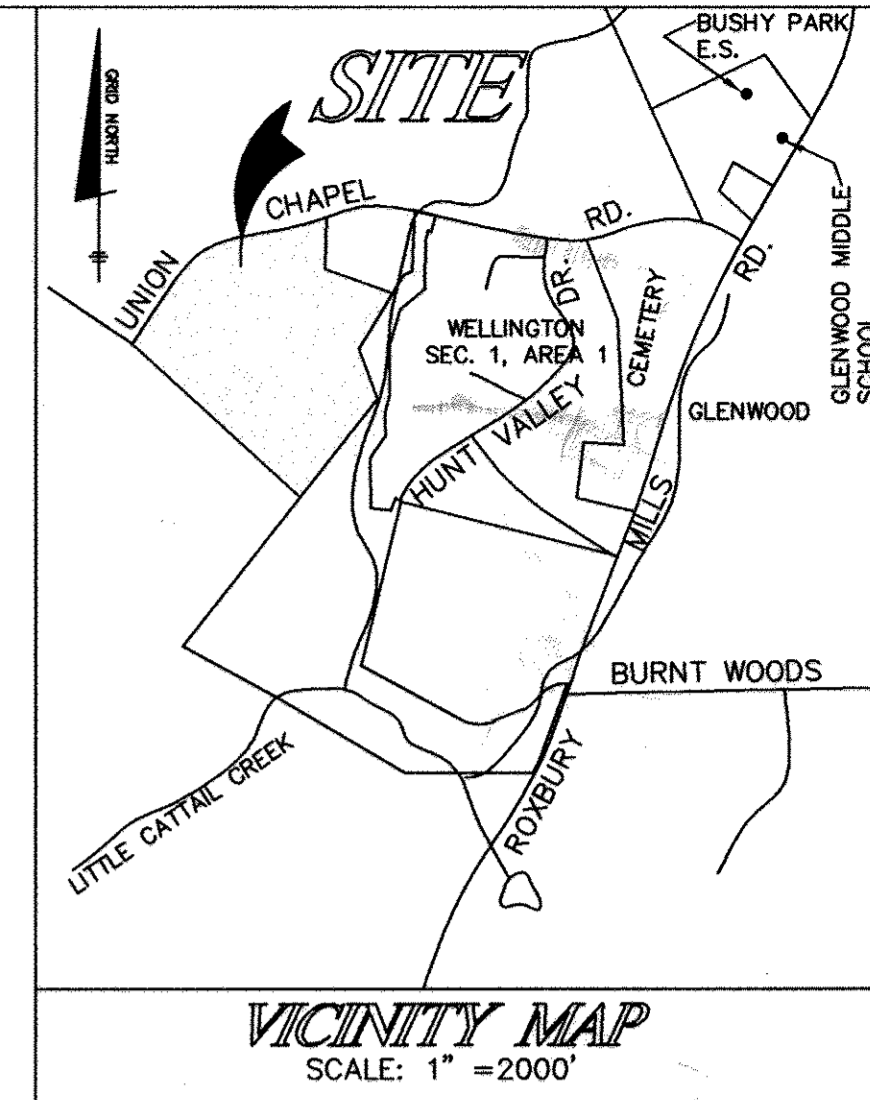
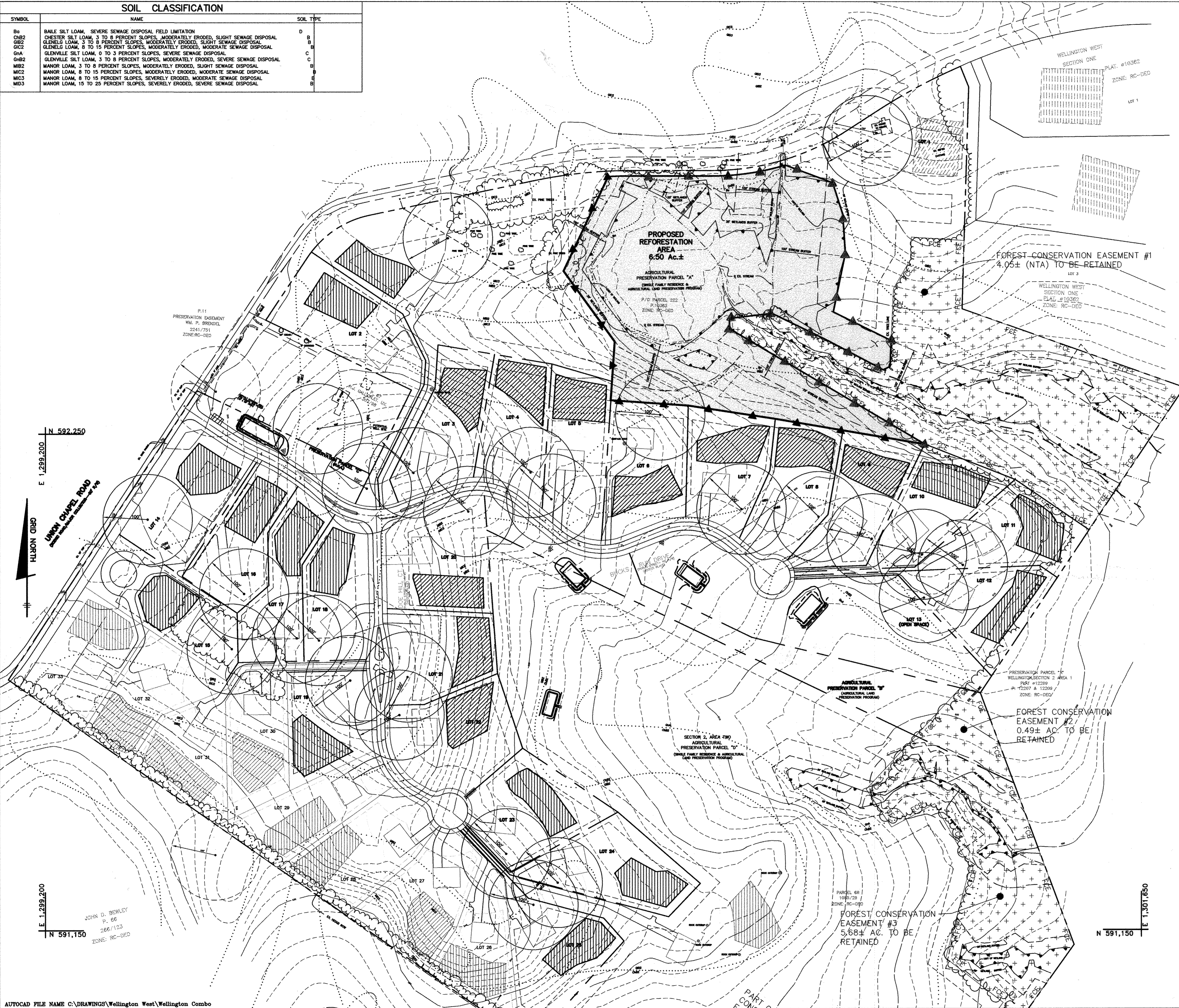
ZONED RR-DEO
 TAX MAP NO. 22 PARCEL NOS. 141 & 234
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: APRIL 7, 2000
 SHEET 17 OF 19



PLAN
 SCALE: 1" = 100'

SOIL CLASSIFICATION

SYMBOL	NAME	SOIL TYPE
Bs	BALD SILT LOAM, SEVERE SEWAGE DISPOSAL FIELD LIMITATION	D
CB2	CHESTER SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED, SLIGHT SEWAGE DISPOSAL	B
CBZ	GLENELG LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED, SLIGHT SEWAGE DISPOSAL	B
GCZ	GLENELG LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED, MODERATE SEWAGE DISPOSAL	C
GA	GLENVILLE SILT LOAM, 0 TO 3 PERCENT SLOPES, SEVERE SEWAGE DISPOSAL	C
GnB2	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED, SEVERE SEWAGE DISPOSAL	B
MB2	MANOR LOAM, 3 TO 8 PERCENT SLOPES, MODERATELY ERODED, SLIGHT SEWAGE DISPOSAL	B
MC2	MANOR LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED, MODERATE SEWAGE DISPOSAL	B
MC3	MANOR LOAM, 8 TO 15 PERCENT SLOPES, SEVERELY ERODED, MODERATE SEWAGE DISPOSAL	B
MD3	MANOR LOAM, 15 TO 25 PERCENT SLOPES, SEVERELY ERODED, SEVERE SEWAGE DISPOSAL	B



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Neil Sheehan 6/27/00
 Chief, Division of Land Development Date

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Tavelle 6-20-00
 Chief, Bureau of Highways Date

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.

U.S.D.A. Natural Resources Conservation Service Date

These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The HOWARD SOIL CONSERVATION DISTRICT.

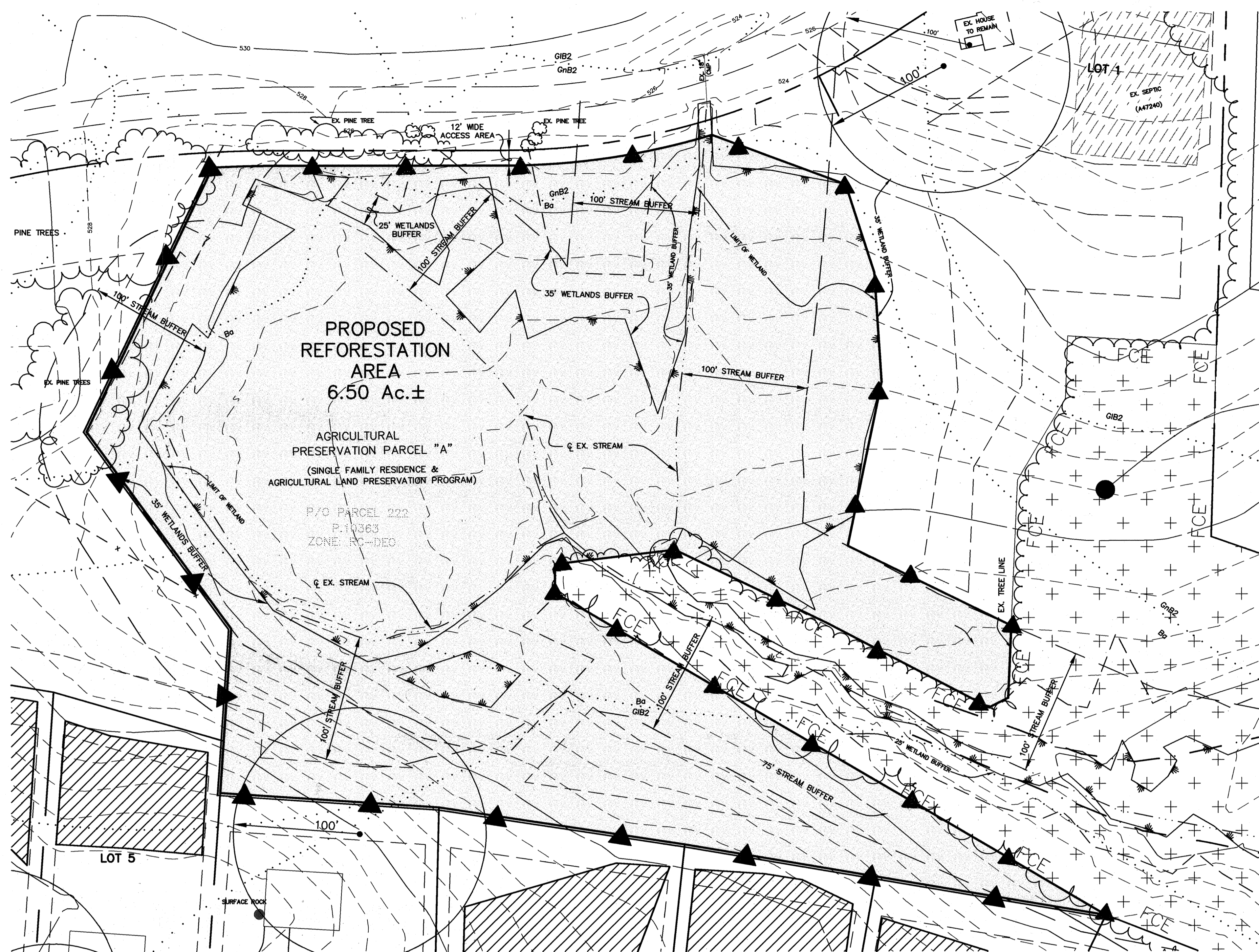
Howard SCD Date

DEVELOPER
 PULTE HOME COPORATION
 MARYLAND DIVISION
 1501 S EDGEWOOD ST.
 BALTIMORE, MARYLAND. 21227

OWNER/GRANTOR
 BPMB ASSOCIATES, LLC
 15298 UNION CHAPEL ROAD
 WOODBINE, MARYLAND 21797
 (410) 442-2101

DATE NO.	REVISION
PROJECT:	THE PADDOCKS LOTS 1 - 33 AND PRESERVATION PARCELS 'A' - 'B'
TITLE:	OFF-SITE FOREST MITIGATION PLAN
AREA:	WELLINGTON WEST SECTION TWO (S-98-03) F-98-18D TAX MAP 14 - PART OF PARCEL 222, PARCELS 68 & 69 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE:	REFORESTATION PLANTING PLAN COVER SHEET
<p>WILDMAN ENVIRONMENTAL SERVICES 4747 BONNIE BRANCH RD. ELICOTT CITY, MD. 21043 PHONE: (410) 313-9999 FAX: (410) 313-9099</p>	
DESIGNED BY: R.B.M. DRAWN BY: J.E.P. PROJECT NO. 99301 DATE: 04/06/00 SCALE: 1" = 100' SHEET NO. 18 OF 19	

AUTOCAD FILE NAME C:\DRAWINGS\Wellington West\Wellington Combo



PROPOSED REFORESTATION AREA
 6.50 Ac.±
 AGRICULTURAL PRESERVATION PARCEL "A"
 (SINGLE FAMILY RESIDENCE & AGRICULTURAL LAND PRESERVATION PROGRAM)
 P/O PARCEL 222
 P-10363
 ZONE: RC-DEO

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

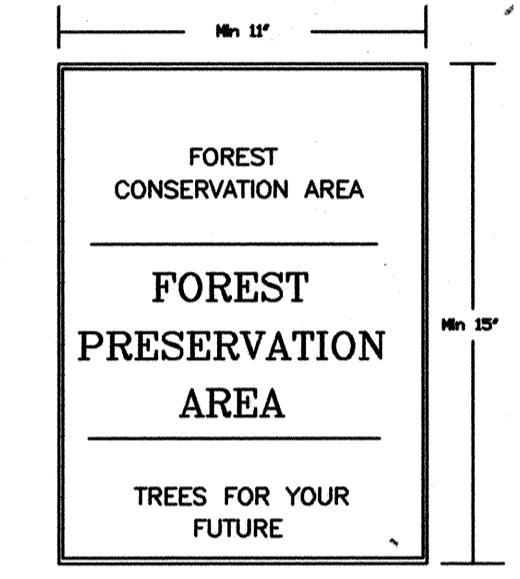
- PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATIONS.
- DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
- SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
- ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
- FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
- PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
- UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

PLANT INSTALLATION

- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
- PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
- CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
- CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSEMED FROM THE SOIL. IF THE ROOTS ENCIRCLE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. J-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
- FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
- FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
- AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
- NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.



SIGNAGE DETAIL

NOT TO SCALE

General Notes

- The Forest Conservation Easement has been established as an Offsite Forest Mitigation Area, Per Section 16.1216 of The Howard County Forest Conservation Act. No Clearing, Grading or Construction is Permitted Within The Forest Conservation Easement; However, Forest Management Practices As Defined in The Deed Of Forest Conservation Easement Are Allowed.
- Denotes Proposed Reforestation Area, sheets 18 & 19
- Denotes Tree Protection Signage, sheets 17, 18 & 19
- Denotes Protective Orange Fence, sheets 17, 18 & 19

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 6/27/00
 Chief, Division of Land Development
 [Signature] 10/2/00
 Chief, Development Engineering Division
 APPROVED: DEPARTMENT OF PUBLIC WORKS
 [Signature] 6-20-00
 Chief, Bureau of Highways

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.
 U.S.D.A.-Natural Resources Conservation Service
 These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The HOWARD SOIL CONSERVATION DISTRICT.
 Howard SCD

DEVELOPER
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 MARYLAND DIVISION
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WILDMAN ENVIRONMENTAL SERVICES 1747 BONNIE BRANCH RD. ELLICOTT CITY, MD. 21040 PHONE: (410) 313-9899 FAX: (410) 313-9899 DESIGNED BY: R.B.W. DRAWN BY: J.E.P. PROJECT NO: 99301 DATE: 04/07/00 SCALE: 1" = 50' SHEET NO. 19 OF 19	

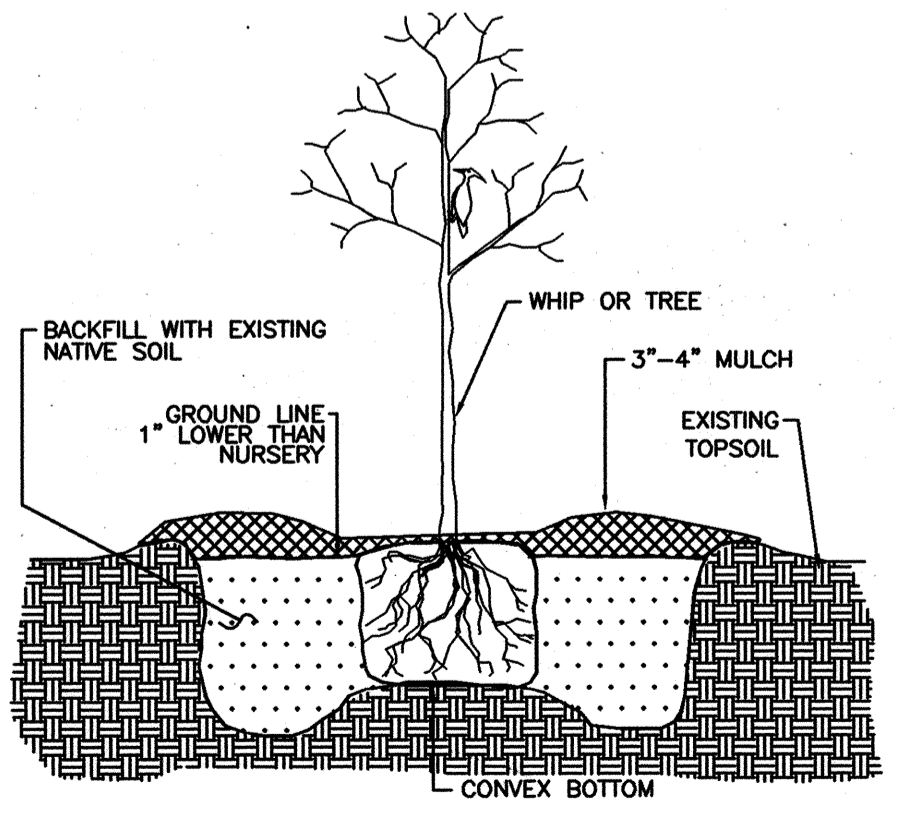
REFORESTATION PLANT LIST

QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C. SPACING	SIZE & REMARKS
205	Prunus serotina Wild Black Cherry	I	M	FACU	10'	CONT./BROOT 3'-5' HEIGHT
205	Robinia pseudoacacia Black Locust	VI	D-M	FACU-	10'	CONT./BROOT 3'-5' HEIGHT
205	Quercus alba White Oak	MT	D-M	FACU-	10'	CONT./BROOT 3'-5' HEIGHT
205	Quercus rubra Red Oak	MT	D-M	UPL	10'	CONT./BROOT 3'-5' HEIGHT
205	Quercus palustris Pin Oak	T	M-W	FACW	10'	CONT./BROOT 3'-5' HEIGHT
205	Fraxinus americana White Ash	MT	D-M	FACU	10'	CONT./BROOT 3'-5' HEIGHT
205	Nyssa sylvatica Black Gum	T	M-W	FAC	10'	CONT./BROOT 3'-5' HEIGHT
205	Platanus occidentalis American Sycamore	I	D-W	FAC	10'	CONT./BROOT 3'-5' HEIGHT
205	Juglans nigra Black Walnut	VT	M	FACU	10'	CONT./BROOT 3'-5' HEIGHT
205	Liriodendron tulipifera Yellow Poplar	I	M	FACU	10'	CONT./BROOT 3'-5' HEIGHT
205	Acer rubrum Red Maple	VT	D-W	FAC	10'	CONT./BROOT 3'-5' HEIGHT

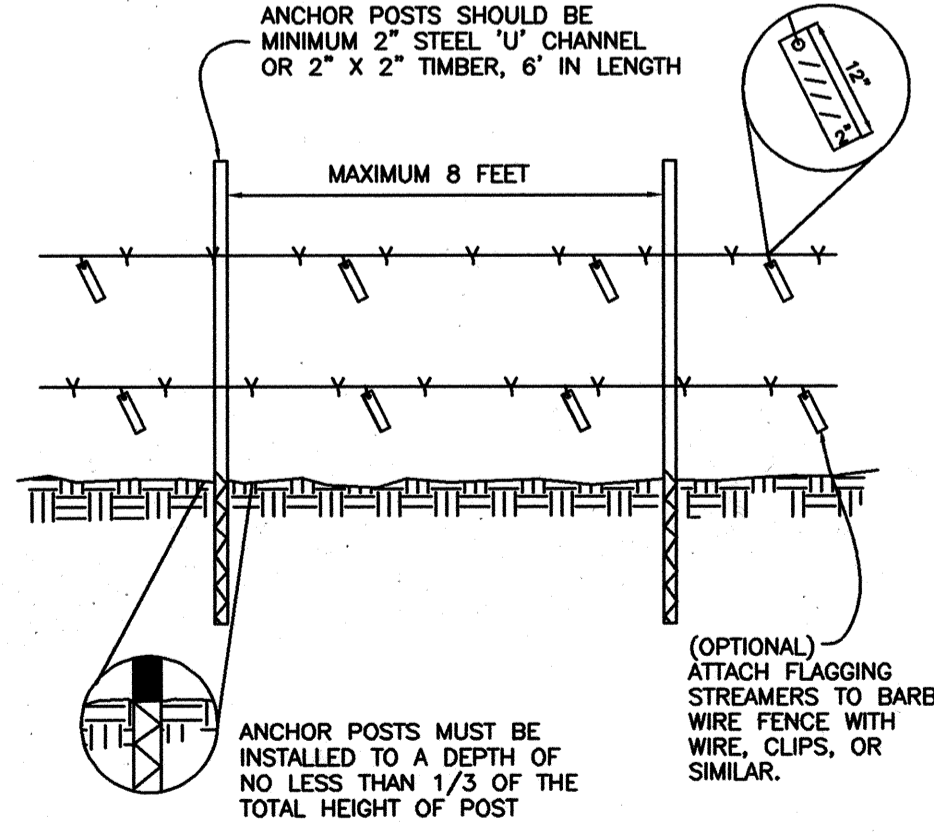
Quantities Of Individual Species And Species Composition May Change Depending On Availability At Time Of Planting. Total Quantity Of Trees For Entire Easement Area Will Not Change.

PLAN VIEW

1"=50'



TREE PLANTING DETAIL
CONTAINER GROWN



- NOTES**
- FOREST PROTECTION DEVICE ONLY.
 - RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 - BOUNDARIES OF AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 - ROOT DAMAGE SHOULD BE AVOIDED.
 - PROTECTIVE SIGNS MAY ALSO BE USED.
 - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.
 - BARBED WIRE SHOULD BE ATTACHED SECURELY TO POSTS.

PROTECTIVE FENCE DETAIL
TWO STRAND BARBED WIRE

THIS PLAN IS FOR FOREST CONSERVATION EASEMENT PLANTING PURPOSES ONLY