

REVISIONS		
NO.	DESCRIPTION	DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cinda Hamner 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Charles J. Crovo 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

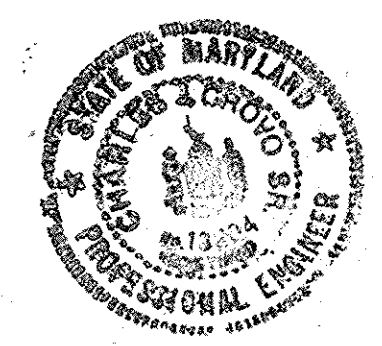
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William R. McMillan 4-10-08
 CHIEF, BUREAU OF HIGHWAYS DATE

AS-BUILT CERTIFICATION

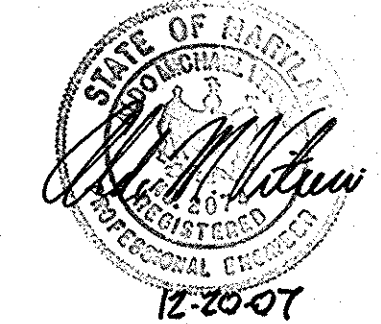
I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN UNDER THE APPROVED PLANS AND SPECIFICATIONS.

Charles J. Crovo 6/18/14
 CHARLES J. CROVO, SR., P.E. NO. 18204 DATE



PLAN
 SCALE: 1" = 50'

NOTE: SEE STRIPING PLAN, SHEET II.



THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

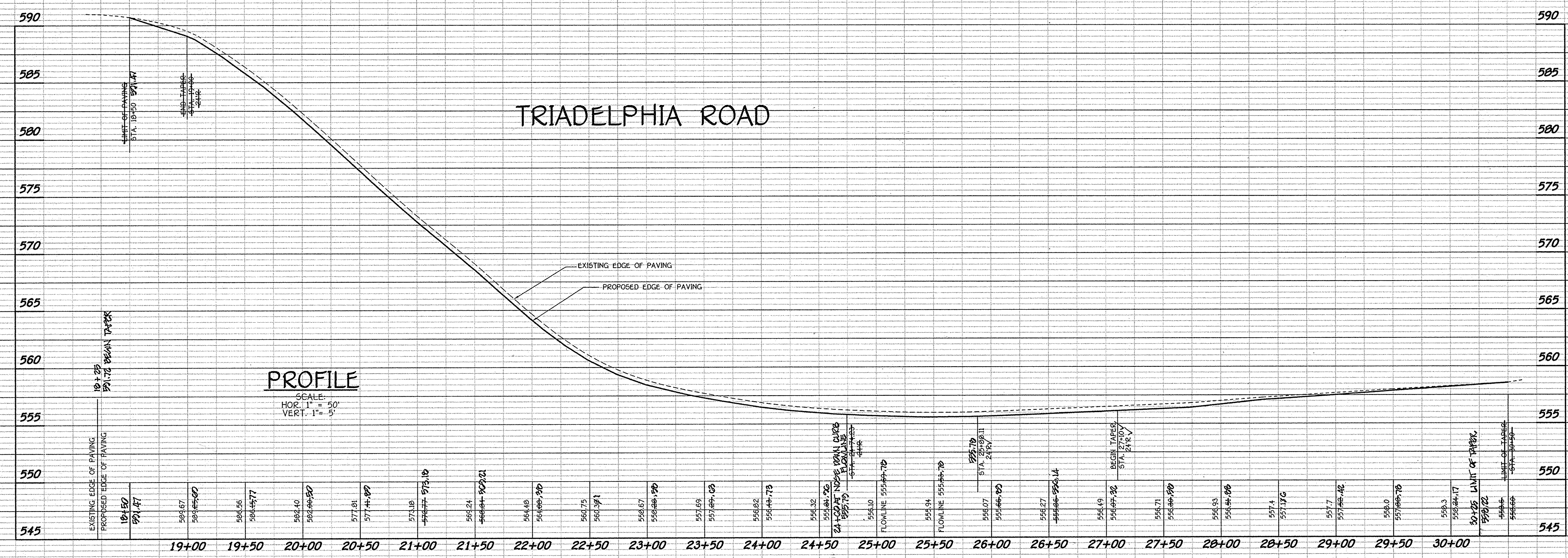
ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TRIADELPHIA ROAD WIDENING
 PLAN AND PROFILE

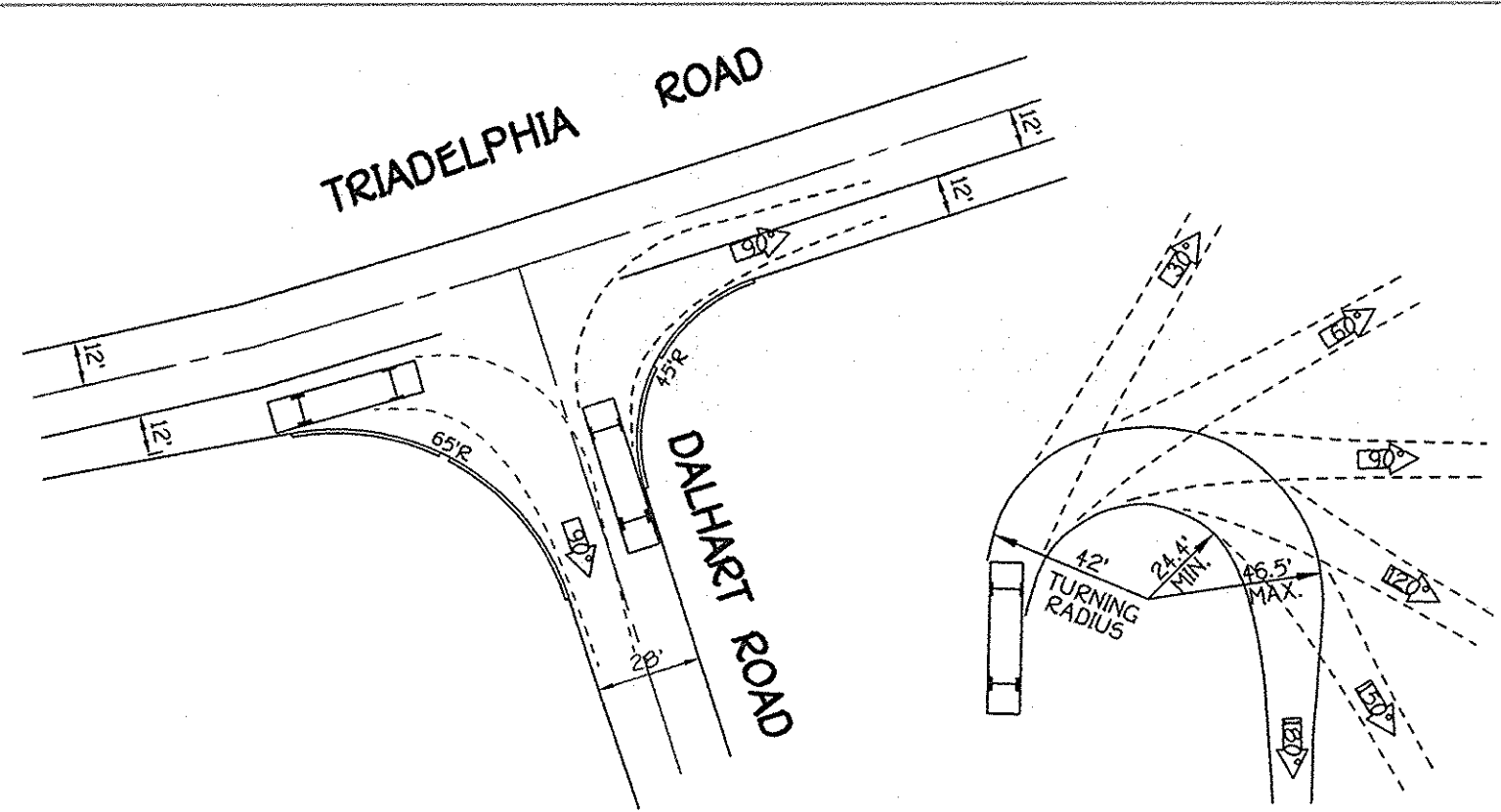
OWNER Mr. Kenneth Warfield, Jr., Mary Ellen Warfield 14451 Triadelphia Road Glenelg, Maryland 21737 (410-442-2337)	DEVELOPER Ten Oaks Properties, Inc. C/O Mr. Kenneth Warfield, Jr., President 14451 Triadelphia Road Glenelg, Maryland 21737 (410-442-2337)
---	--

SCALE: AS SHOWN DATE: DEC. 2007 DIV. NO. 2 OF 40
 DES. DAM DRN. DAM E-C. A.M.V.

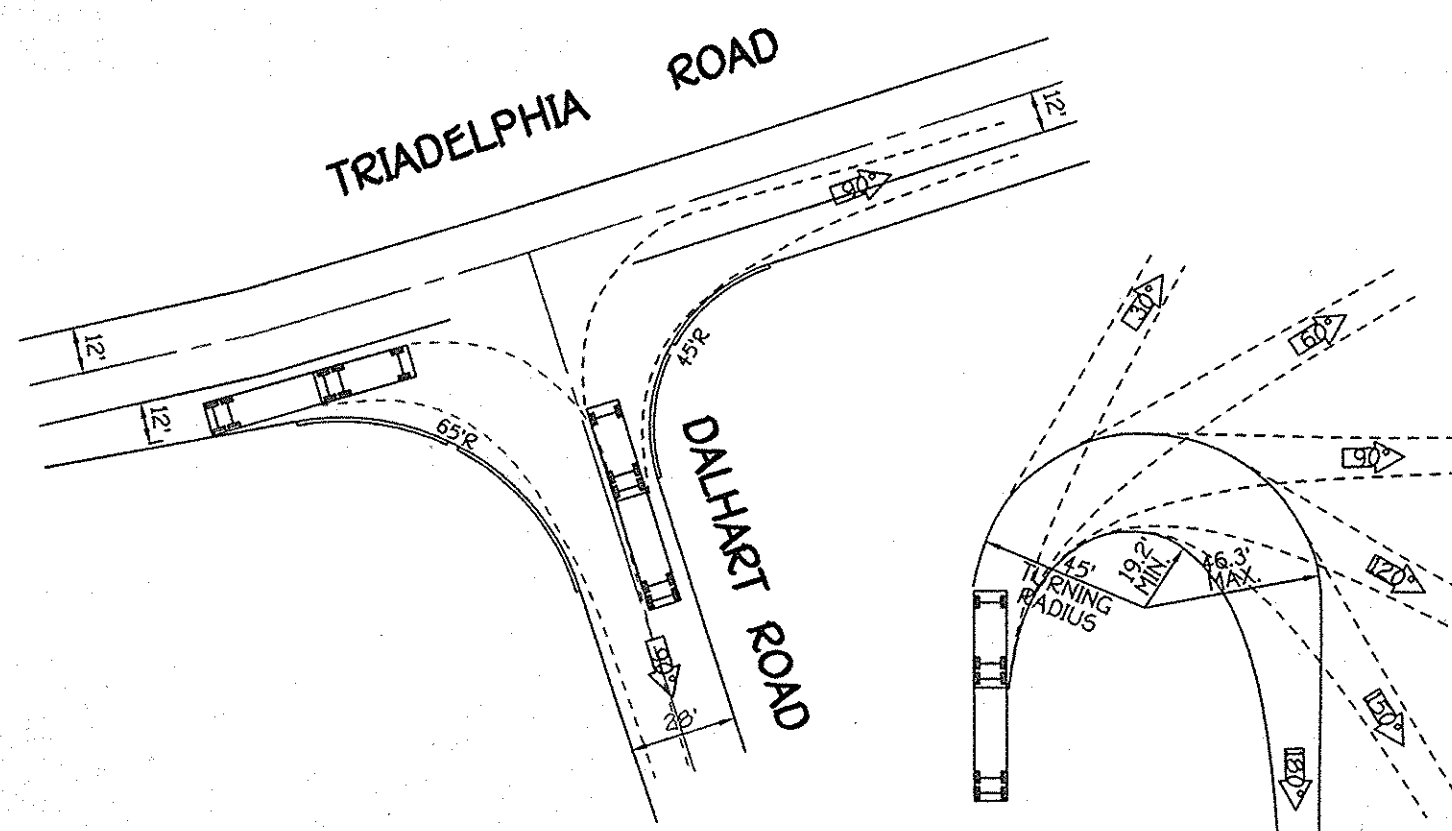
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 14451 TRIADELPHIA ROAD, GLENELG, MARYLAND 21737
 (410) 442-2337



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

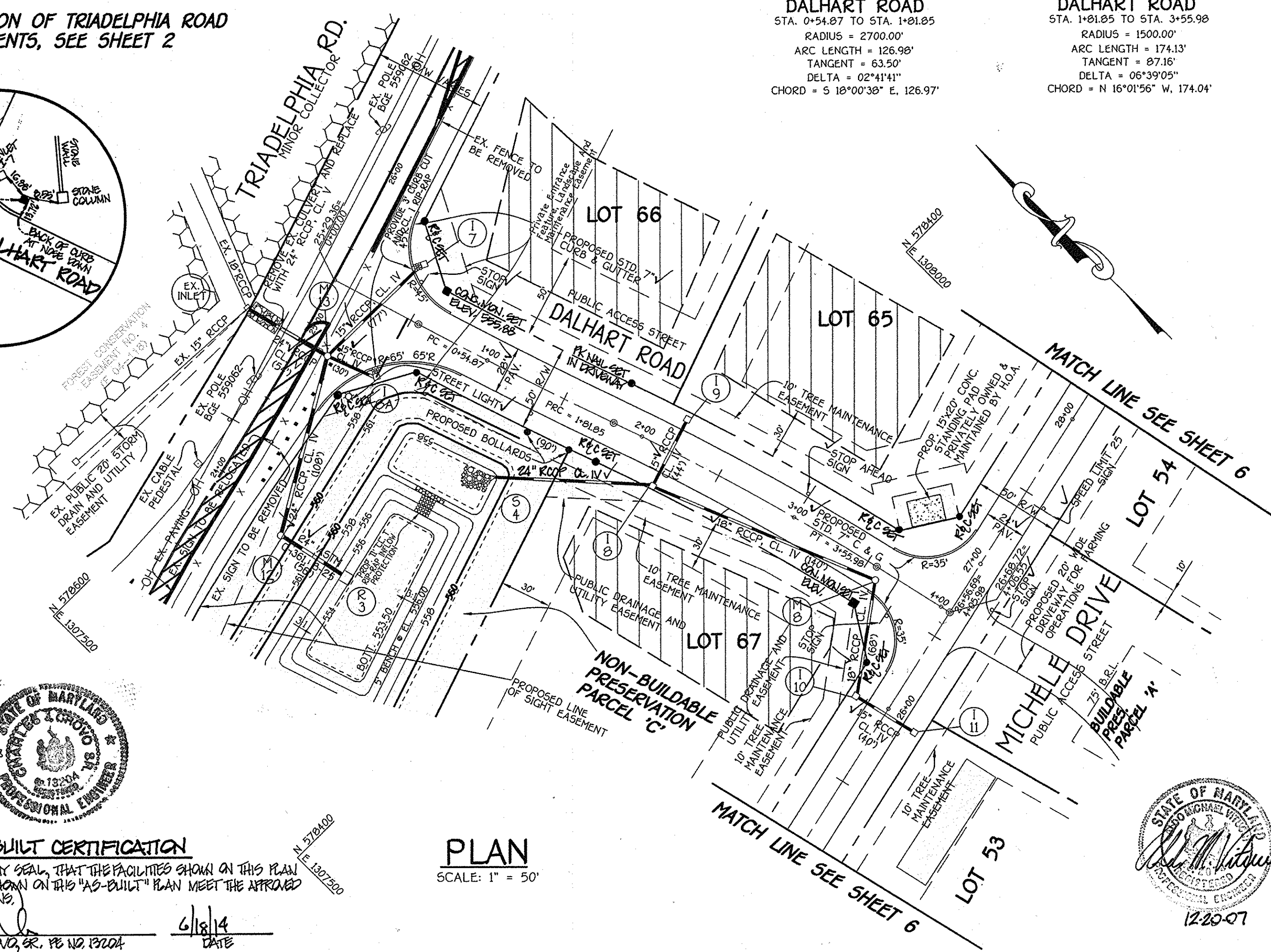
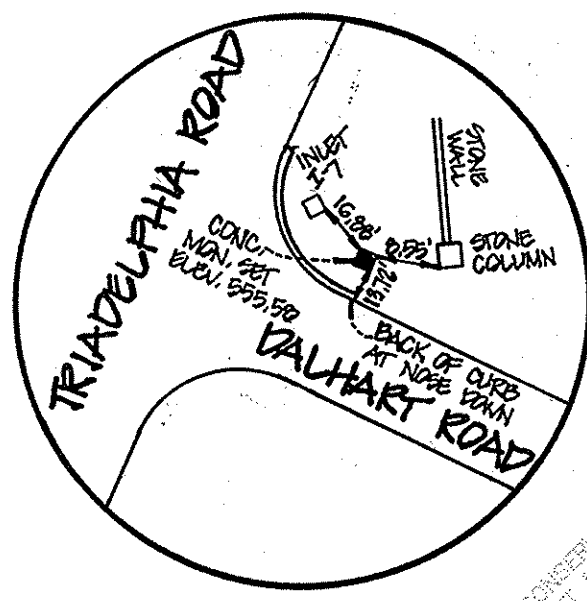


BUS TURNING MOVEMENT
SCALE: 1" = 50'



WB-50 TURNING MOVEMENT
SCALE: 1" = 50'

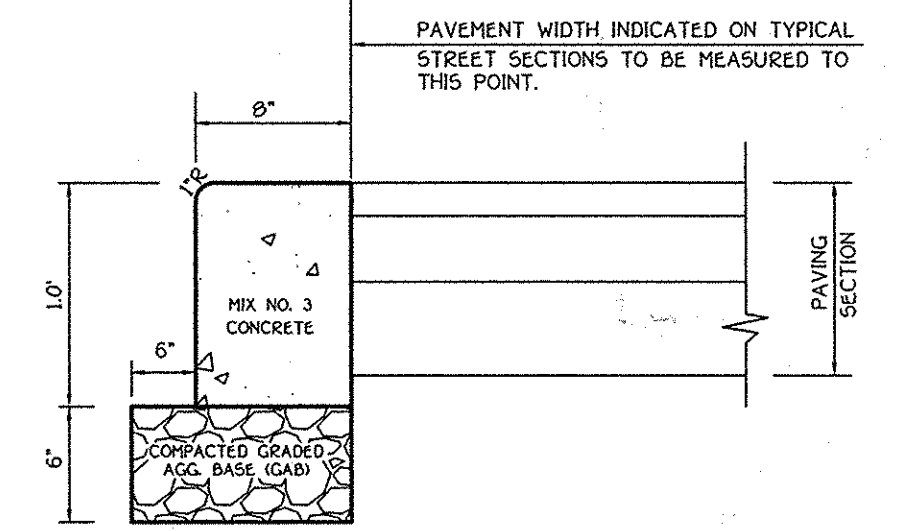
FOR CONTINUATION OF TRIADELPHIA ROAD IMPROVEMENTS, SEE SHEET 2



PLAN
SCALE: 1" = 50'

CL CURVE DATA
DALHART ROAD
STA. 0+51.87 TO STA. 1+01.85
RADIUS = 2700.00'
ARC LENGTH = 126.98'
TANGENT = 63.50'
DELTA = 02°41'41"
CHORD = 5 18'00"38" E. 126.97'

CL CURVE DATA
DALHART ROAD
STA. 1+01.85 TO STA. 3+55.98
RADIUS = 1500.00'
ARC LENGTH = 174.13'
TANGENT = 87.16'
DELTA = 06°39'05"
CHORD = N 16°01'56" W. 174.04'



FLUSH CURB (R-3.07)
NO SCALE

REVISIONS		
NO.	DESCRIPTION	DATE

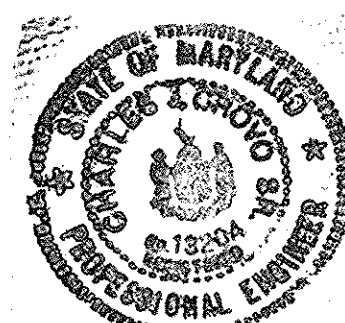
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Indy Hamer 4/24/08 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT

Charles J. Draper 4/26/08 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

W. J. M. M. 4-10-08 DATE
CHIEF, BUREAU OF HIGHWAYS



AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE COLLECTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Charles J. Draper 4/18/14 DATE
CHARLES J. DRAPER, P.E. NO. 13204

THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

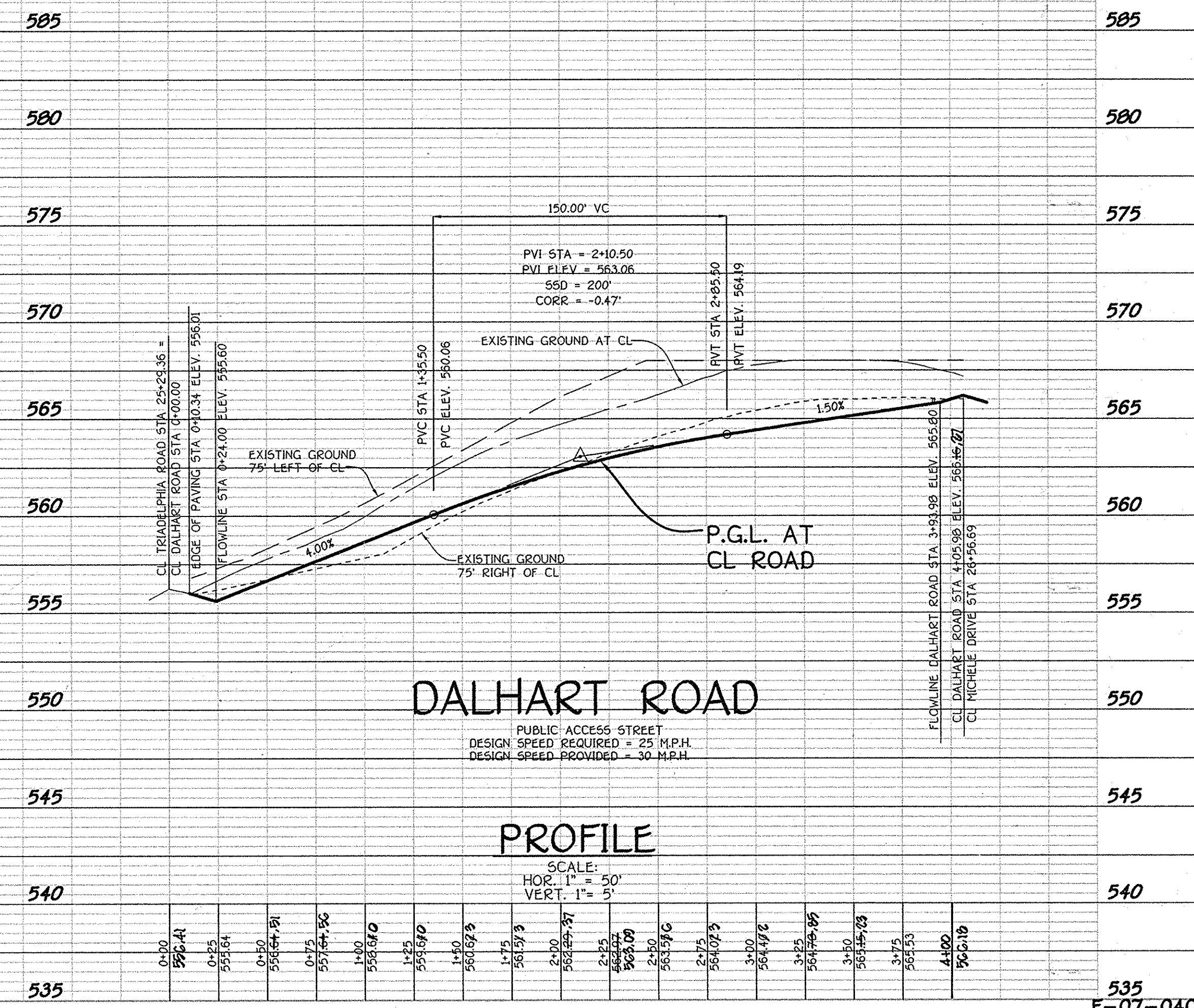
ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DALHART ROAD
PLAN AND PROFILE

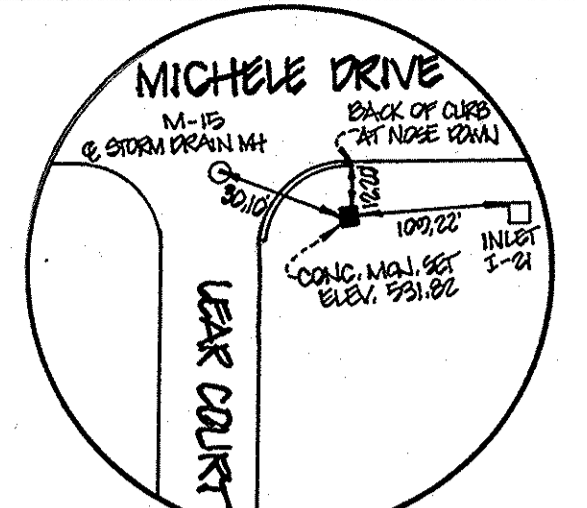
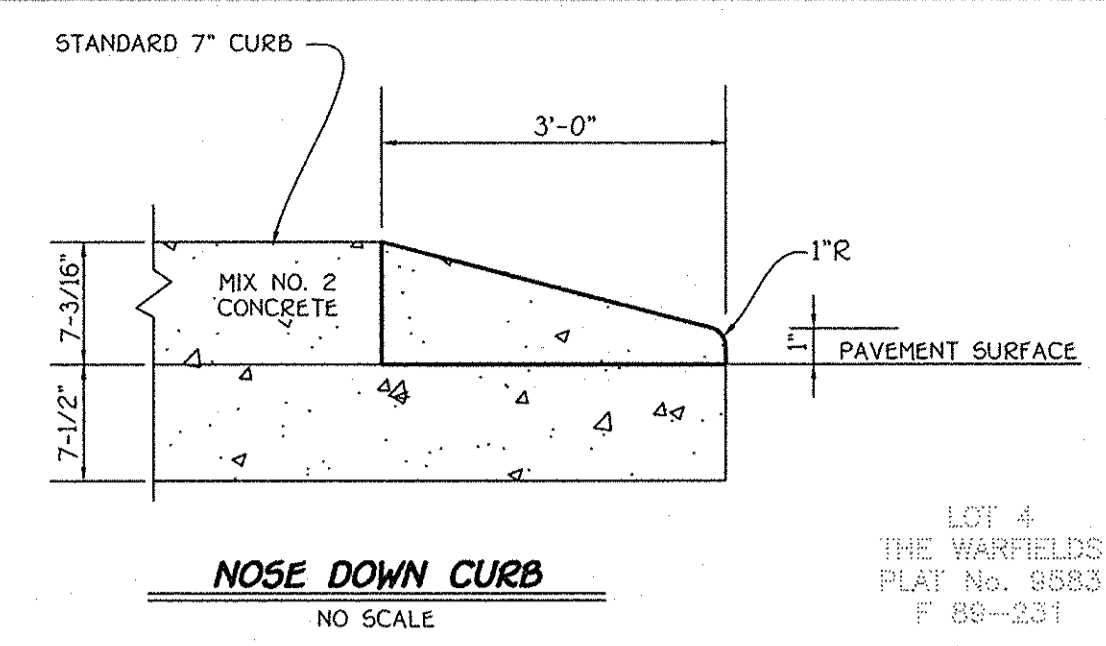
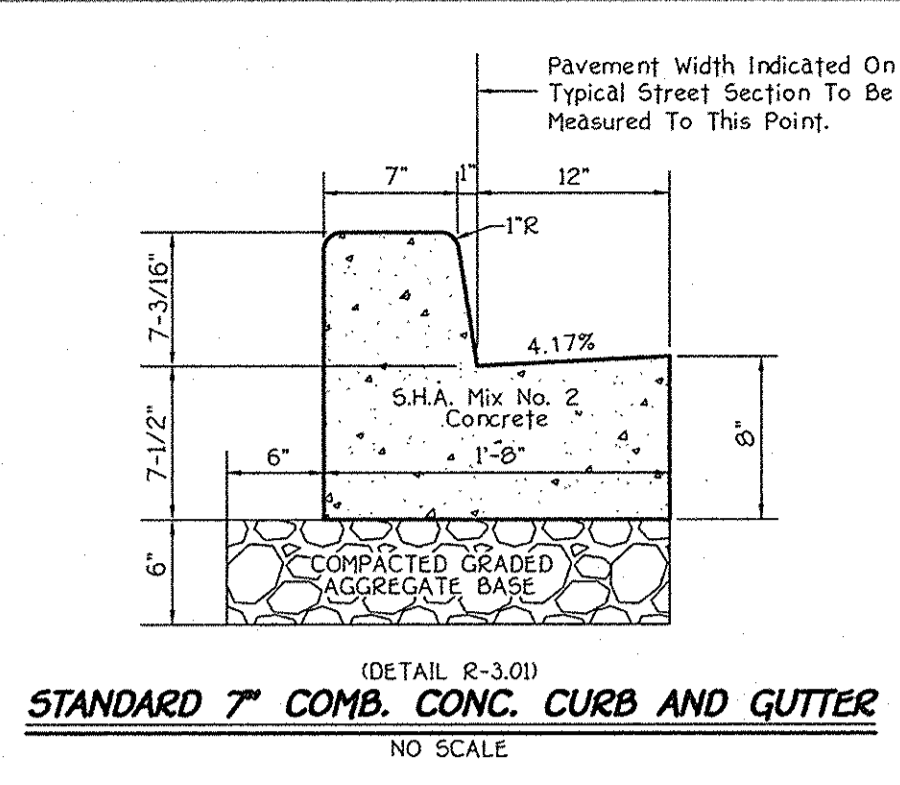
OWNER Mr. Kenard Warfield, Jr., Mary Ellen Warfield 14451 Triadelphia Road Glenelg, Maryland 21737 (410-442-2337)	DEVELOPER Ten Oaks Properties, Inc. C/O Mr. Kenard Warfield, Jr., President 14451 Triadelphia Road Glenelg, Maryland 21737 (410-442-2337)
--	---

SCALE: AS SHOWN DATE: DEC. 2007 DWG. NO. 3 OF 40
DES. DAM DRN. DAM CHK. A.M.V.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
13075 BALTIC AVENUE, SUITE 200, BALTIMORE, MARYLAND 21286
TEL: 410-528-8800 FAX: 410-528-8801



K:\Drawings 3\30310 Warfield Homebase\FINALS\30310 SECT 2 SHEET 3 ROAD PLAN.dwg, 12/19/2007 8:39:55 AM



NO.	REVISIONS DESCRIPTION	DATE

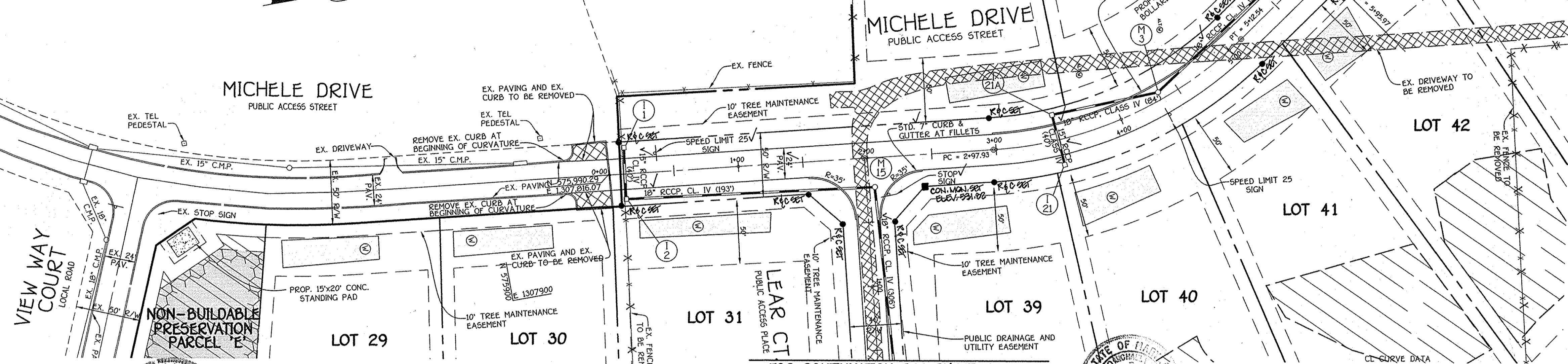
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hamt 4/14/05
CHIEF, DIVISION OF LAND DEVELOPMENT

John DeMunn 4/22/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William R. Mohr Jr. 4-10-09
CHIEF, BUREAU OF HIGHWAYS



THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MICHELE DRIVE
PLAN AND PROFILE

OWNER
Mr. Kenneth Warfield, Jr., Vice: Ellen Warfield
14451 Traddeshia Road
Glenely, Maryland 21737
(410) 442-2337

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kenneth Warfield, Jr., President
14451 Traddeshia Road
Glenely, Maryland 21737
(410) 442-2337

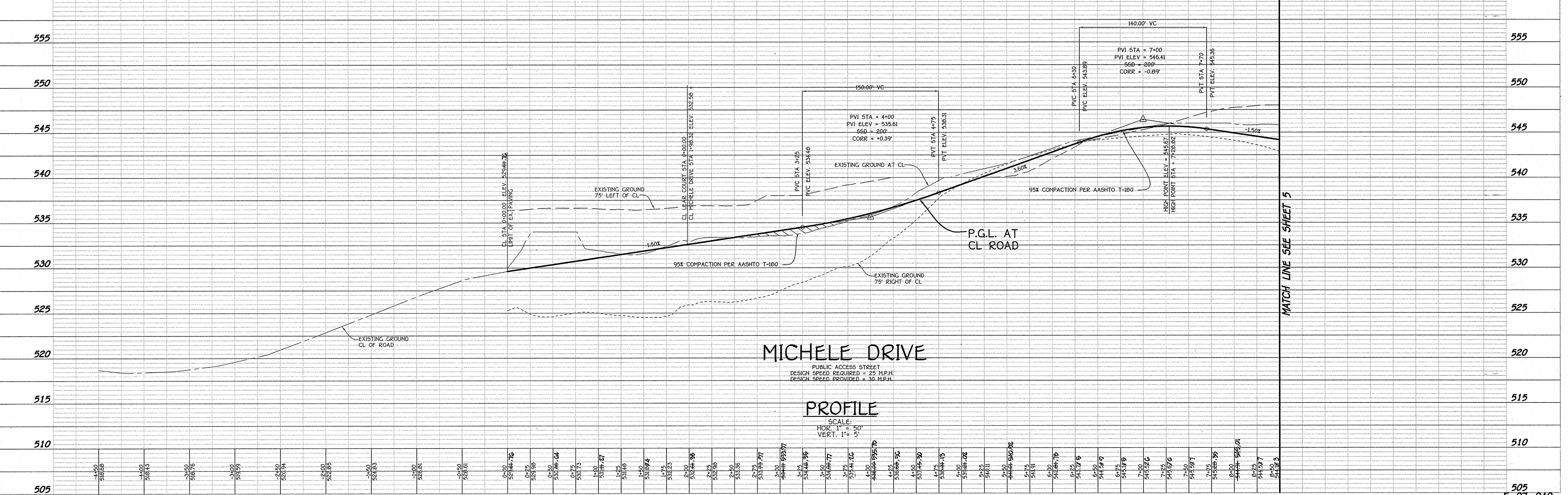
SCALE: AS SHOWN DATE: DEC. 2007 DWG. NO. 4 OF 40
DES. DAM DEN. DAM CHK. A.M.V.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERS CONSULTANTS & LAND SURVEYORS
14451 TRADDESHIA ROAD
GLENELY, MARYLAND 21737
TEL: 410-442-2337 FAX: 410-442-2337

AS-BUILT CERTIFICATION

I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Charles J. Prados, Sr. 6/14/14
CHARLES J. PRADOS, SR., PE NO 13204



CL CURVE DATA
MICHELE DRIVE
 STA. 9+86.16 TO STA. 13+93.85
 RADIUS = 325.00'
 ARC LENGTH = 407.70'
 TANGENT = 214.74'
 DELTA = 44°29'38"
 CHORD = N 21°41'13" W, 397.53'

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN UNDER THE APPROVED PLANS AND SPECIFICATIONS.
 CHARLES J. [Signature] P.E. NO. 19204
 6/18/14
 DATE



NO.	REVISIONS DESCRIPTION	DATE

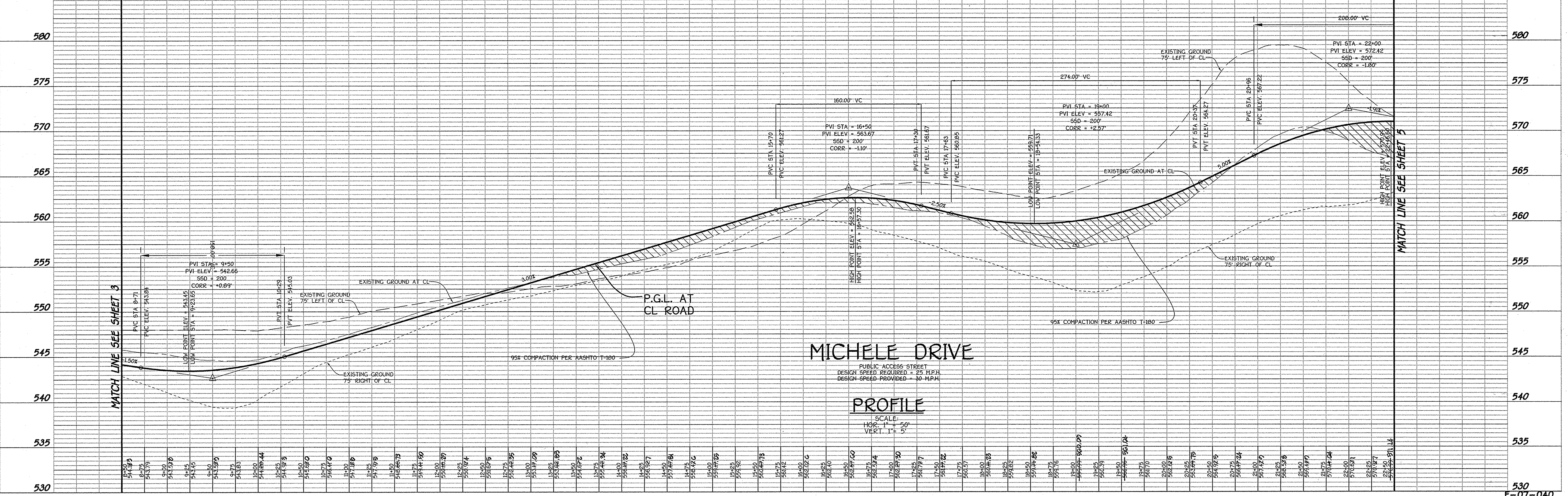
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hamer
 CHIEF, DIVISION OF LAND DEVELOPMENT
 4/24/08
 DATE

John [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 4/22/08
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Willa R. [Signature]
 CHIEF, BUREAU OF HIGHWAYS
 4-10-08
 DATE



MICHELE DRIVE
 PUBLIC ACCESS STREET
 DESIGN SPEED REQUIRED = 25 MPH
 DESIGN SPEED PROVIDED = 30 MPH
PROFILE
 SCALE:
 HOR. 1" = 50'
 VERT. 1" = 5'

NON-BUILDABLE PRESERVATION PARCEL 'F'
 OWNER: H.O.A.
 EASEMENT HOLDERS:
 HOWARD COUNTY, MD. &
 HOWARD COUNTY CONSERVANCY

THE WARFIELDS II
 SECTION TWO
BUILDABLE LOTS 6-8, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MICHELE DRIVE
 PLAN AND PROFILE

OWNER
 Mr. Kenneth Warfield, Jr. & Mary Ellen Warfield
 14451 Tradelands Road
 Glenens, Maryland 21737
 410-442-2337

DEVELOPER
 Tan Gola Properties, Inc.
 C/O Mr. Kenneth Warfield, Jr., President
 14451 Tradelands Road
 Glenens, Maryland 21737
 410-442-2337

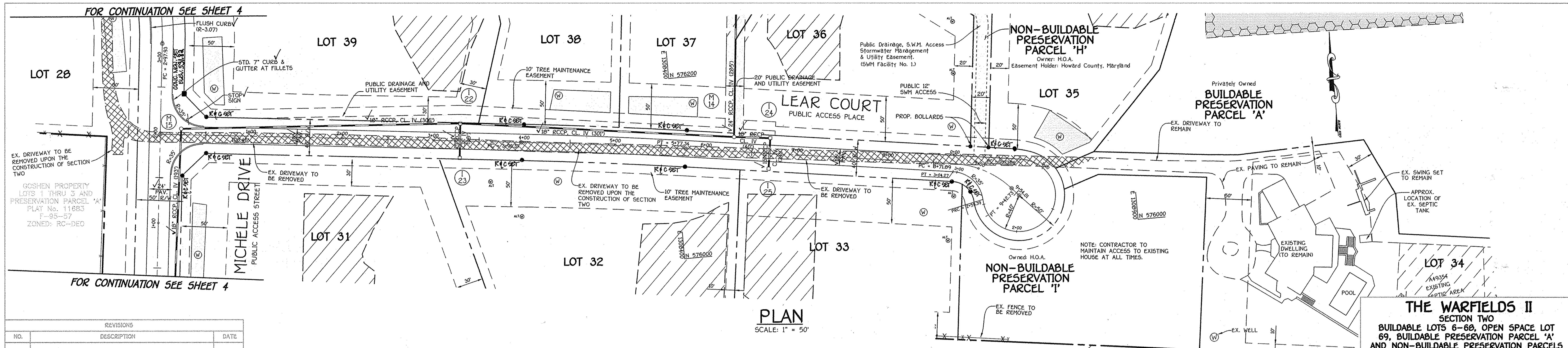
SCALE: AS SHOWN DATE: DEC. 2007 DWG. NO. 5 OF 40
 DES. DAM DRN. DAM CHK. A.M.V.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 14451 TRADELANDS ROAD
 GLENENS, MARYLAND 21737
 410-442-2337



K:\Drawings\3106310 Warfield Homesites\FINALS\3106310 SECT-2 SHEET 5 ROAD PLAN-MICHELE-2.dwg, 3/14/2008 10:33:38 AM

AS-BUILT



NO.	REVISIONS DESCRIPTION	DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

C. Williams 4/24/08
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

M. D. Williams 4/24/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION NY DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

W. J. Williams 4-10-09
CHIEF, BUREAU OF HIGHWAYS DATE

CL CURVE DATA
LEAR COURT
STA. 3+96.37 TO STA. 5+77.34
RADIUS = 5500.00'
ARC LENGTH = 180.96'
TANGENT = 90.49'
DELTA = 01°53'07"
CHORD = 5 02°45'02" E, 180.96'

CL CURVE DATA
LEAR COURT
STA. 8+71.89 TO STA. 9+42.73
RADIUS = 101.41'
ARC LENGTH = 70.83'
TANGENT = 36.93'
DELTA = 40°00'33"
CHORD = 5 61°48'12" E, 69.40'

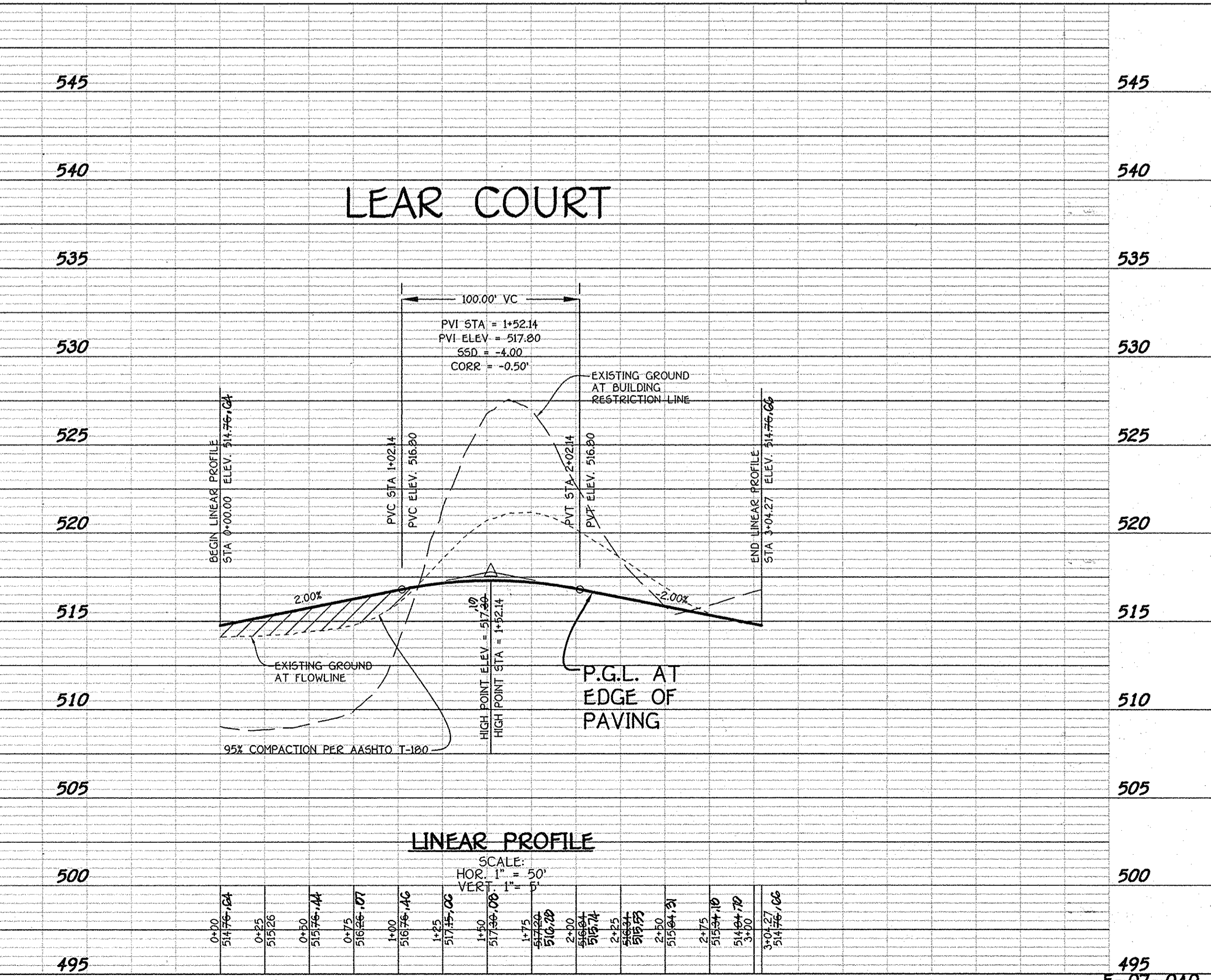
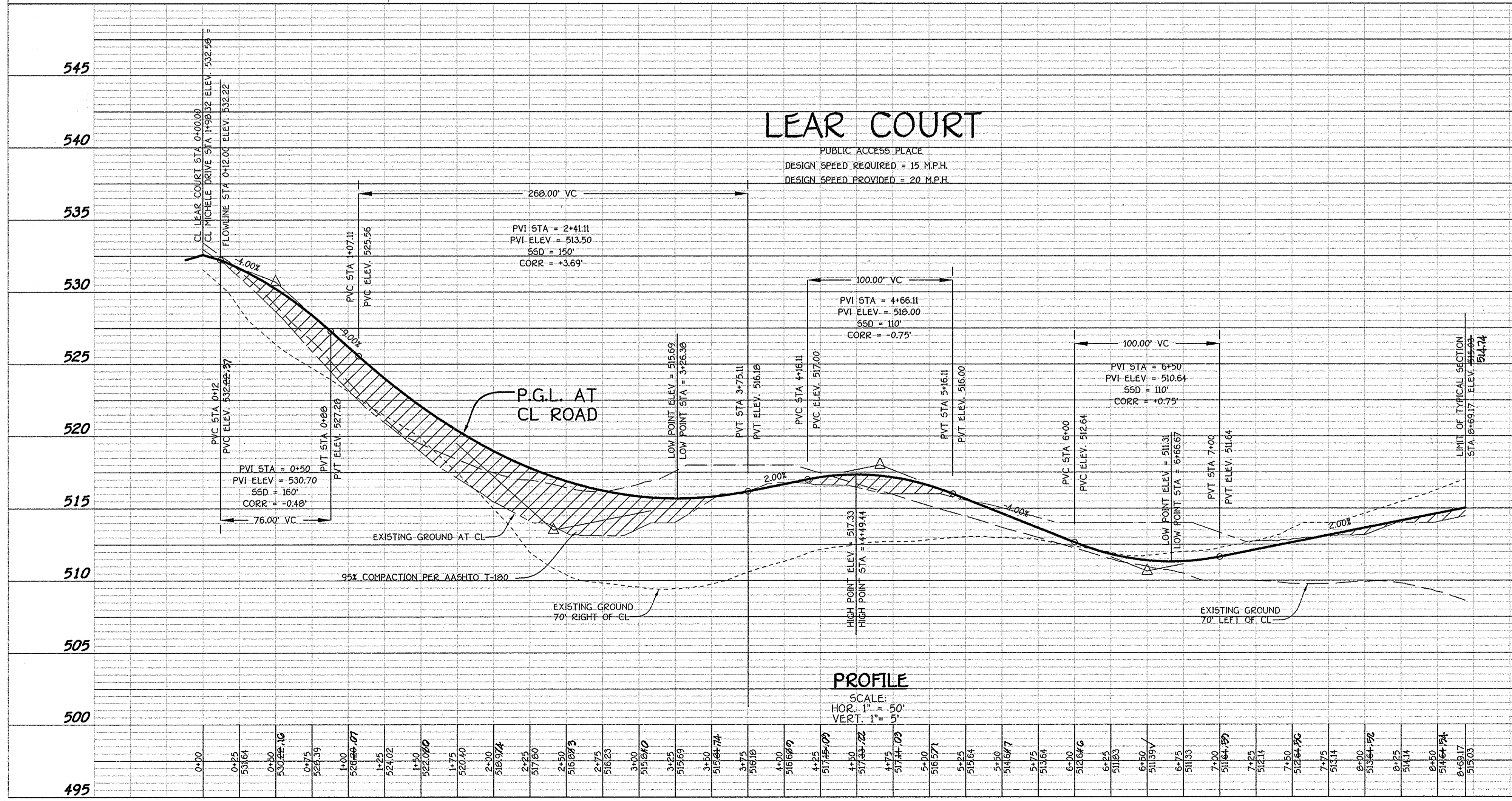
AS-BUILT CERTIFICATION

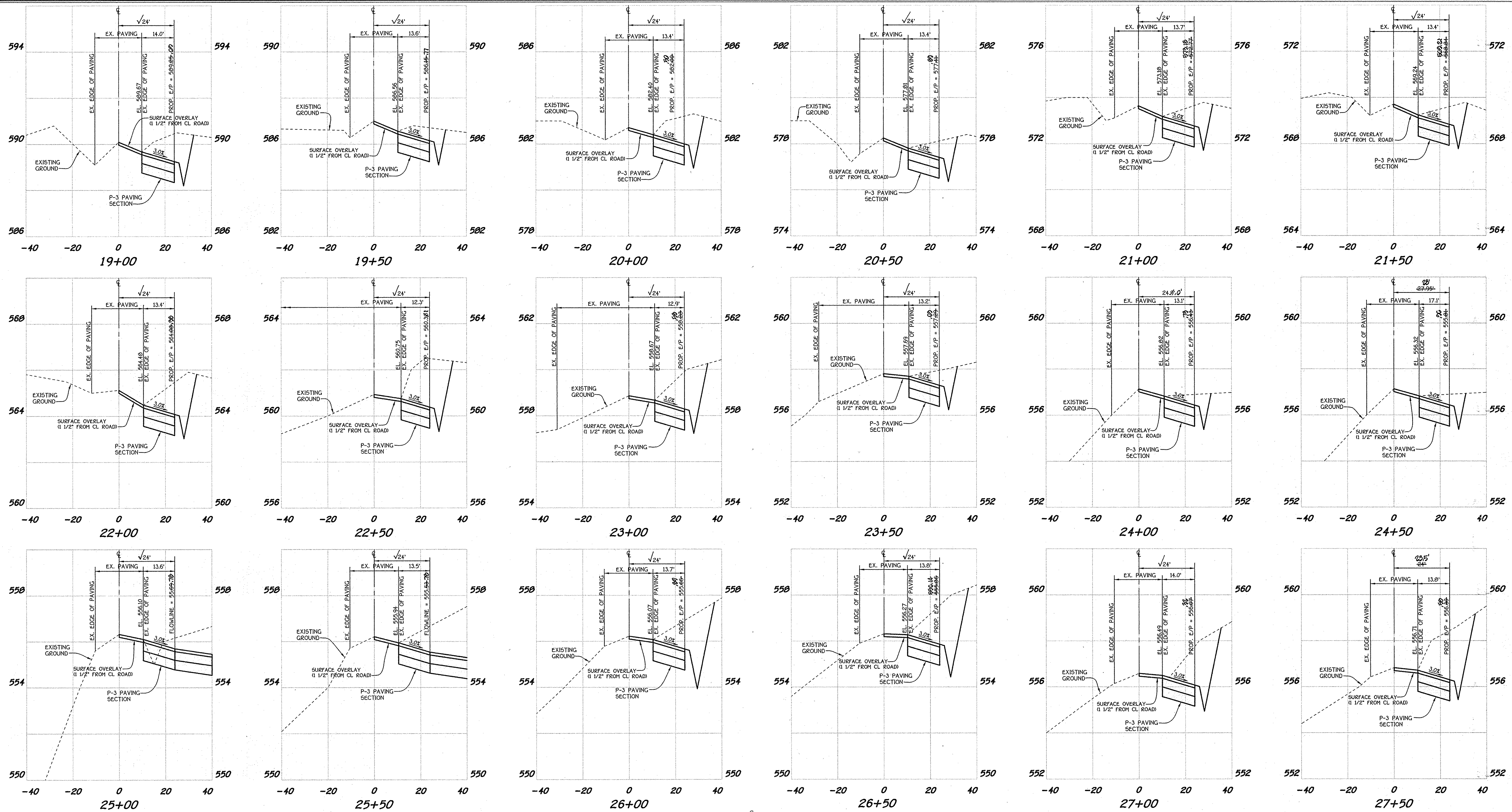
I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Charles J. Jackson, Sr. 6/18/14
CHARLES JACKSON, SR., PE NO. 19204 DATE

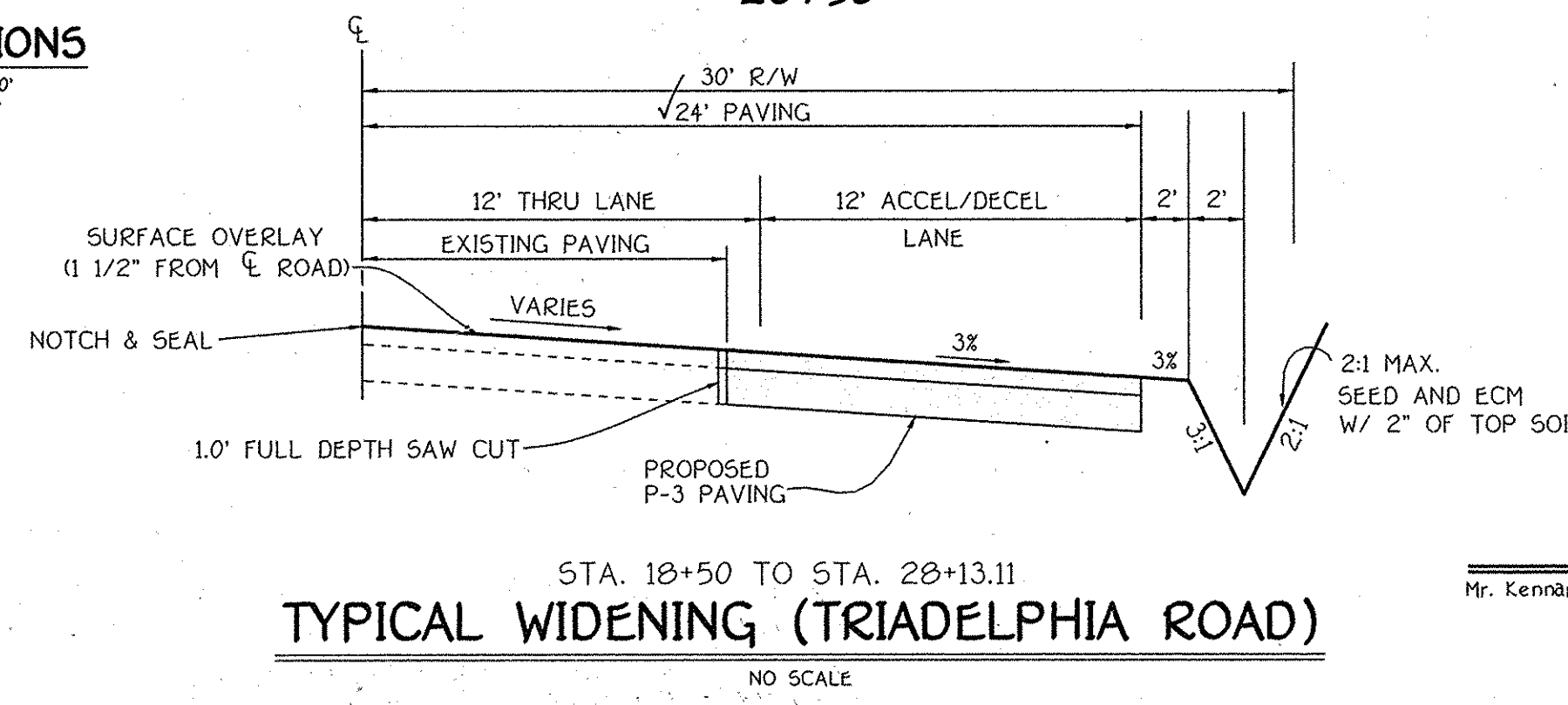
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
PROFESSIONAL ENGINEER

STATE OF MARYLAND
DEPARTMENT OF PROFESSIONAL ENGINEERING





CROSS-SECTIONS
 SCALE: HOR. 1" = 20'
 VER. 1" = 2'



STA. 18+50 TO STA. 28+13.11
TYPICAL WIDENING (TRIADELPHIA ROAD)
 NO SCALE

APPROVED: DEPARTMENT OF PUBLIC WORKS
William J. M... 4-10-08
 CHIEF, BUREAU OF HIGHWAYS
 APPROVED: DEPARTMENT OF PLANNING AND ZONING
Judy Hand 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT
Charles J. Groza 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
Charles J. Groza
 CHARLES J. GROZA, SE, PE NO. 123204
 DATE: 6/18/14



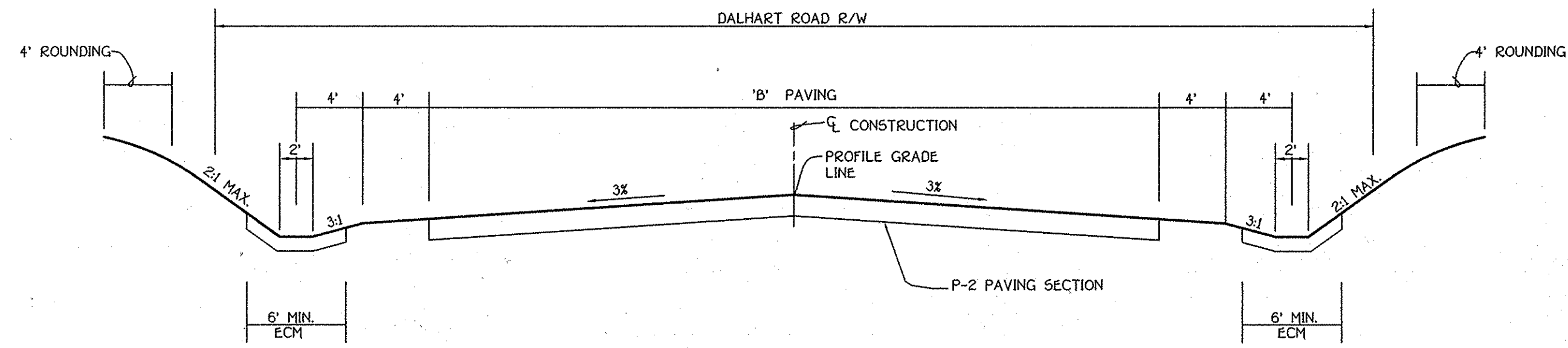
TRIADELPHIA ROAD - ROAD SECTIONS THE WARFIELDS II SECTION TWO
 BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET # OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamer 1/21/08 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT
Mike Danner 4/2/08 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William J. ... 4-10-08 DATE
 CHIEF, BUREAU OF HIGHWAYS



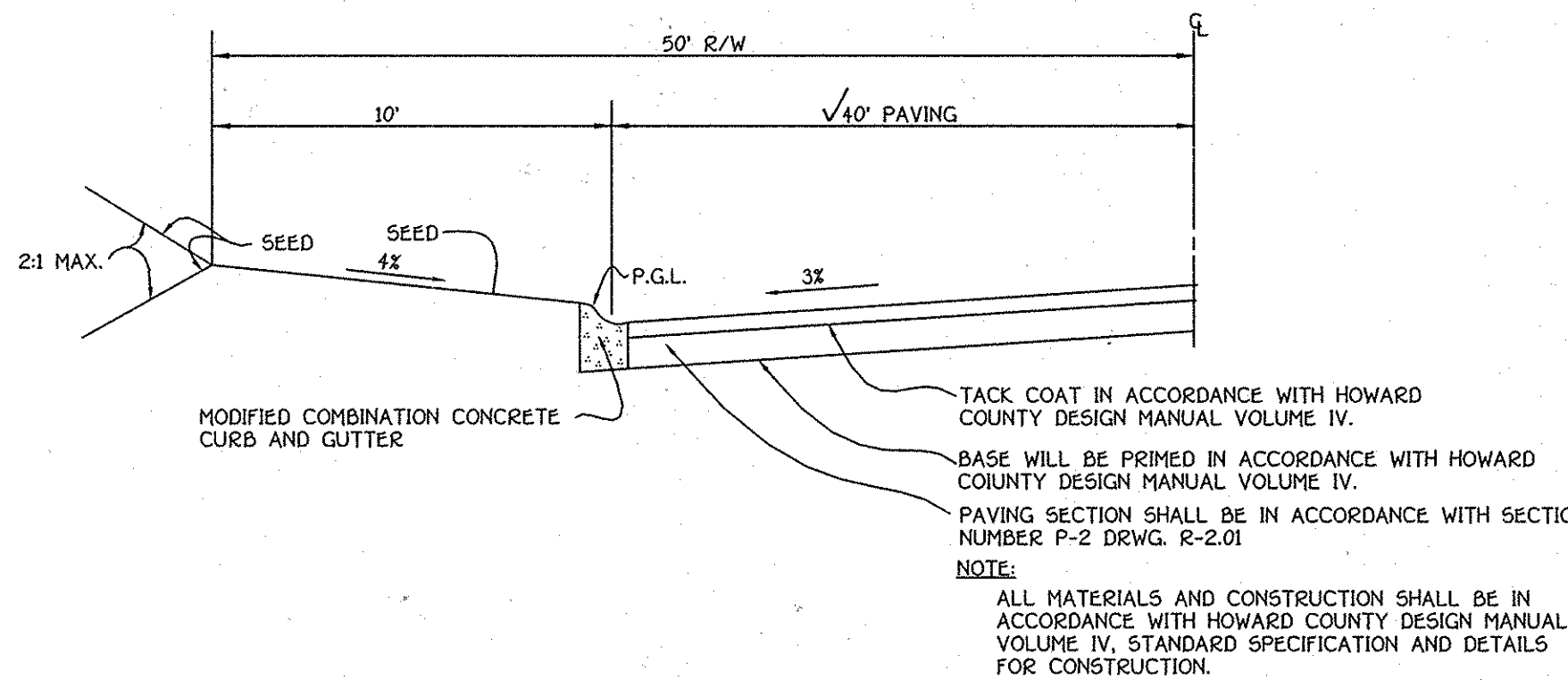
NOTE:
 SEE HOWARD COUNTY STD. DETAILS FOR PAVING SECTION.

TYPICAL ROADWAY SECTION

ECM - DENOTES EROSION CONTROL MATTING

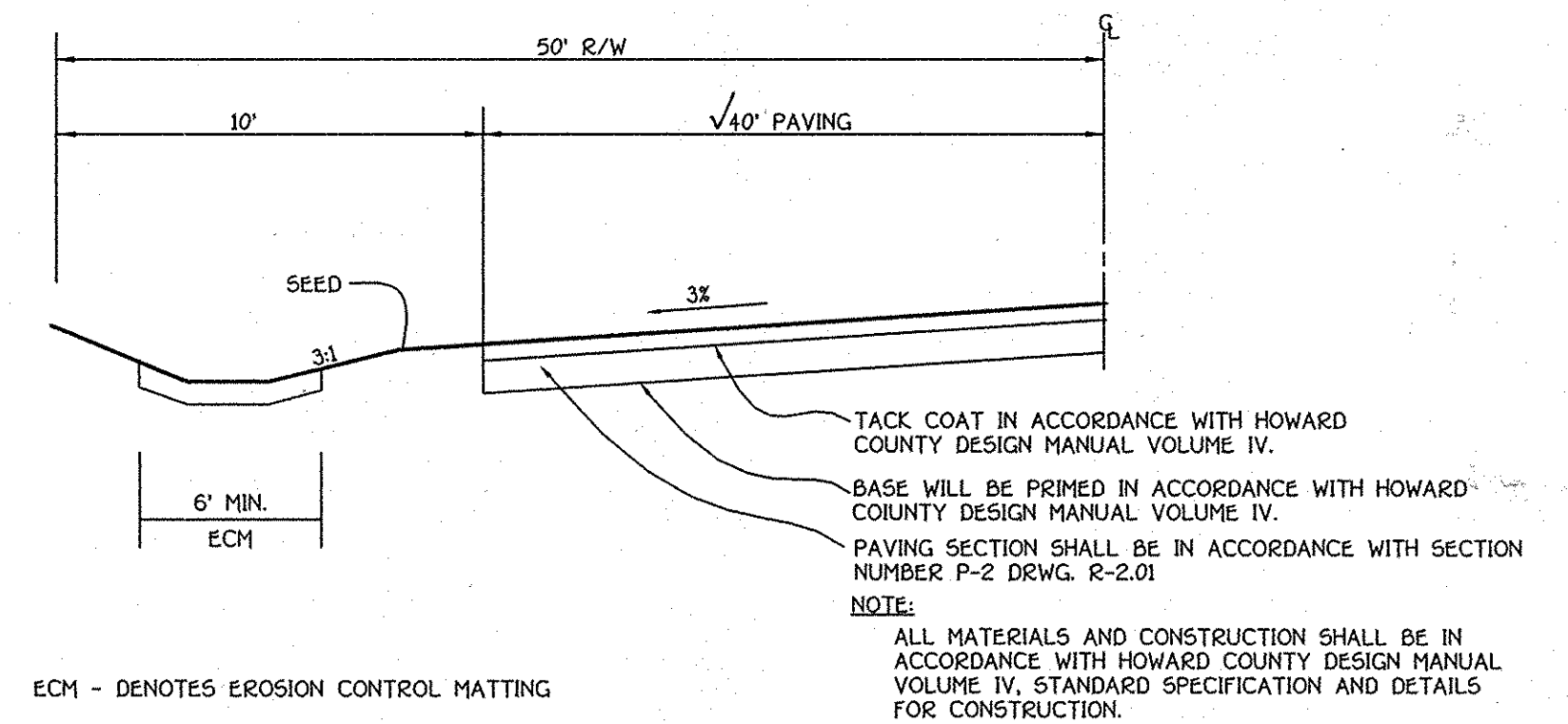
ROADWAY INFORMATION CHART							
ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	A	B	STATION LIMITS	PAVING SECTION
DALHART ROAD	PUBLIC ACCESS STREET	25 MPH *	RC-DEO	50'	√28'	√0+00 TO 4+05.98	P-2
MICHELE DRIVE	PUBLIC ACCESS STREET	25 MPH *	RC-DEO	50'	√24'	√0+00 TO 3+26.42	P-2
LEAR COURT	PUBLIC ACCESS PLACE	25 MPH *	RC-DEO	40'	√18'	√0+00 TO 8+71.89	P-2

* VERTICAL CURVE SUBJECT TO SECTION 2.3.3.A OF THE HOWARD COUNTY DESIGN MANUAL, VOLUME III



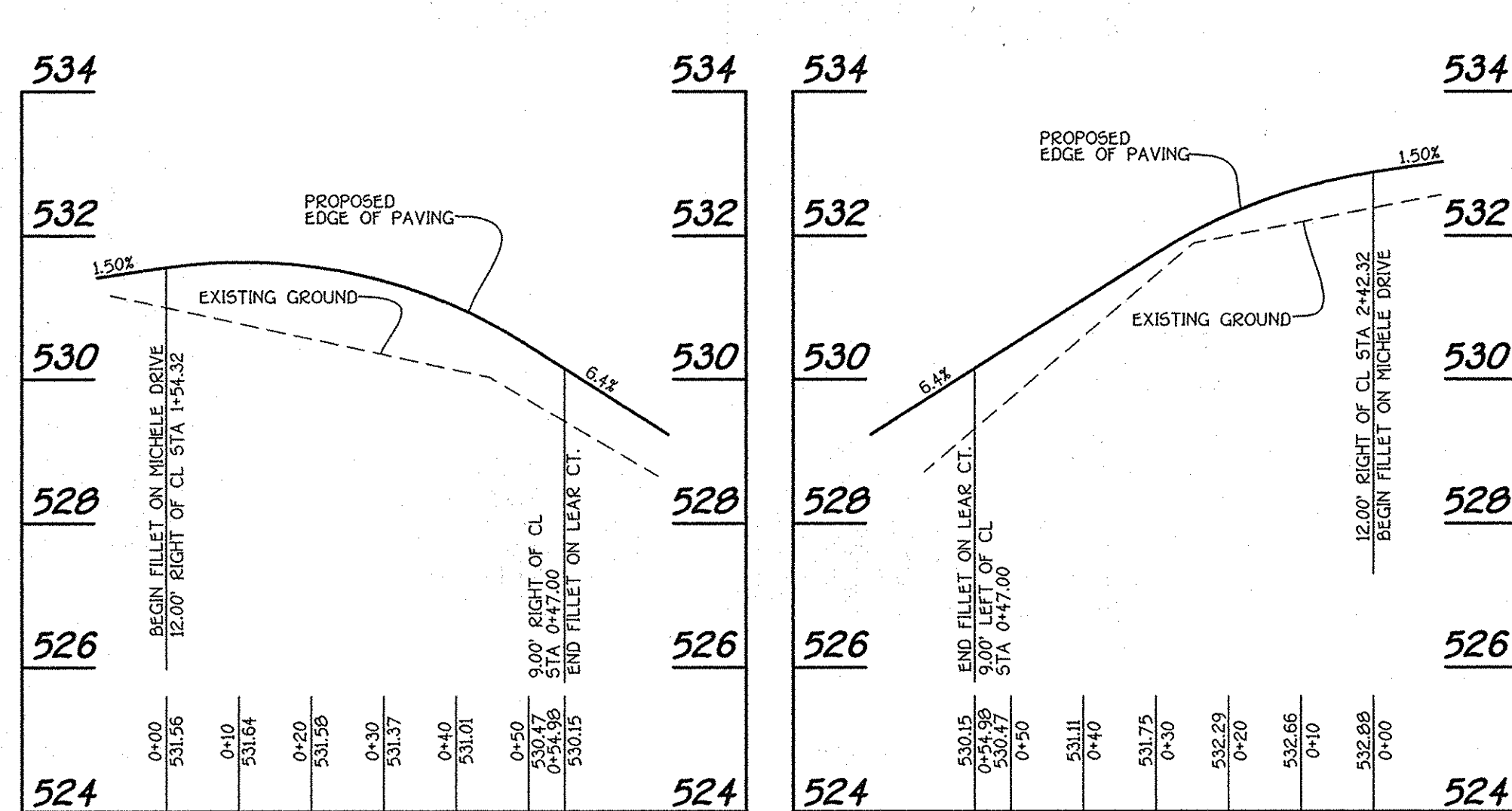
TYPICAL CUL-DE-SAC SECTION (DALHART ROAD)

NO SCALE



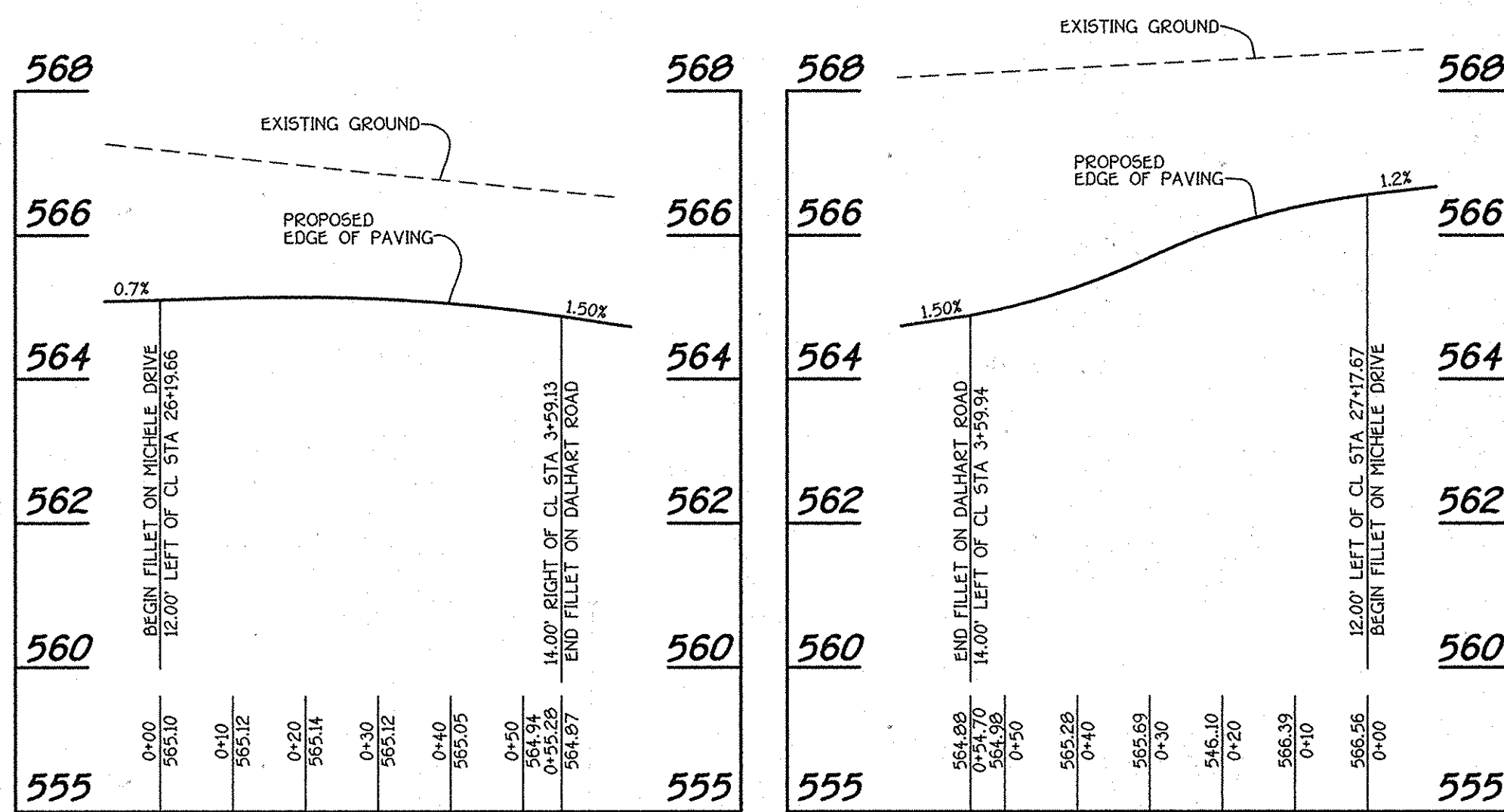
TYPICAL CUL-DE-SAC SECTION (ROAD B)

NO SCALE



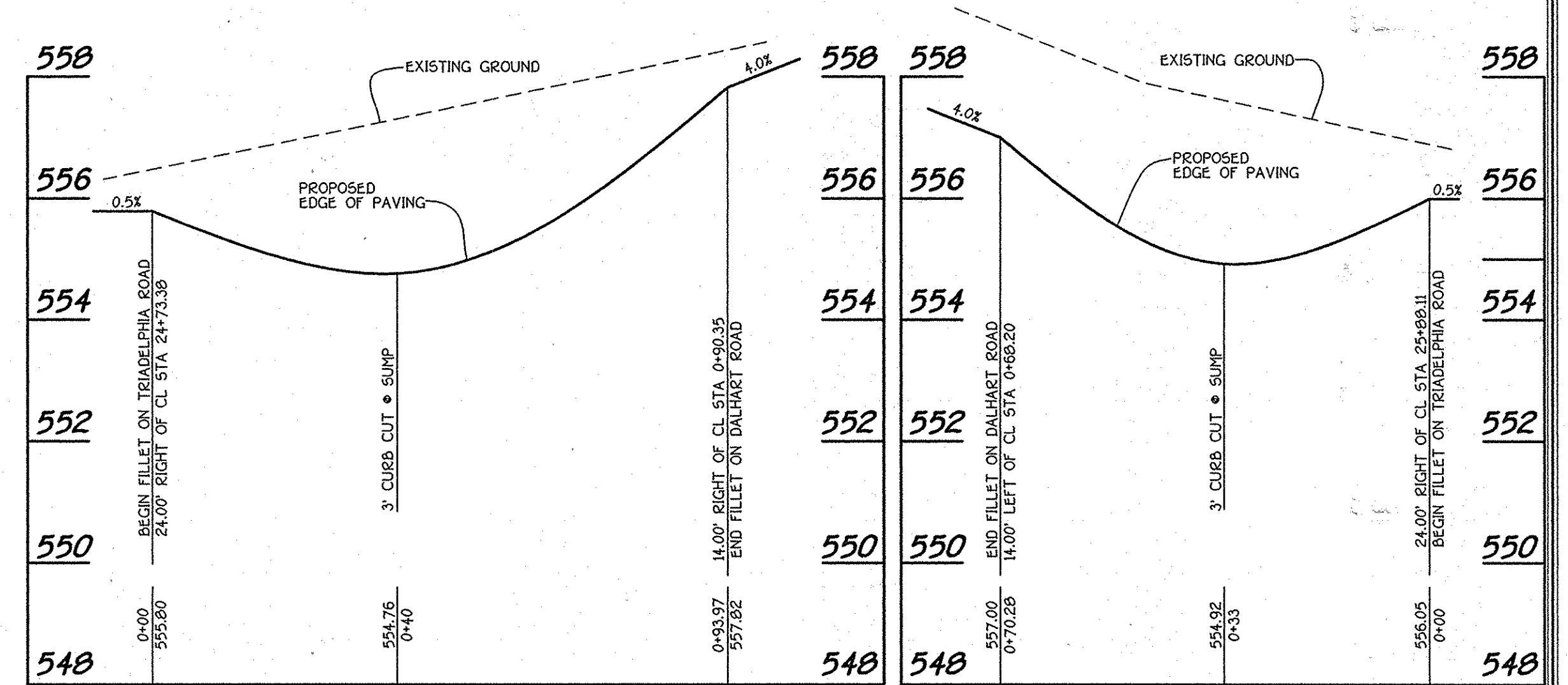
FILLET PROFILES

SCALE: HOR. : 1" = 20'
 VER. : 1" = 2'



FILLET PROFILES

SCALE: HOR. : 1" = 20'
 VER. : 1" = 2'



FILLET PROFILES

SCALE: HOR. : 1" = 20'
 VER. : 1" = 2'

NOTE: PROPOSED GRADE AT FILLETS IS AT BOTTOM OF CURB.

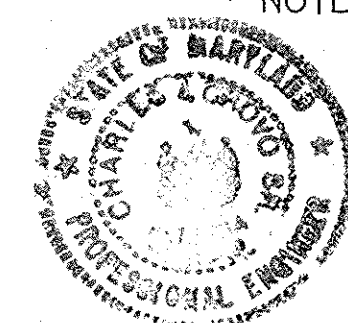
AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN UNDER THE APPROVED PLANS AND SPECIFICATIONS.
Charles J. Brown, Jr. PE NO. 19204
G. Hilt DATE

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Gleneta, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Gleneta, Maryland 21737
 (410-442-2337)

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Gleneta, Maryland 21737
 (410-442-2337)

ROAD DETAILS
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 9 OF 40

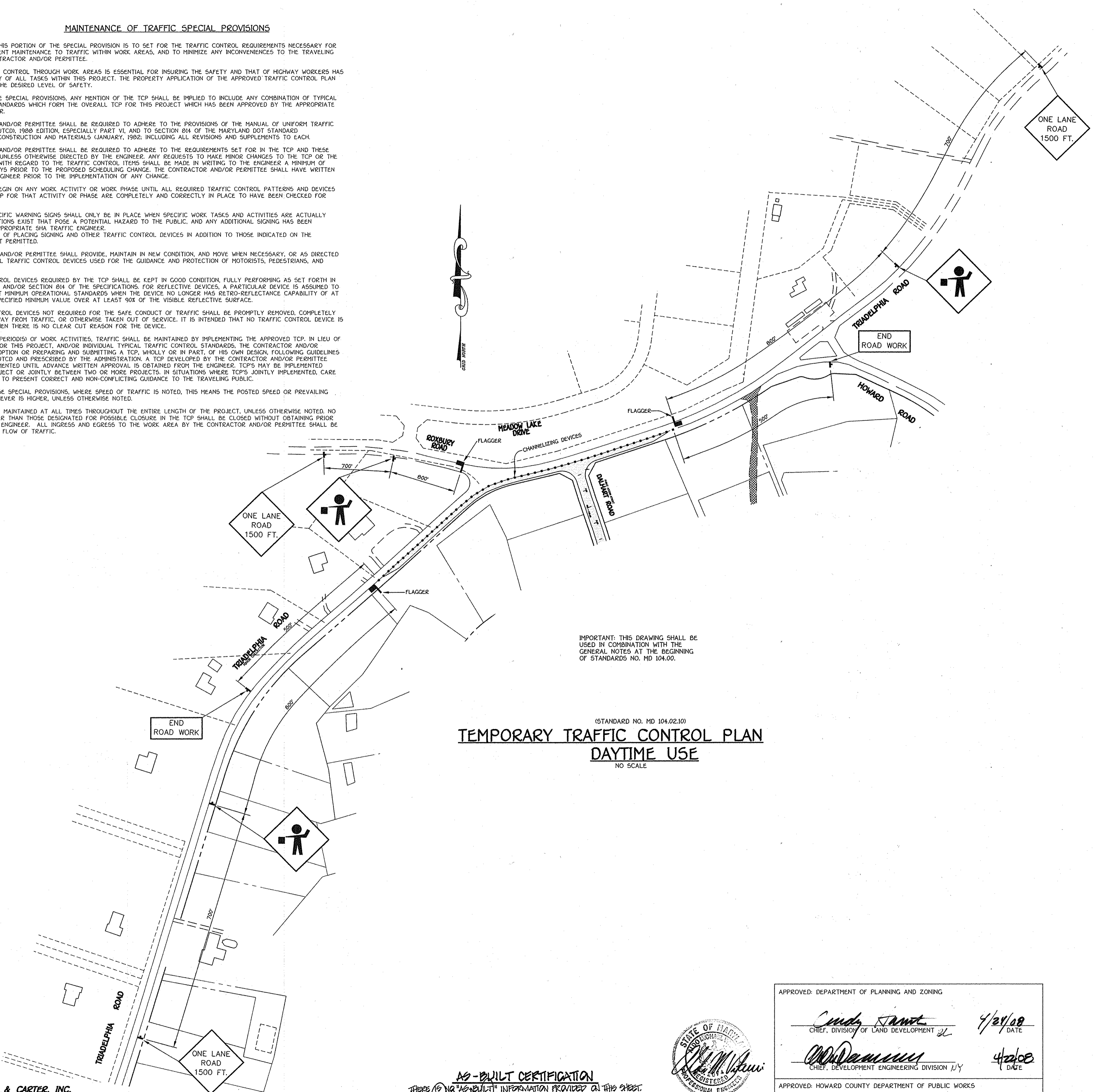
F-07-040
 AS-BUILT



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 1872 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 481-2855

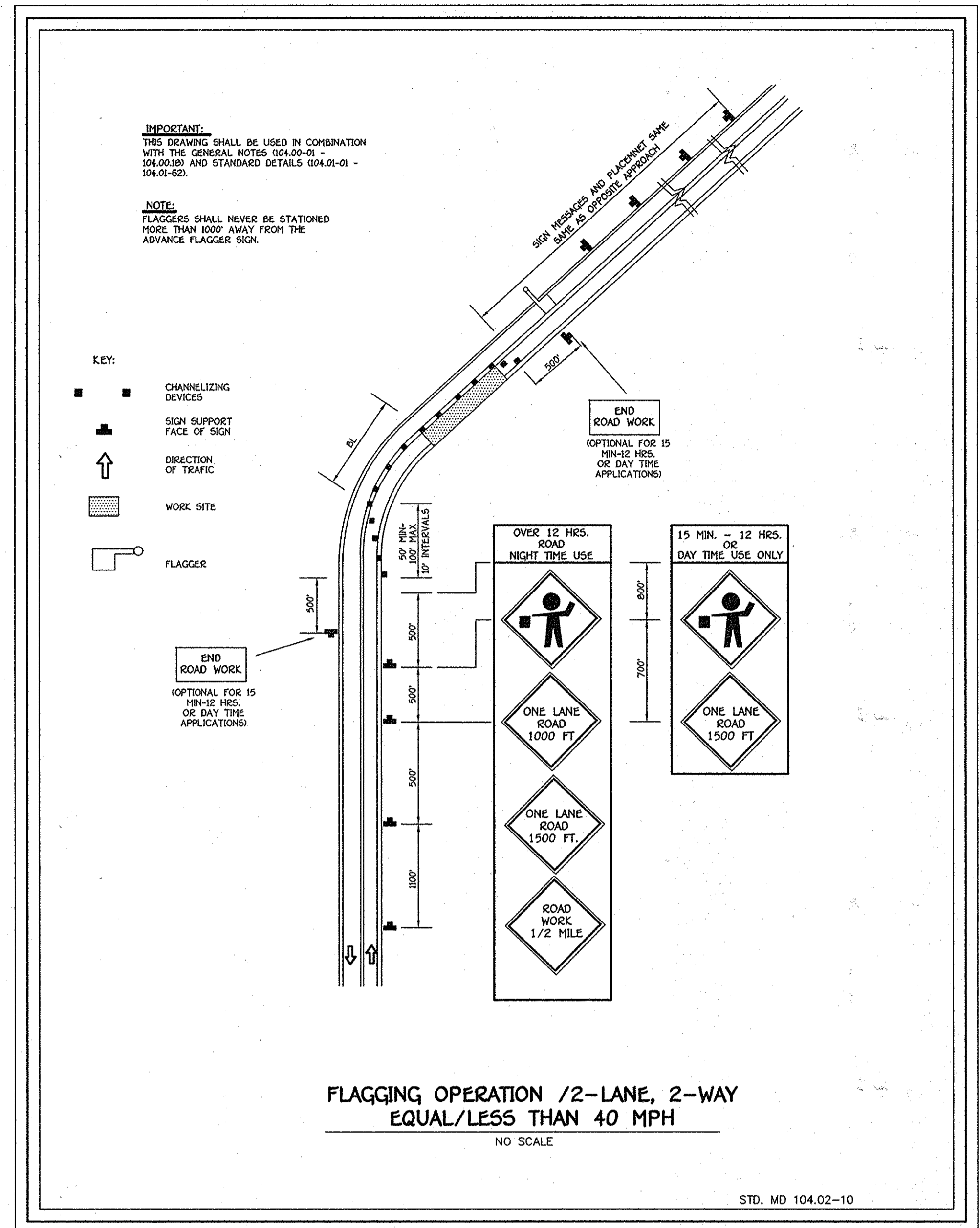
MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS

1. THE PURPOSE OF THIS PORTION OF THE SPECIAL PROVISION IS TO SET FOR THE TRAFFIC CONTROL REQUIREMENTS NECESSARY FOR THE SAFE AND EFFICIENT MAINTENANCE TO TRAFFIC WITHIN WORK AREAS, AND TO MINIMIZE ANY INCONVENIENCES TO THE TRAVELING PUBLIC AND THE CONTRACTOR AND/OR PERMITTEE.
2. PROPERTY TRAFFIC CONTROL THROUGH WORK AREAS IS ESSENTIAL FOR INSURING THE SAFETY AND THAT OF HIGHWAY WORKERS HAS THE HIGHEST PRIORITY OF ALL TASKS WITHIN THIS PROJECT. THE PROPER APPLICATION OF THE APPROVED TRAFFIC CONTROL PLAN (TCP) WILL PROVIDE THE DESIRED LEVEL OF SAFETY.
3. THROUGHOUT THESE SPECIAL PROVISIONS, ANY MENTION OF THE TCP SHALL BE IMPLIED TO INCLUDE ANY COMBINATION OF TYPICAL TRAFFIC CONTROL STANDARDS WHICH FORM THE OVERALL TCP FOR THIS PROJECT WHICH HAS BEEN APPROVED BY THE APPROPRIATE SHA TRAFFIC ENGINEER.
4. THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE PROVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), 1988 EDITION, ESPECIALLY PART VI, AND TO SECTION 814 OF THE MARYLAND DOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (JANUARY, 1992, INCLUDING ALL REVISIONS AND SUPPLEMENTS TO EACH.
5. THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE REQUIREMENTS SET FORTH IN THE TCP AND THESE SPECIAL PROVISIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY REQUESTS TO MAKE MINOR CHANGES TO THE TCP OR THE SPECIAL PROVISIONS WITH REGARD TO THE TRAFFIC CONTROL ITEMS SHALL BE MADE IN WRITING TO THE ENGINEER A MINIMUM OF THREE(3) WORKING DAYS PRIOR TO THE PROPOSED SCHEDULING CHANGE. THE CONTRACTOR AND/OR PERMITTEE SHALL HAVE WRITTEN APPROVAL OF THE ENGINEER PRIOR TO THE IMPLEMENTATION OF ANY CHANGE.
6. NO WORK SHALL BEGIN ON ANY WORK ACTIVITY OR WORK PHASE UNTIL ALL REQUIRED TRAFFIC CONTROL PATTERNS AND DEVICES INDICATED ON THE TCP FOR THAT ACTIVITY OR PHASE ARE COMPLETELY AND CORRECTLY IN PLACE TO HAVE BEEN CHECKED FOR APPROVED USAGE.
7. GENERAL AND SPECIFIC WARNING SIGNS SHALL ONLY BE IN PLACE WHEN SPECIFIC WORK TASKS AND ACTIVITIES ARE ACTUALLY UNDERWAY OR CONDITIONS EXIST THAT POSE A POTENTIAL HAZARD TO THE PUBLIC, AND ANY ADDITIONAL SIGNING HAS BEEN APPROVED BY THE APPROPRIATE SHA TRAFFIC ENGINEER.
NOTE: THE PRACTICE OF PLACING SIGNING AND OTHER TRAFFIC CONTROL DEVICES IN ADDITION TO THOSE INDICATED ON THE APPROVED TCP IS NOT PERMITTED.
8. 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.
9. ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE TCP SHALL BE KEPT IN GOOD CONDITION, FULLY PERFORMING AS SET FORTH IN THE TCP. THE MUTCD, 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 60% OF THE SPECIFIED MINIMUM VALUE OVER AT LEAST 90% OF THE VISIBLE REFLECTIVE SURFACE.
10. 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.
11. THROUGHOUT THE PERIOD(S) 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 MUTCD 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.
12. 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.
13. TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT, UNLESS OTHERWISE NOTED. NO TRAVEL LANE(S) 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.



IMPORTANT: THIS DRAWING SHALL BE USED IN COMBINATION WITH THE GENERAL NOTES AT THE BEGINNING OF STANDARDS NO. MD 104.00.

(STANDARD NO. MD 104.02.10)
TEMPORARY TRAFFIC CONTROL PLAN
DAYTIME USE
NO SCALE



FLAGGING OPERATION 1/2-LANE, 2-WAY
EQUAL/LESS THAN 40 MPH
NO SCALE

STD. MD 104.02-10

KEY

- SIGN SUPPORT
- FACE OF SIGN
- CHANNELIZING DEVICES
- WORK SITE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
NATIONAL HEADQUARTERS: 1000 W. BROADWAY, SUITE 1000, ELICOTT CITY, MARYLAND 21042
TELEPHONE: 410-286-1000

AS-BUILT CERTIFICATION
I HEREBY CERTIFY THAT THE INFORMATION PROVIDED ON THIS SHEET IS TRUE AND CORRECT.
Charles J. Grant, Sr.
CHARLES J. GRANT, SR. P.E. NO. 19204
DATE: 4/18/14



APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hunt 4/21/08
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 4/21/08
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William Z. Marshall 4-10-09
CHIEF, BUREAU OF HIGHWAYS
DATE: 4-10-09

OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)
And
Warfield Brothers
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

TRAFFIC CONTROL PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 10 OF 40

F-07-040
AS-BUILT

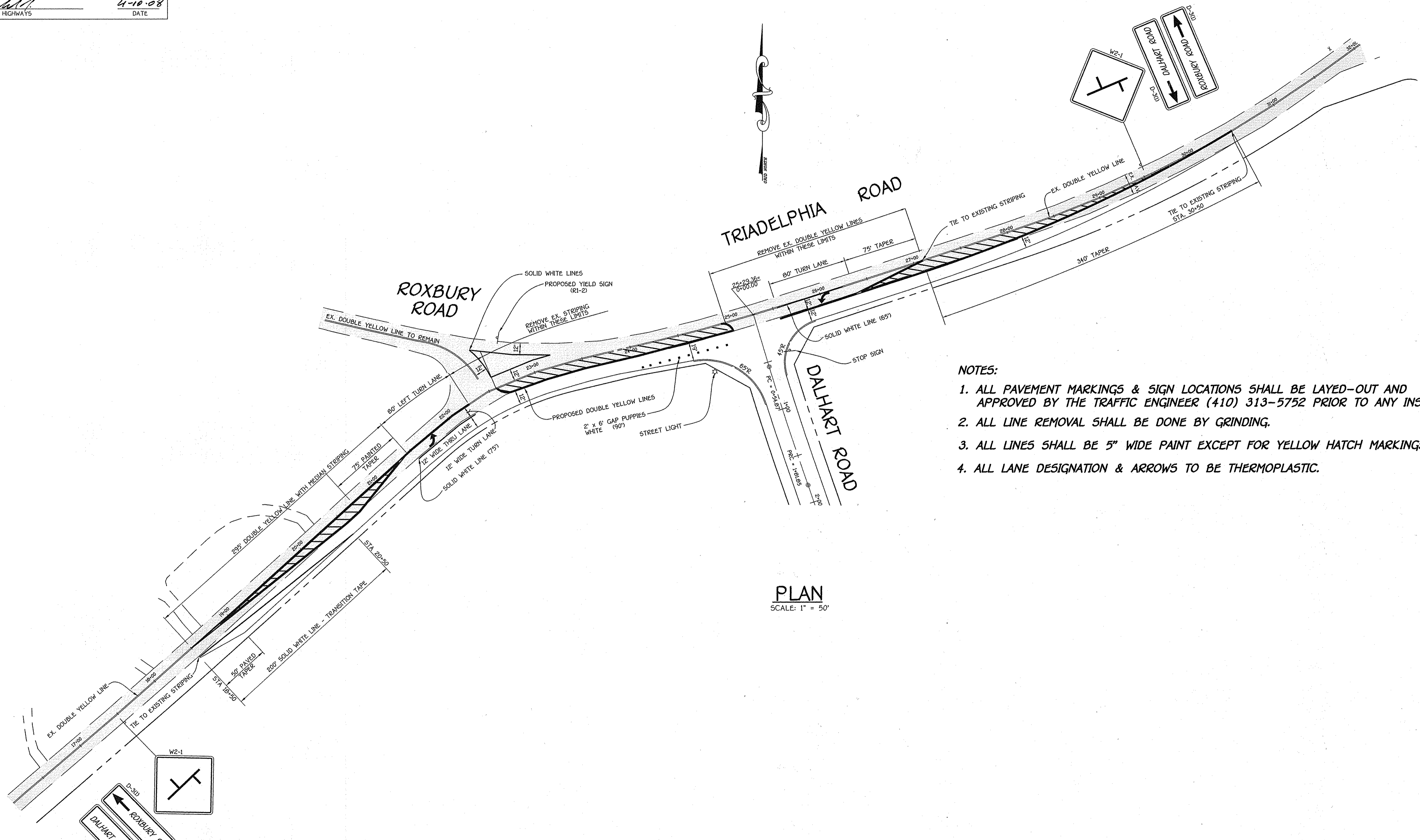
K:\Drawings\330310 Warfield Homeowners\FINALS\330310 SEC2 SHEET 10 TRAFFIC PLAN.dwg, 12/19/2007 9:07:13 AM

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamble 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT / DATE

Willie J. Smith 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION / DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Willie J. Smith 4-10-08
 CHIEF, BUREAU OF HIGHWAYS / DATE

BC



- NOTES:**
1. ALL PAVEMENT MARKINGS & SIGN LOCATIONS SHALL BE LAYED-OUT AND APPROVED BY THE TRAFFIC ENGINEER (410) 313-5752 PRIOR TO ANY INSTALLATION.
 2. ALL LINE REMOVAL SHALL BE DONE BY GRINDING.
 3. ALL LINES SHALL BE 5" WIDE PAINT EXCEPT FOR YELLOW HATCH MARKINGS WHICH ARE 12" WIDE.
 4. ALL LANE DESIGNATION & ARROWS TO BE THERMOPLASTIC.

PLAN
 SCALE: 1" = 50'

K:\Drawings\310310 Warfield Homes\310310 SECT 2 STRIPING PLAN.dwg, 12/19/2007 9:12:42 AM

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2337

AS-BUILT CERTIFICATION
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.
Charles J. George, Jr. 6/18/08
 CHARLES J. GEORGE, JR. PE NO. 13204 / DATE



OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

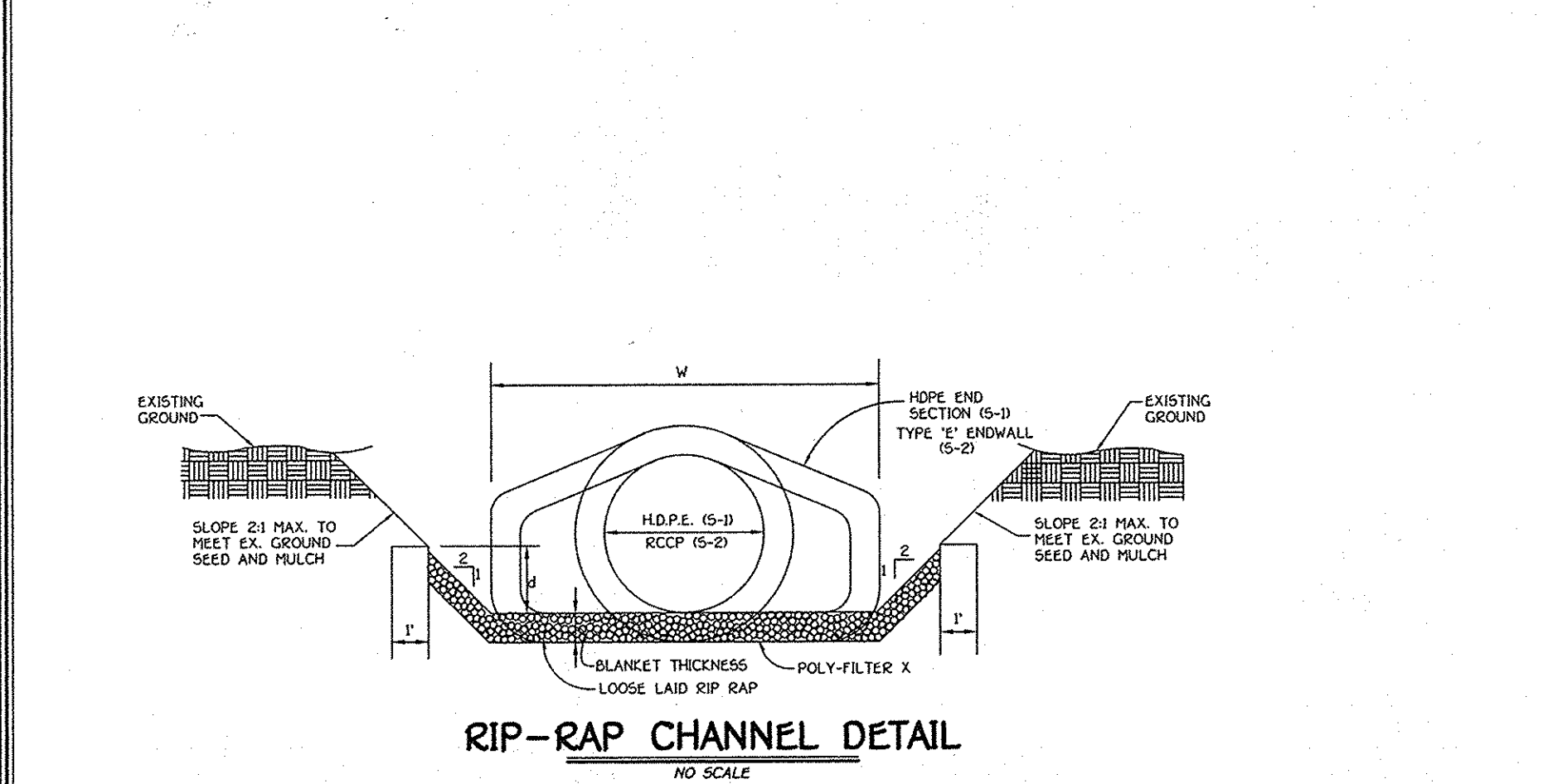
DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

STRIPING PLAN
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 11 OF 40

F-07-040
AS-BUILT

STRUCTURE SCHEDULE							
STRUCTURE NO.	TOP ELEVATION	IN.VIN.	IN.VOUT.	COORDINATES OR CL STATION	WIDTH	TYPE	REMARKS
I-1	426.36	927.85	525.66-26	15250 LEFT OF CL STA 0+12.50 (MICHELE DRIVE)	-	√ D INLET	D - 4.11
I-2	528.38	1010	488.16-924.76	10300 RIGHT OF CL STA 0+12.50 (MICHELE DRIVE)	-	√ D INLET	D - 4.11
I-3	541.02	1010	537.46-24	10300 LEFT OF CL STA 9+33.65 (MICHELE DRIVE)	-	√ D INLET	D - 4.11
I-4	541.02	1010	537.46-24	10300 RIGHT OF CL STA 9+33.65 (MICHELE DRIVE)	-	√ D INLET	D - 4.11
I-5	546.04	953.17	554.66-22	√ 20' LEFT OF CL STA 18+54.00 (MICHELE DRIVE)	36"	√ D INLET	D - 4.11
I-6	546.04	953.17	554.66-22	√ 20' LEFT OF CL STA 20+00.00 (MICHELE DRIVE)	36"	√ D INLET	D - 4.11
I-7	546.04	953.17	554.66-22	√ 20' LEFT OF CL STA 0+48 (DALHART ROAD)	36"	√ D INLET	D - 4.11
I-8	560.72	953.17	554.66-22	√ 22' RIGHT OF CL STA 2+19.50 (DALHART ROAD)	36"	√ D INLET	D - 4.11
I-9	563.99	1010	560.94-25	√ 22' LEFT OF CL STA 23+38.55 (MICHELE DRIVE)	36"	√ D INLET	D - 4.11
I-10	563.99	1010	560.94-25	√ 20' RIGHT OF CL STA 23+38.55 (MICHELE DRIVE)	36"	√ D INLET	D - 4.11
I-11	550.89	971	545.77-22	538.72-19	36"	√ A-5	D - 4.01
I-12	550.89	971	545.77-22	538.72-19	36"	√ A-5	D - 4.01
I-13	550.89	971	545.77-22	538.72-19	36"	√ A-5	D - 4.01
I-14	550.89	971	545.77-22	538.72-19	36"	√ A-5	D - 4.01
I-15	518.70	971.99	516.79-17	505.62-56	42"	√ D INLET	D - 4.11
I-16	528.00	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-17	528.00	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-18	530.00	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-19	530.00	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-20	510.00	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-21	533.48	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-22	514.30	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-23	514.30	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-24	509.92	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-25	509.92	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-26	546.04	953.17	554.66-22	554.66-22	36"	√ D INLET	D - 4.11
I-27	499.00	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-28A	554.50	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-28B	554.50	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
I-28C	554.50	971.99	516.79-17	505.62-56	36"	√ D INLET	D - 4.11
M-1	541.02	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-2	540.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-3	536.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-4	544.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-5	548.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-6	557.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-7	552.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-8	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-9	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-10	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-11	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-12	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-13	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-14	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
M-15	555.00	971.99	516.79-17	505.62-56	36"	√ STD. MANHOLE	G - 5.12
S-1	526.66	971.99	516.79-17	505.62-56	36"	√ 24" CONC. END SECT	D - 5.51
S-2	496.00	971.99	516.79-17	505.62-56	36"	√ 30" CONC. END SECT	D - 5.51
S-3	496.00	971.99	516.79-17	505.62-56	36"	√ 24" CONC. END SECT	D - 5.51
S-4	550.00	971.99	516.79-17	505.62-56	36"	√ 24" CONC. END SECT	D - 5.51
S-5	537.00	971.99	516.79-17	505.62-56	36"	√ 24" CONC. END SECT	D - 5.51
S-6	550.00	971.99	516.79-17	505.62-56	36"	√ 18" CONC. END SECT	D - 5.51
R-1	498.75	971.99	516.79-17	505.62-56	36"	√ CONCRETE RISER	SEE SHEET 28
R-2	488.00	971.99	516.79-17	505.62-56	36"	√ CONCRETE RISER	SEE SHEET 29
R-3	488.00	971.99	516.79-17	505.62-56	36"	√ CONCRETE RISER	SEE SHEET 30
R-4	539.00	971.99	516.79-17	505.62-56	36"	√ CONCRETE RISER	SEE SHEET 31
HW-1	498.50	971.99	516.79-17	505.62-56	36"	√ TYPE 'A' HEADWALL	D - 5.11
HW-2	481.00	971.99	516.79-17	505.62-56	36"	√ TYPE 'A' HEADWALL	D - 5.11
HW-3	481.00	971.99	516.79-17	505.62-56	36"	√ TYPE 'A' HEADWALL	D - 5.11

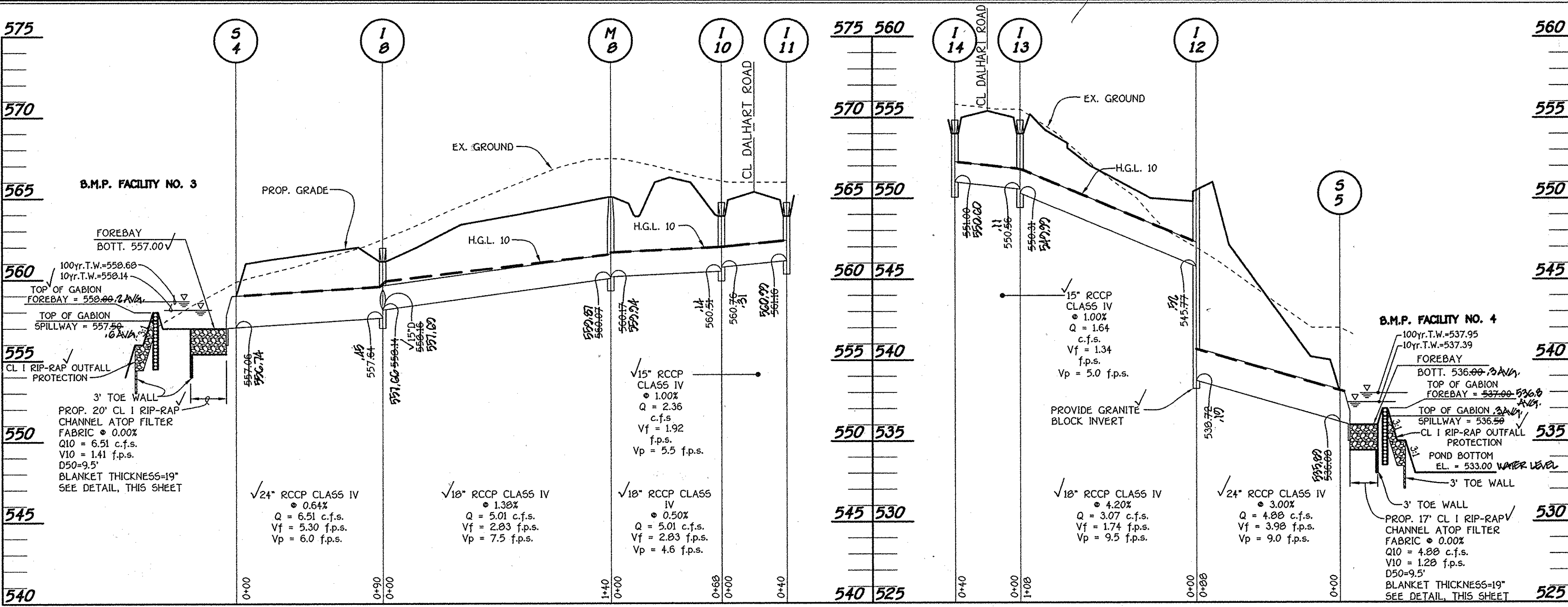
* DENOTES THROAT OPENING ELEVATION
 @ DENOTES NUMBER OF PIPES WITH THAT ELEVATION



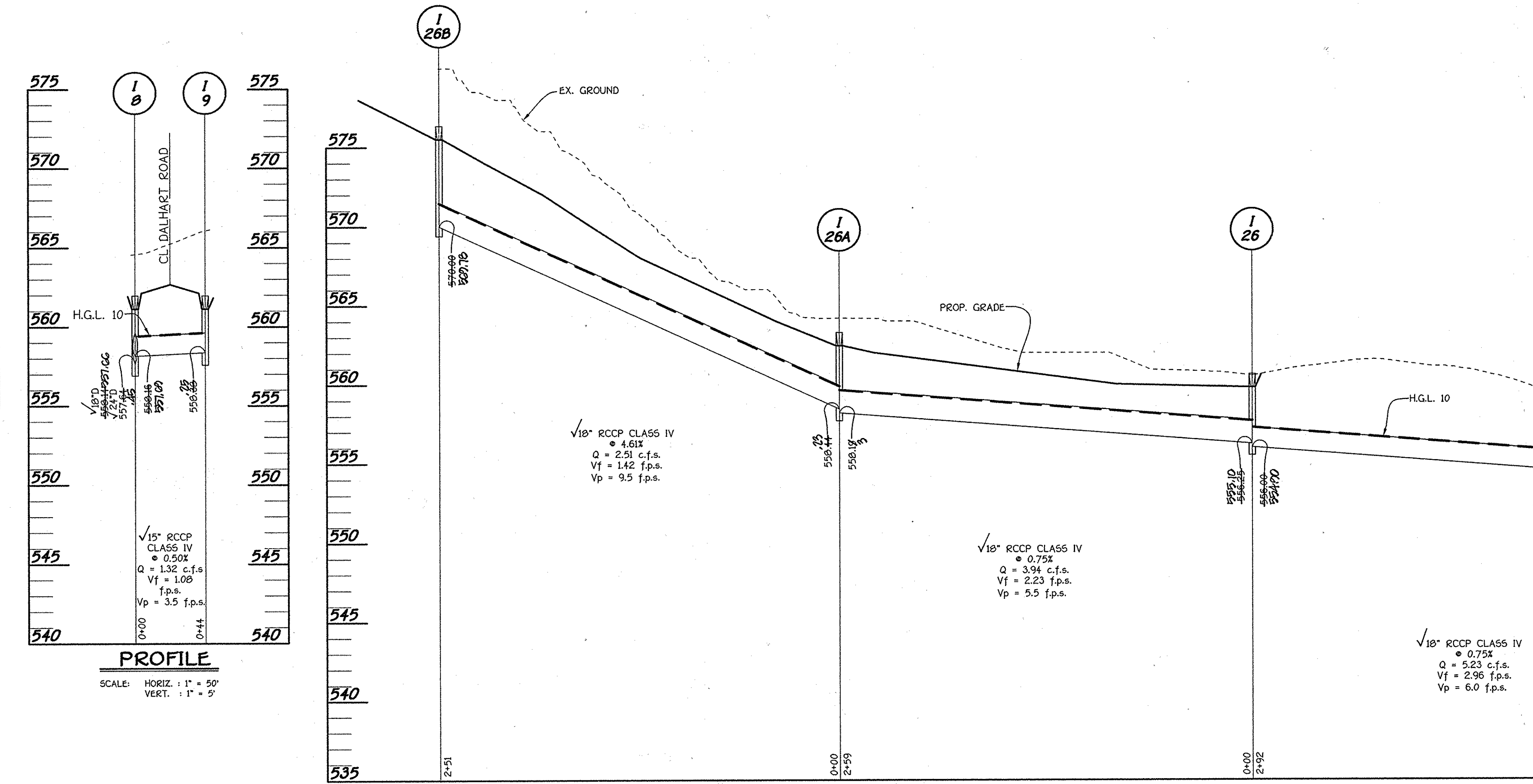
RIP-RAP CHANNEL DESIGN DATA													
STRUCTURE	AREA	WETTED PERIMETER	R	R ^{2/3}	S	S ^{1/2}	W	d	V (ft/s)	BLANKET THICKNESS			
S-2	8.89	13.44	0.6815	0.7981	0.005	0.0707	10'	0.72	0.04	1.99	17.64	9.5"	19"
S-3	5.98	12.41	0.4819	0.6132	0.005	0.0707	10'	0.54	0.04	1.61	9.49	9.5"	19"
S-4	4.67	11.92	0.3918	0.5338	0.005	0.0707	10'	0.43	0.04	1.41	6.51	9.5"	19"
S-5	3.97	11.65	0.3408	0.4861	0.005	0.0707	10'	0.37	0.04	1.28	4.88	9.5"	19"
S-6	4.55	11.88	0.3830	0.5257	0.005	0.0707	10'	0.42	0.04	1.39	6.23	9.5"	19"

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 1072 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 831-2222

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 12/20/07



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



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

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 puncturing, 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.
- Stones for the riprap or gabion outlets may be placed by equipment. Both shall each 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 equals filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Careful placement will be required to the extent necessary to prevent damage to the permanent works.

ROCK OUTLET PROTECTION III
 NO SCALE

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN AND THE APPROVED PLANS AND SPECIFICATIONS.
 CHARLES J. OROVA, SR., PE NO 13204
 DATE: 6/18/14

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenold, Maryland 21737
 (410) 442-2337

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenold, Maryland 21737
 (410) 442-2337

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chantel
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/20/08

Willa Deuninger
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 4/20/08

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Willa Z. Wash
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 4-10-08

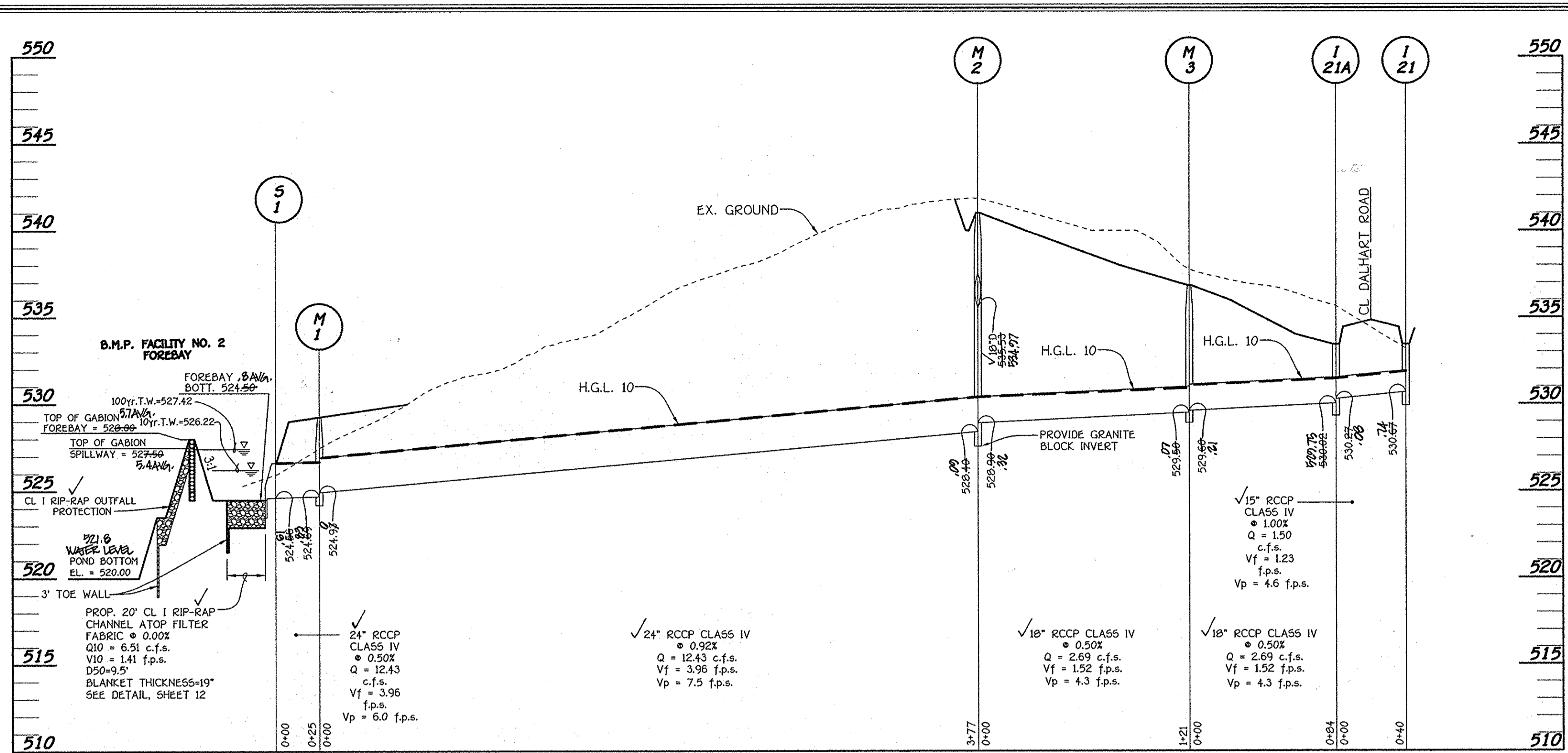
PIPE SCHEDULE		
SIZE	CLASS	LENGTH
6"	PVC, SCH. 40	47 L.F.
15"	RCCP, CLASS IV	500 L.F.
18"	RCCP, CLASS IV	2459 L.F.
24"	RCCP, CLASS IV	2921 L.F.
30"	RCCP, CLASS IV	559 L.F.
24"	ASTM C-361, B-25	85 L.F.
36"	ASTM C-361, B-25	82 L.F.

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 12/20/07

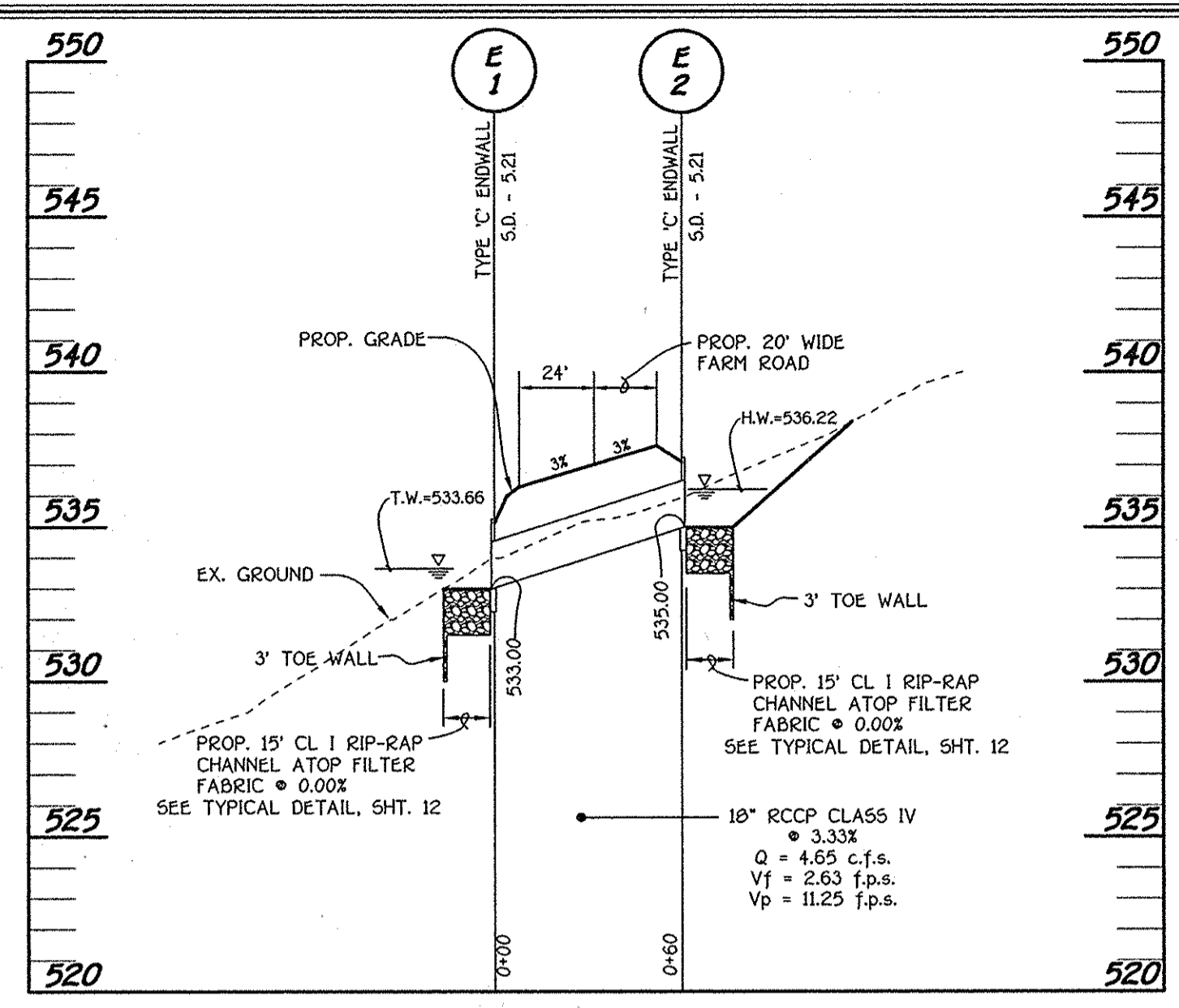
STORM DRAIN PROFILES AND STRUCTURE SCHEDULE
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 12 OF 40

F-07-040
 AS-BUILT

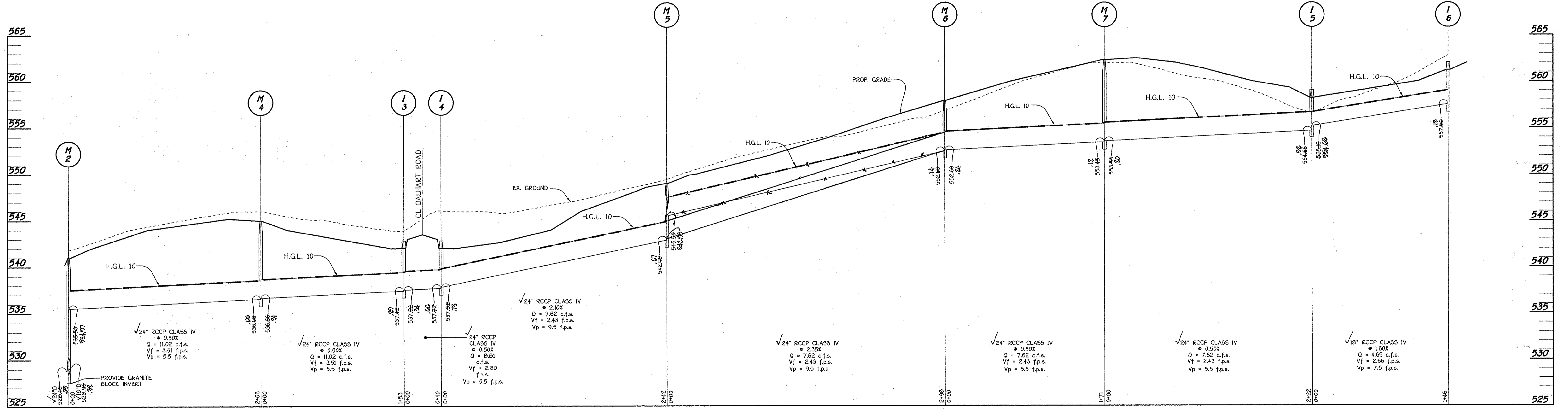


PROFILE
SCALE: HORIZ. : 1" = 50'
VERT. : 1" = 5'



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

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Judy Harro 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE
Mike Deinum 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Wills R. Mott 4-10-09
 CHIEF, BUREAU OF HIGHWAYS
 DATE



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



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN NEAR THE APPROVED PLANS AND SPECIFICATIONS.
 CHARLES J. CRONIN, SR. PE NO 12221-01
 DATE 4/18/14

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 410.461.2020

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

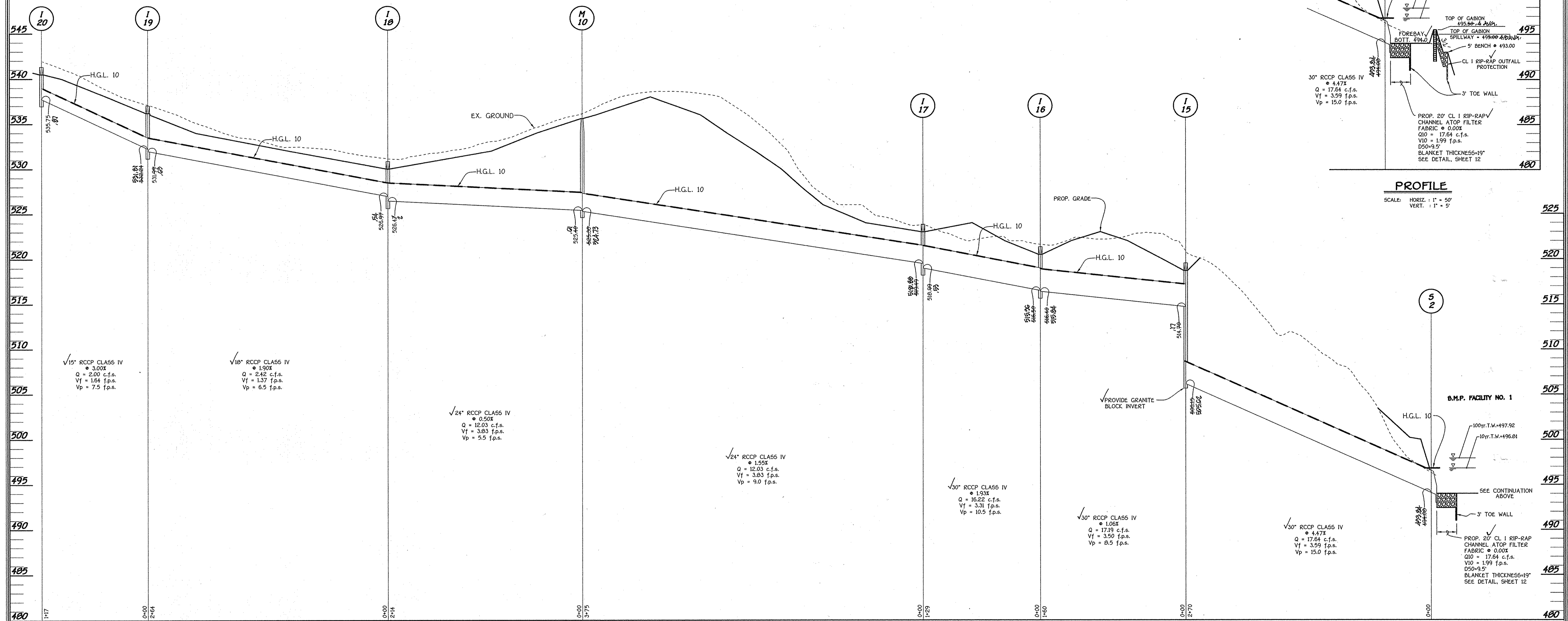
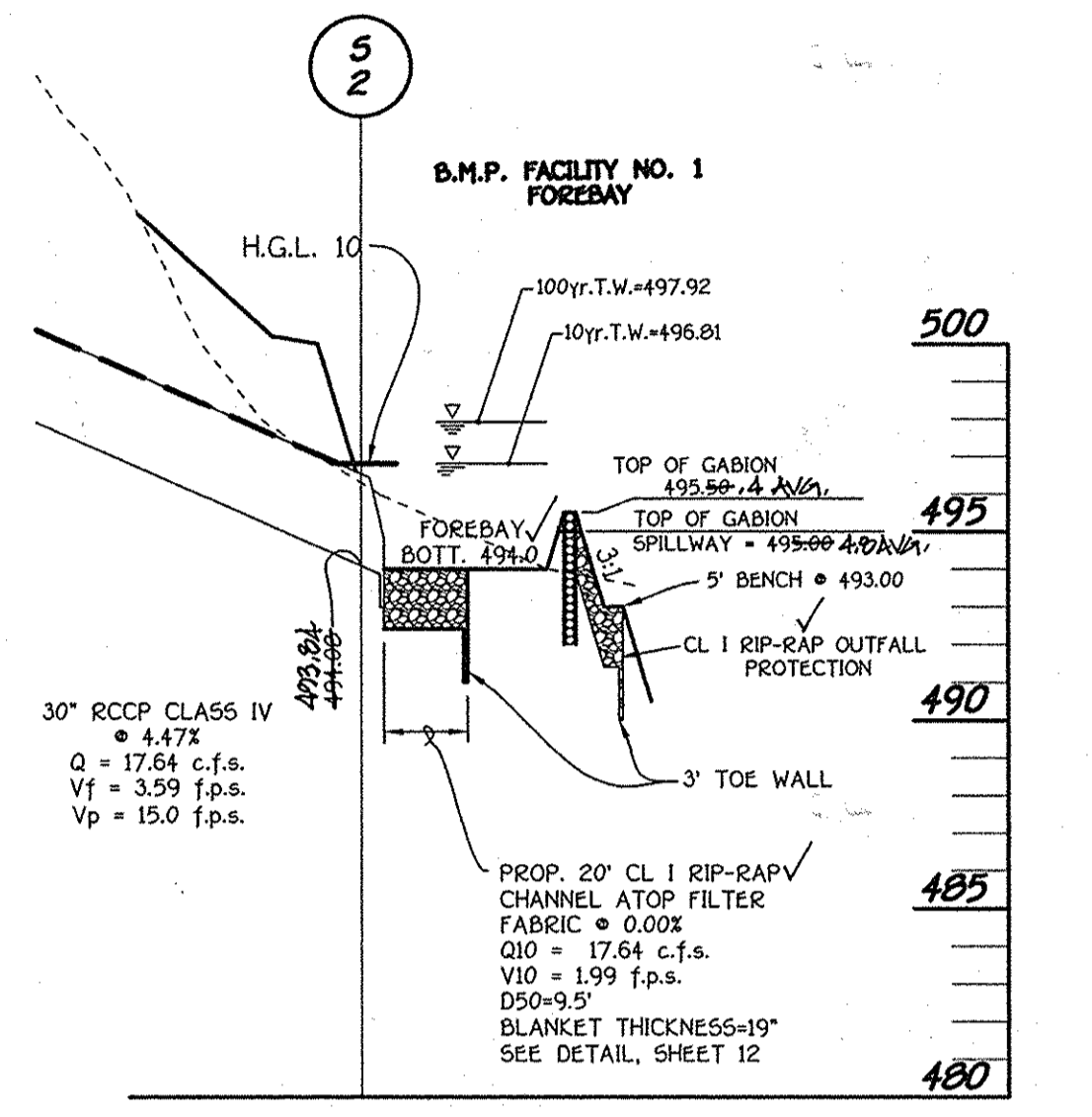
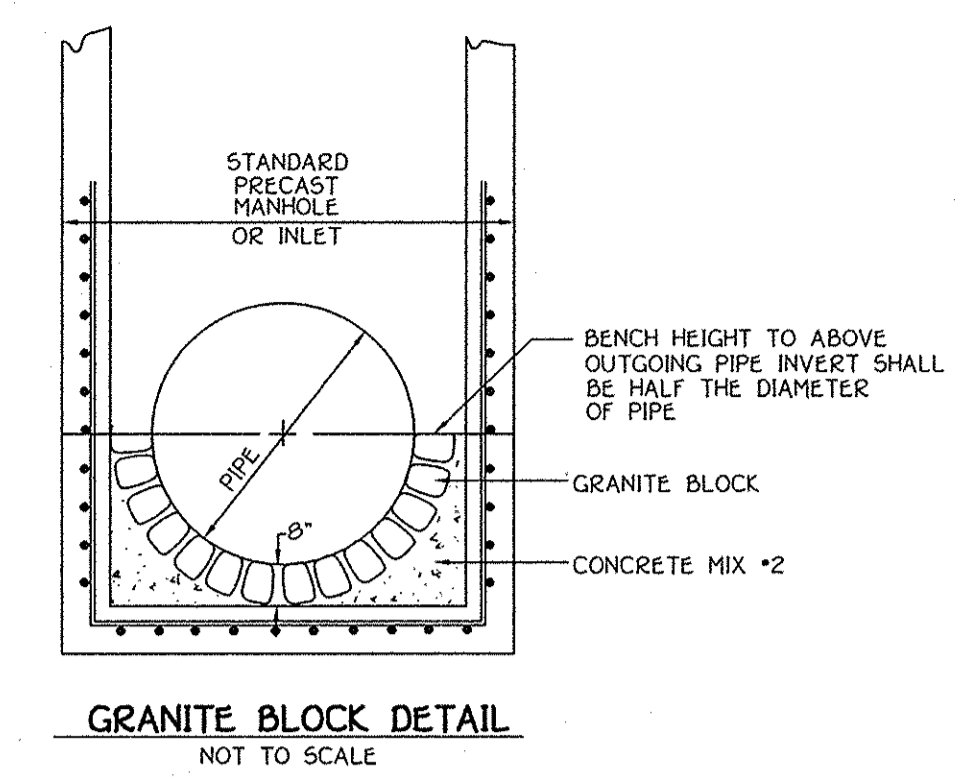
STORM DRAIN PROFILES
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-60, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'.
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 95
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 13 OF 40

F-07-040
AS-BUILT

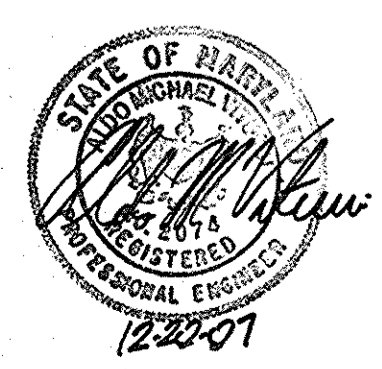
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Kramb 4/21/08
 CHIEF, DIVISION OF LAND DEVELOPMENT 150 DATE

W. J. M. ... 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 150 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
W. J. M. ... 4-10-07
 CHIEF, BUREAU OF HIGHWAYS 150 DATE



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



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
Charles J. Crova 6/18/14
 CHARLES J. CROVA, SR., P.E. NO. 19204 DATE

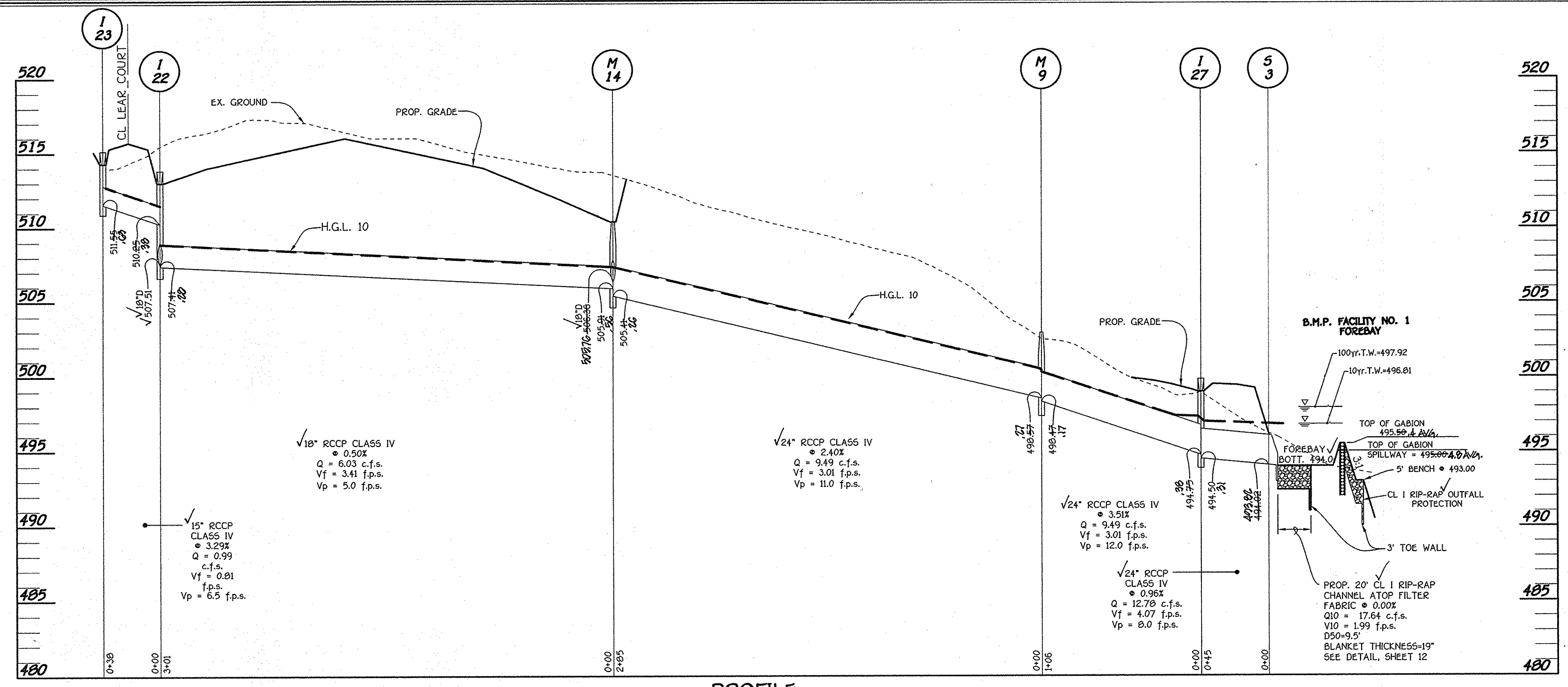
OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

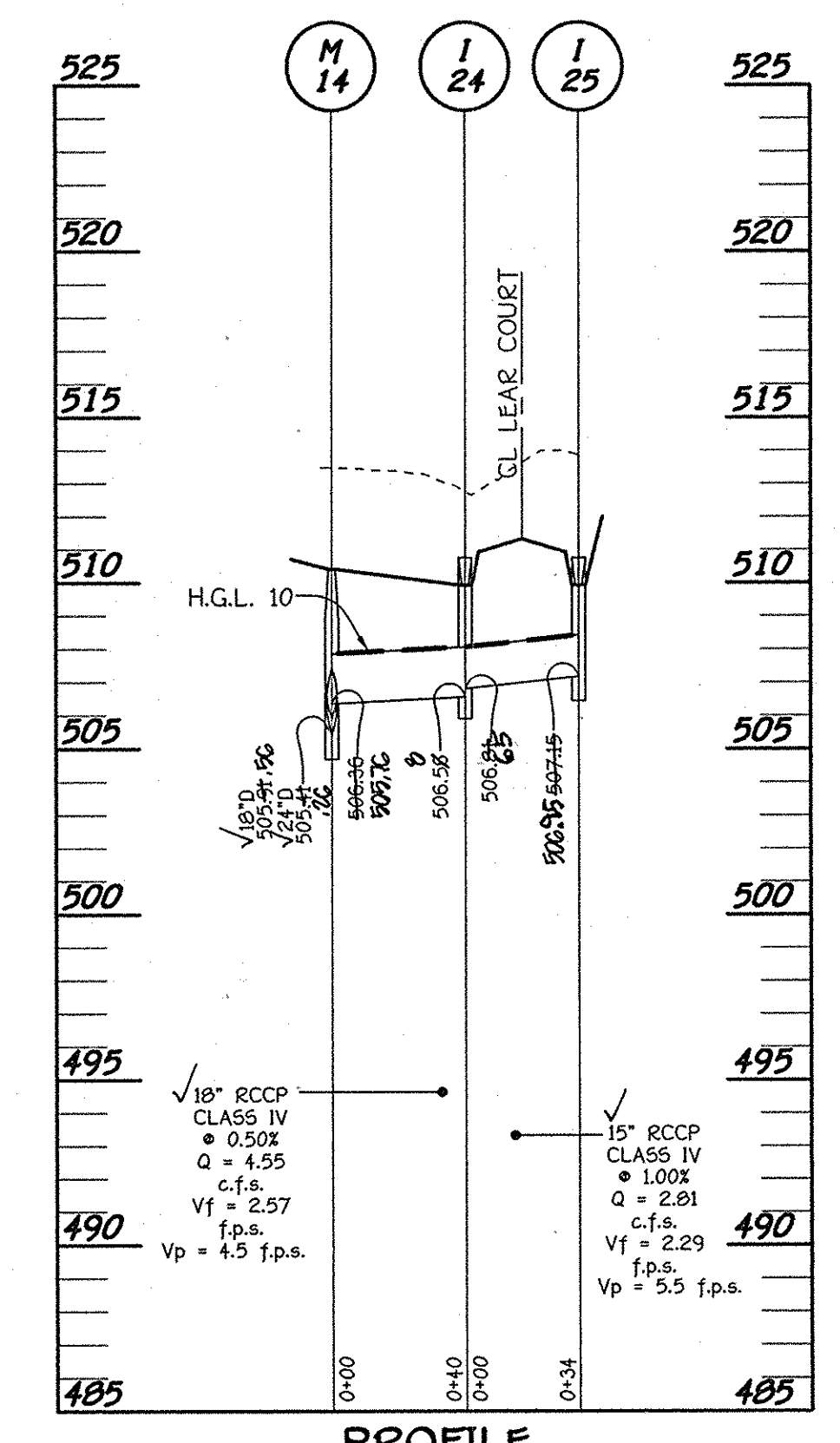
STORM DRAIN PROFILES
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 14 OF 40

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Starob 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT PL DATE

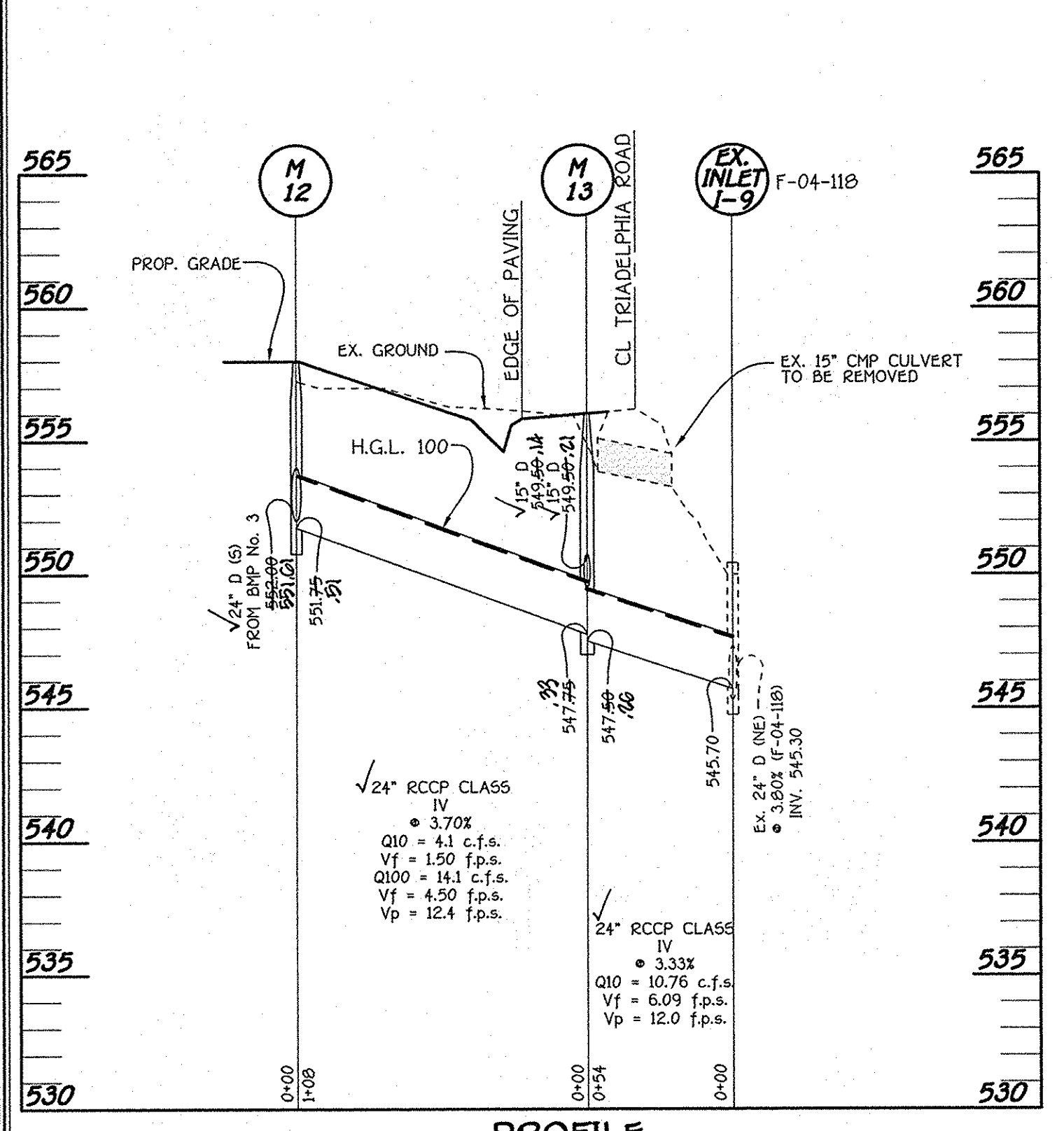
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Mike Z. Whit 4-10-07
 CHIEF, BUREAU OF HIGHWAYS MW DATE



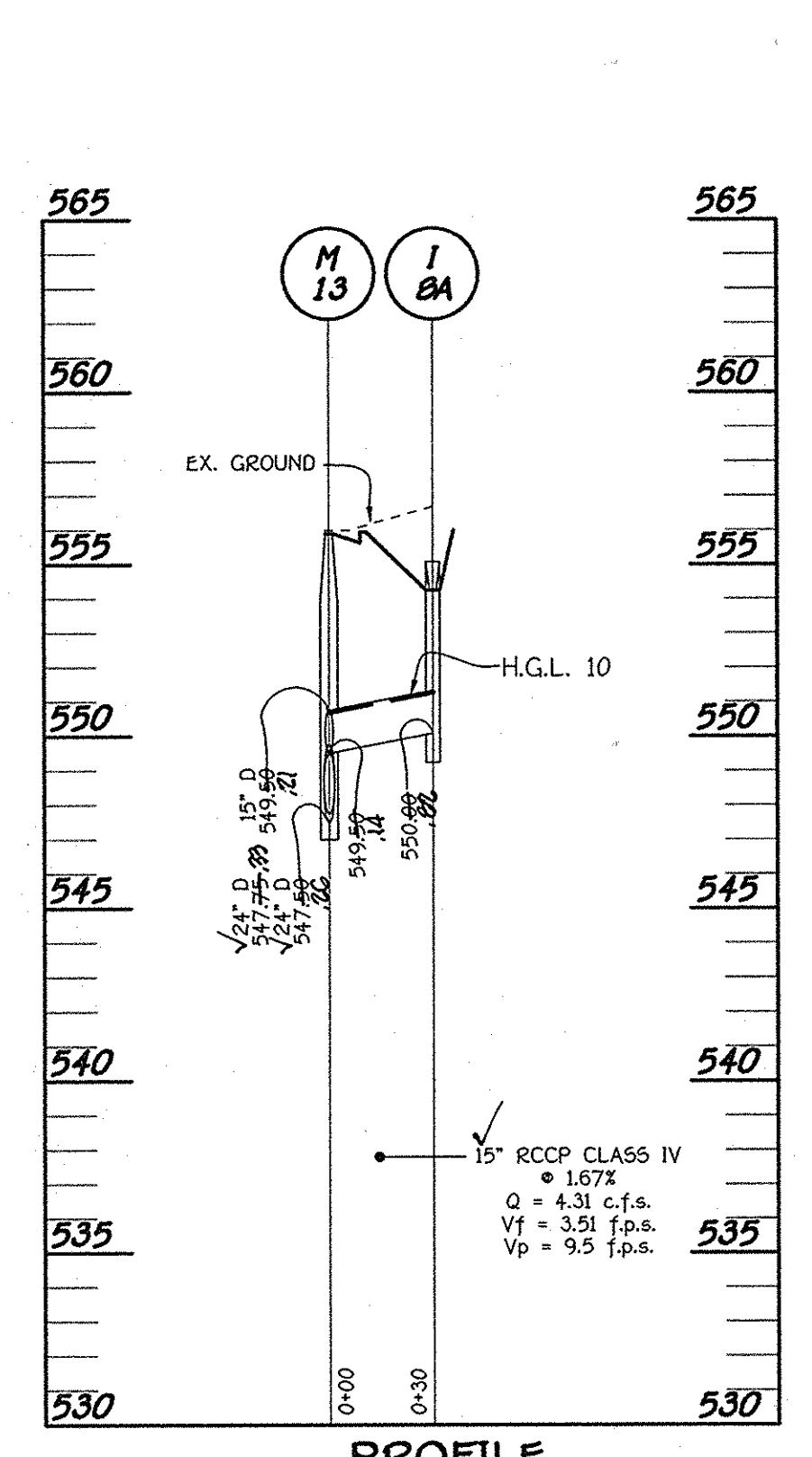
PROFILE
 SCALE: HORIZ. : 1" = 50'
 VERT. : 1" = 5'



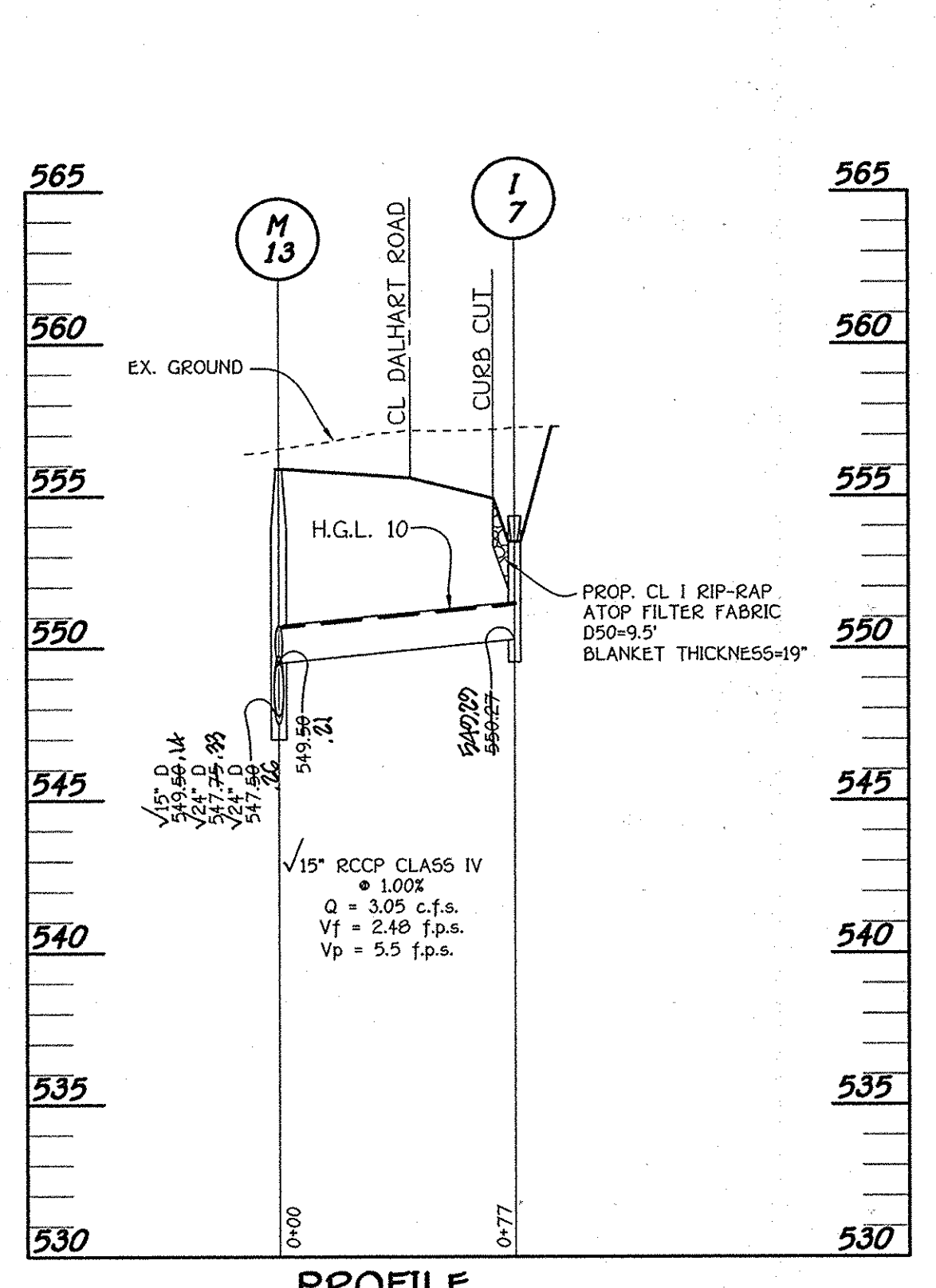
PROFILE
 SCALE: HORIZ. : 1" = 50'
 VERT. : 1" = 5'



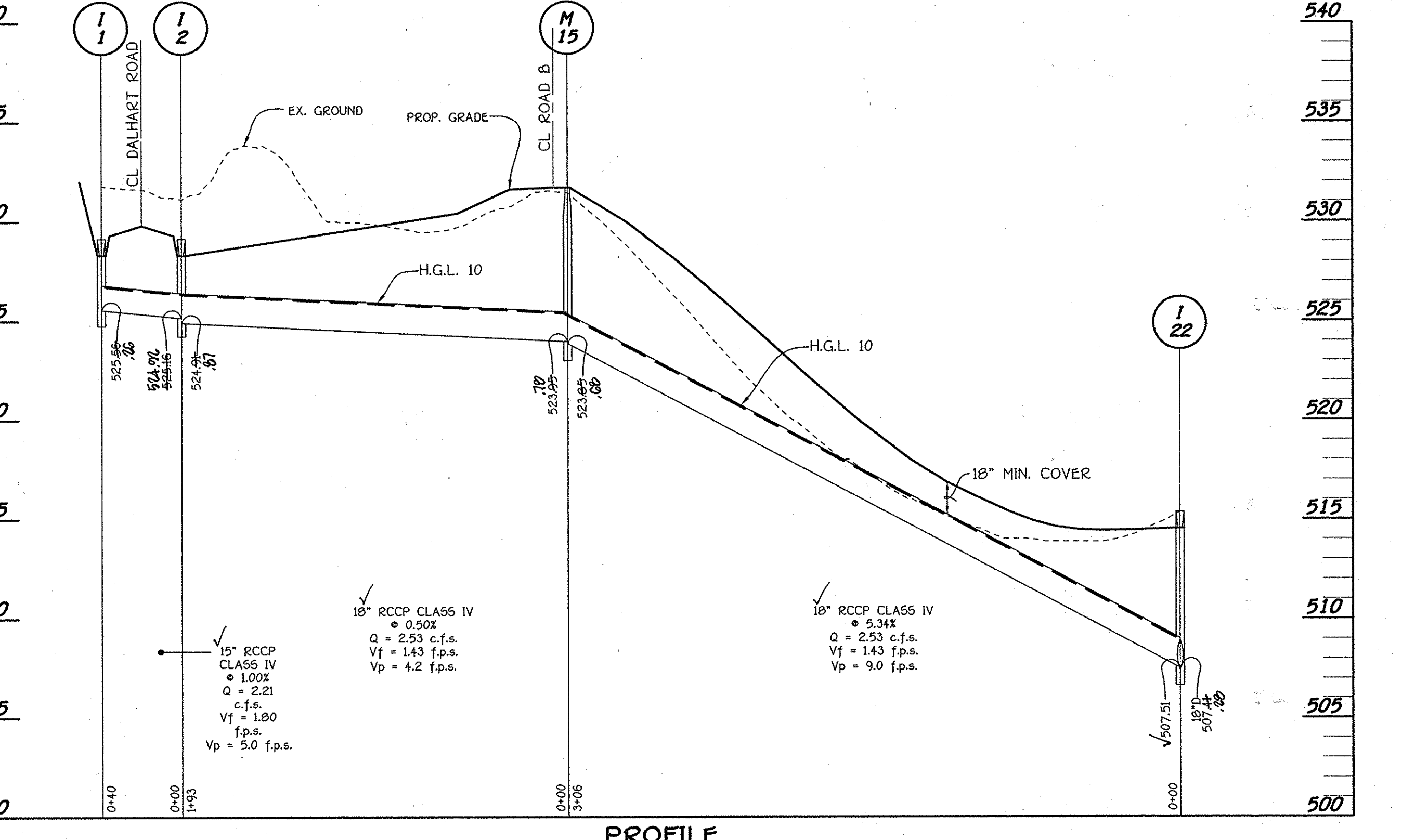
PROFILE
 SCALE: HORIZ. : 1" = 50'
 VERT. : 1" = 5'



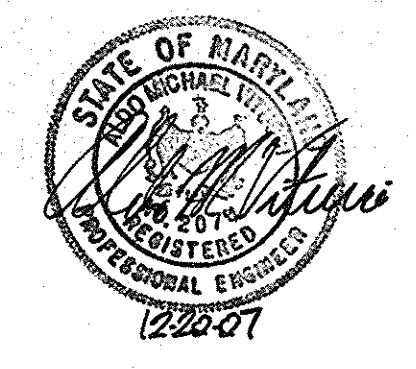
PROFILE
 SCALE: HORIZ. : 1" = 50'
 VERT. : 1" = 5'



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



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



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 3072 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21734
 (410) 461-2955

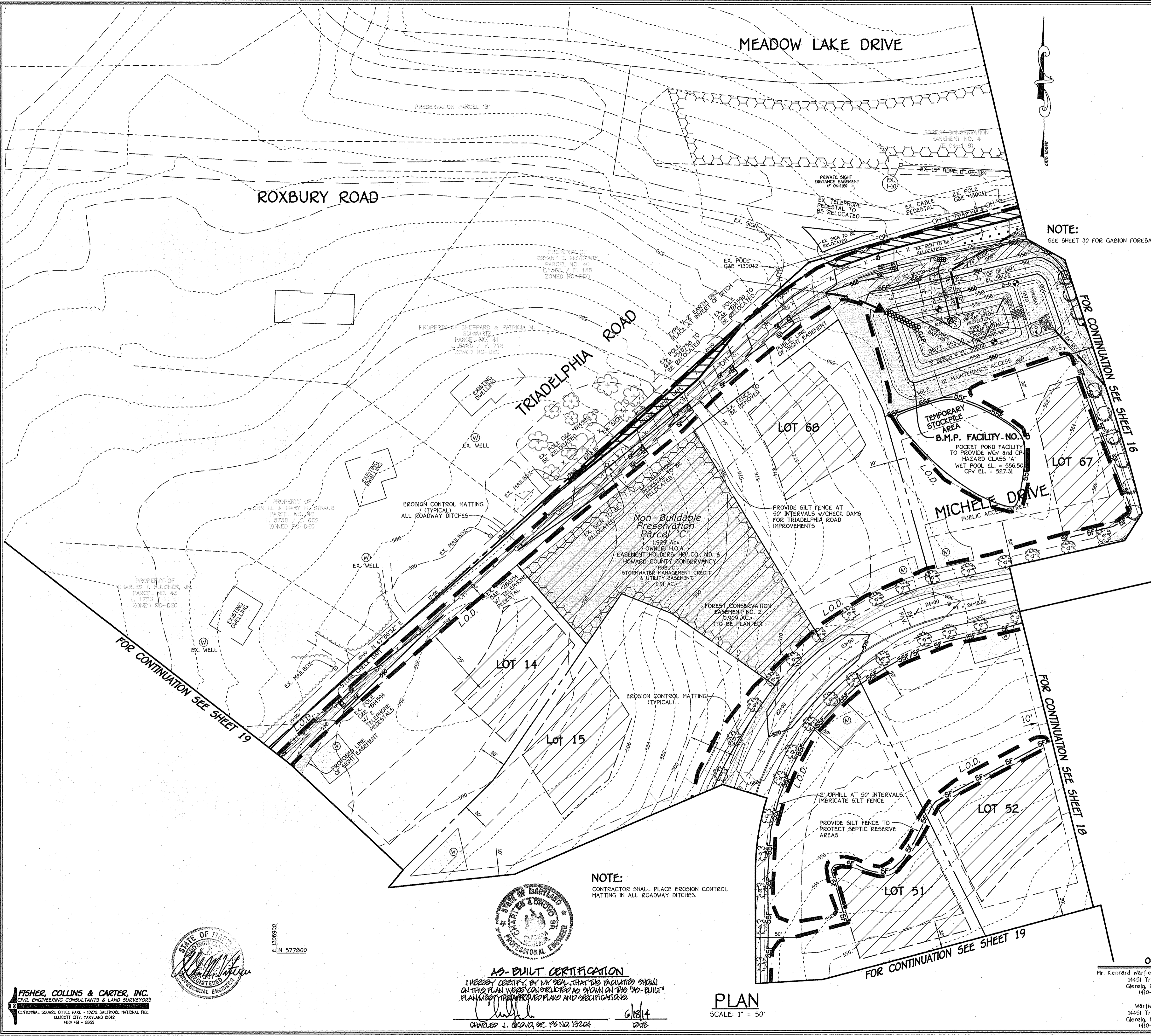


AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN NEXT TO THE APPROVED PLANS AND SPECIFICATIONS.
 CHARLES J. OROVA, P.E. PE NO. 12204
 DATE 6/18/14

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410) 442-2337
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410) 442-2337

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410) 442-2337

STORM DRAIN PROFILES
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 109 & 114
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 15 OF 40



N 577800
E 1307900

NOTE:
SEE SHEET 30 FOR GABION FOREBAY PROFILE.

TEMPORARY SEDIMENT BASIN No. 3
INITIAL D.A. = 3.70 AC.
FINAL D.A. = 5.54 AC.
STORAGE REQUIRED
WET = 9,972 CUFT.
DRY = 9,972 CUFT.
STORAGE PROVIDED
WET = 9,972 CUFT. @ ELEV. 556.16
DRY = 10,977 CUFT. @ ELEV. 557.75
BOTTOM ELEV. = 553.50
TOP OF EMBANKMENT = 561.00
CLEAN OUT ELEV. = 555.00
RISE R CREST ELEV. = 557.75
Q1 exist. = 0.8 c.f.s.
Q1 prop. = 0.5 c.f.s. @ ELEV. 557.73

- LEGEND**
- SS—SS—SS— SUPER-SILT FENCE
 - SF—SF—SF— SILT FENCE
 - TP—TP—TP— TREE PROTECTION FENCE
 - [S.C.E.] STABILIZED CONSTRUCTION ENTRANCE
 - EARTH DIKE
 - L.O.D.— DENOTES L.O.D. LIMITS OF DISTURBANCE
 - E.C.M.— DENOTES EROSION CONTROL MATTING
 - [G.I.P.] GABION INFLOW PROTECTION
 - [Hatched Box] DENOTES STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT

STREET TREE SCHEDULE				
SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
[Tree Symbol]	133	ACER RUBRUM 'OCTOBER GLORY' RED MAPLE	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W (MICHELLE DRIVE) 2656.69 x 2 / 40 = 132.83 TREES
[Tree Symbol]	27	PRUNUS SARGENTII SARGENT CHERRY	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W (MICHELLE DRIVE) 532.18 x 2 / 40 = 26.61 TREES
[Tree Symbol]	20	PLATANUS OCCIDENTALIS 'BLOODGOOD' LONDON PLANETREE	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W (ROAD 'A') 405.98 x 2 / 40 = 20.30 TREES
[Tree Symbol]	44	QUERCUS RUBRA NORTHERN RED OAK	2 1/2"-3" CAL.	40' APART ON PUBLIC R/W (ROAD 'B') 871.89 x 2 / 40 = 43.60 TREES

NOTE: STREET TREE TYPES ARE ONLY A RECOMMENDATION AND MAY BE SUBSTITUTED WITH A COUNTY ACCEPTED EQUIVALENT FROM THE HOWARD COUNTY LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE 224 REQUIRED STREET TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$67,200.00.

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.

Signature Of Developer: *Kennard Warfield, Jr.* Date: 12-20-07
Printed Name Of Developer: Kennard Warfield, Jr.

By The Engineer:
I Certify That This Plan For Pond Construction, Erosion And Sediment Control Represents A Practical And Feasible 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 Verified The Developer That He/She Must Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion.

Signature Of Engineer: *Algo M. ...* Date: 12-20-07
Printed Name Of Engineer: Algo M. ...

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.

USDA-Natural Resources Conservation Service Date: 4/2/08
These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.
Signature: *...* Date: 4/2/08
Howard Soil Conservation District

Approved: Department of Public Works
Signature: *...* Date: 4-10-08
Chief, Bureau of Highways

Approved: Department of Planning And Zoning
Signature: *...* Date: 4/24/08
Chief, Division Of Land Development

Signature: *...* Date: 4/22/08
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: *...* Date: 12-20-07
P.E. No. 1: 61814

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:
CONTRACTOR SHALL PLACE EROSION CONTROL MATTING IN ALL ROADWAY DITCHES.



AS-BUILT CERTIFICATION
I HEREBY CERTIFY BY MY SEAL THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLAN AND MEET THE APPROVED PLANS AND SPECIFICATIONS.

Signature: *Charles J. Brown* Date: 12/20/07
Charles J. Brown, P.E. No. 19204

PLAN
SCALE: 1" = 50'

OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)
And
Warfield Brothers
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'D'

TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 17 OF 40

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL Pk.
ELLSWORTH CITY, MARYLAND 21042
1800 401 - 2895



F-07-040
AS-BUILT

NOTE:
SWM FOR LOTS 54 & 55 IS TO BE PROVIDED INDIVIDUALLY VIA DISCONNECTION OF ROOFTOP AND NON-ROOFTOP CREDITS.

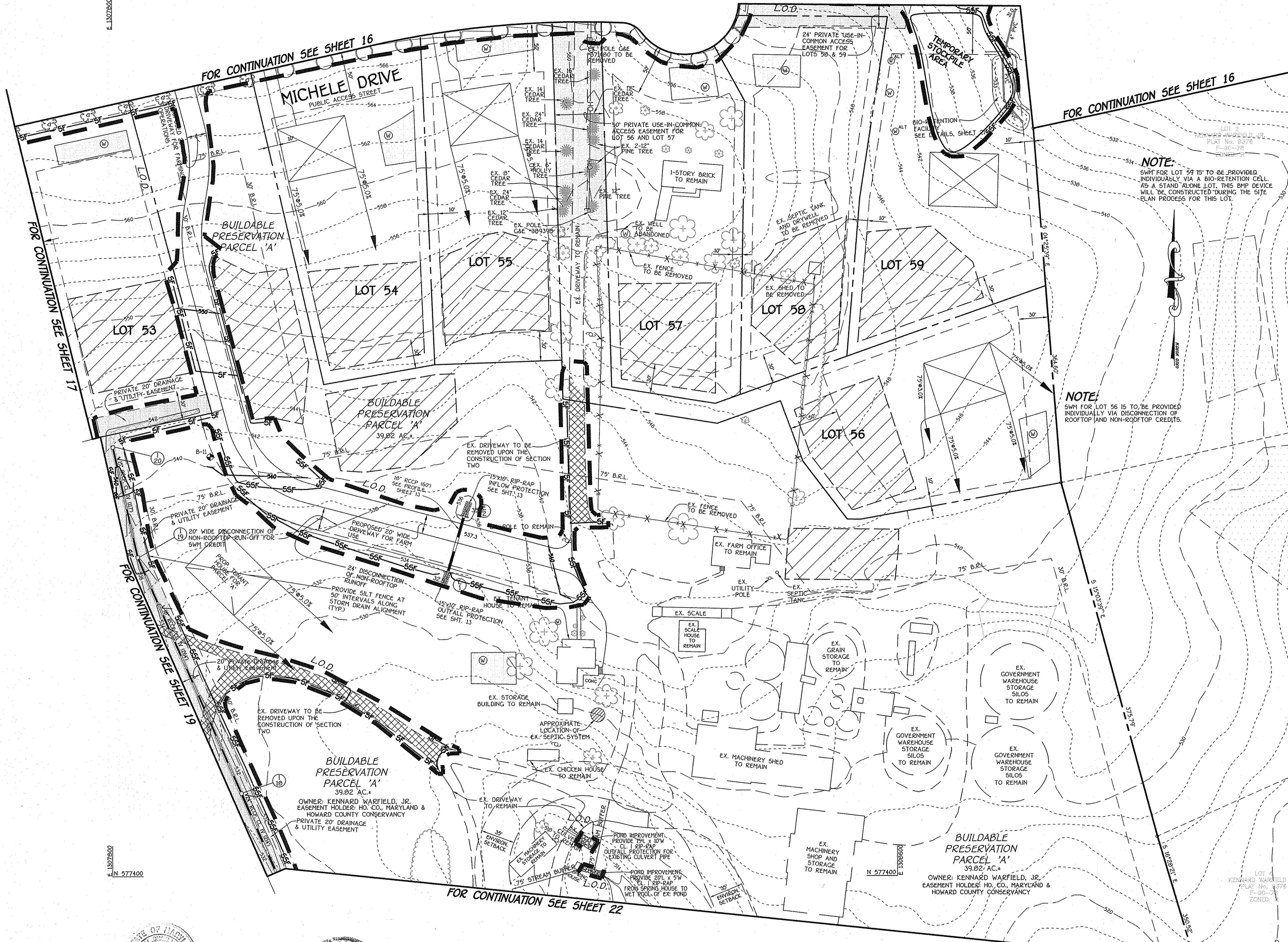
By The Developer:
"I/We Certify That All Development And/Or Construction Will Be Done According To These Plans, And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program For The Control Of 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."
Signature Of Developer: *Kennard Warfield, Jr.* Date: 12-20-07
Printed Name Of Developer: **Kennard Warfield, Jr.**

By The Engineer:
"I Certify That This Plan For Pond Construction, Erosion And Sediment Control Represents A Practical And Feasible Design Based On My Personal Knowledge Of The Site Conditions. This Plan Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District. I Have Notified The Developer That He/She Must Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion."
Signature Of Engineer: *Alfred M. Vitacca* Date: 12-20-07
Printed Name Of Engineer: **Alfred M. Vitacca**

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: *Greg* Date: 4/7/08
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.
Signature: *William Z. Miller* Date: 4-18-08
Approved: Department Of Public Works
Chief, Bureau Of Highways
Signature: *Cindy Hamilton* Date: 4/24/08
Approved: Department Of Planning And Zoning
Chief, Division Of Land Development
Signature: *William Deamus* Date: 4/22/08
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 Release Any Other Party From Meeting Requirements Imposed By Contract, Employment, Or Other Means, Including Meeting Commonly Accepted Industry Practices.

LEGEND
---S-S-S--- SUPER-SILT FENCE
---S---SILT FENCE
---TP---TP--- TREE PROTECTION FENCE
S.C.E. STABILIZED CONSTRUCTION ENTRANCE
--->--- EARTH DIKE
---L.O.D.--- DENOTES L.O.D. LIMITS OF DISTURBANCE
E.C.M. DENOTES EROSION CONTROL MATTING
G.I.P. GABION INFLOW PROTECTION
---Hatched--- DENOTES STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT



AS-BUILT CERTIFICATION
I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
Signature: *Charles J. Crava, Jr.* Date: 6/18/14
CHARLES J. CRAVA, JR. P.E. NO. 13204

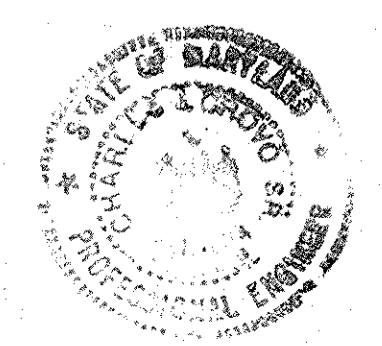
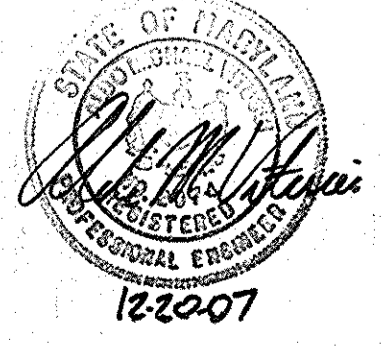
PLAN
SCALE: 1" = 50'

STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 18 OF 40

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

K:\Drawings\330310 Warfield Homes\330310 SECT 2 SHEET 18-24 STREET TREE AND SEDIMENT CONTROL PLAN.dwg, 12/20/2007 2:46:13 PM

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-481-2999





NOTE:
SEE SHEET 27 FOR TYPICAL DITCH SECTION
AND CROSS-SECTIONS FOR TRIADELPHIA ROAD.

NOTE:
GRADING FOR LOTS 12 AND 13 WILL
BE DEFERRED TO THE INDIVIDUAL
SITE PLAN STAGE FOR EACH
LOT.



AS-BUILT CERTIFICATION
I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN
WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN WITH THE APPROVED
PLANS AND SPECIFICATIONS.
Charles W. Crovo, Sr. 6/18/14
CHARLES W. CROVO, SR., PE NO. 132204 DATE

EXISTING FOREST CONSERVATION
EASEMENT NO. 1
1270 AC.4
(TO BE PLANTED)
SECTION ONE, F-97-039
**Non-Buildable
Preservation
Parcel Ten**
OWNER: HOA
EASEMENT HOLDERS: HO, CO., MD. &
HOWARD COUNTY CONSERVANCY
FOREST CONSERVATION
EASEMENT NO. 1
6.029 AC.4
(TO BE PLANTED)
PLAN 577100



OWNER
Mr. Kenneth Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)
And
Warfield Brothers
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc
C/O Mr. Kenneth Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

PLAN
SCALE: 1" = 50'

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."
Kenneth Warfield, Jr. 3-18-08
Signature Of Developer Date
Kenneth Warfield, Jr.
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 That He/She Must Engage A Registered Professional Engineer To
Supervise Pond Construction And Provide The Howard Soil Conservation District With An
"As-Built" Plan Of The Pond Within 30 Days Of Completion."
Robert M. Vetter 3-17-08
Signature Of Engineer Date
Robert M. Vetter
Printed Name Of 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.
USDA Natural Resources Conservation Service Date
Howard Soil Conservation District

Approved Department Of Public Works
William J. ... 4/7/08
Chief, Bureau Of Highways Date

Approved Department Of Planning And Zoning
Charles ... 4/18/07
Chief, Division Of Land Development Date

Approved Department Of Planning And Zoning
Charles ... 4/24/08
Chief, Development Engineering Division 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 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.

- LEGEND**
- S—S—S— SUPER-SILT FENCE
 - SF—SF—SF— SILT FENCE
 - TP—TP—TP— TREE PROTECTION FENCE
 - [S.C.E.] STABILIZED CONSTRUCTION ENTRANCE
 - EARTH DIKE
 - DENOTES L.O.D. LIMITS OF DISTURBANCE
 - [E.C.M.] DENOTES EROSION CONTROL MATTING
 - [G.I.P.] GABION INFLOW PROTECTION
 - [Hatched Box] DENOTES STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT

NOTE:
CONTRACTOR SHALL PLACE EROSION CONTROL MATTING IN ALL ROADWAY DITCHES.

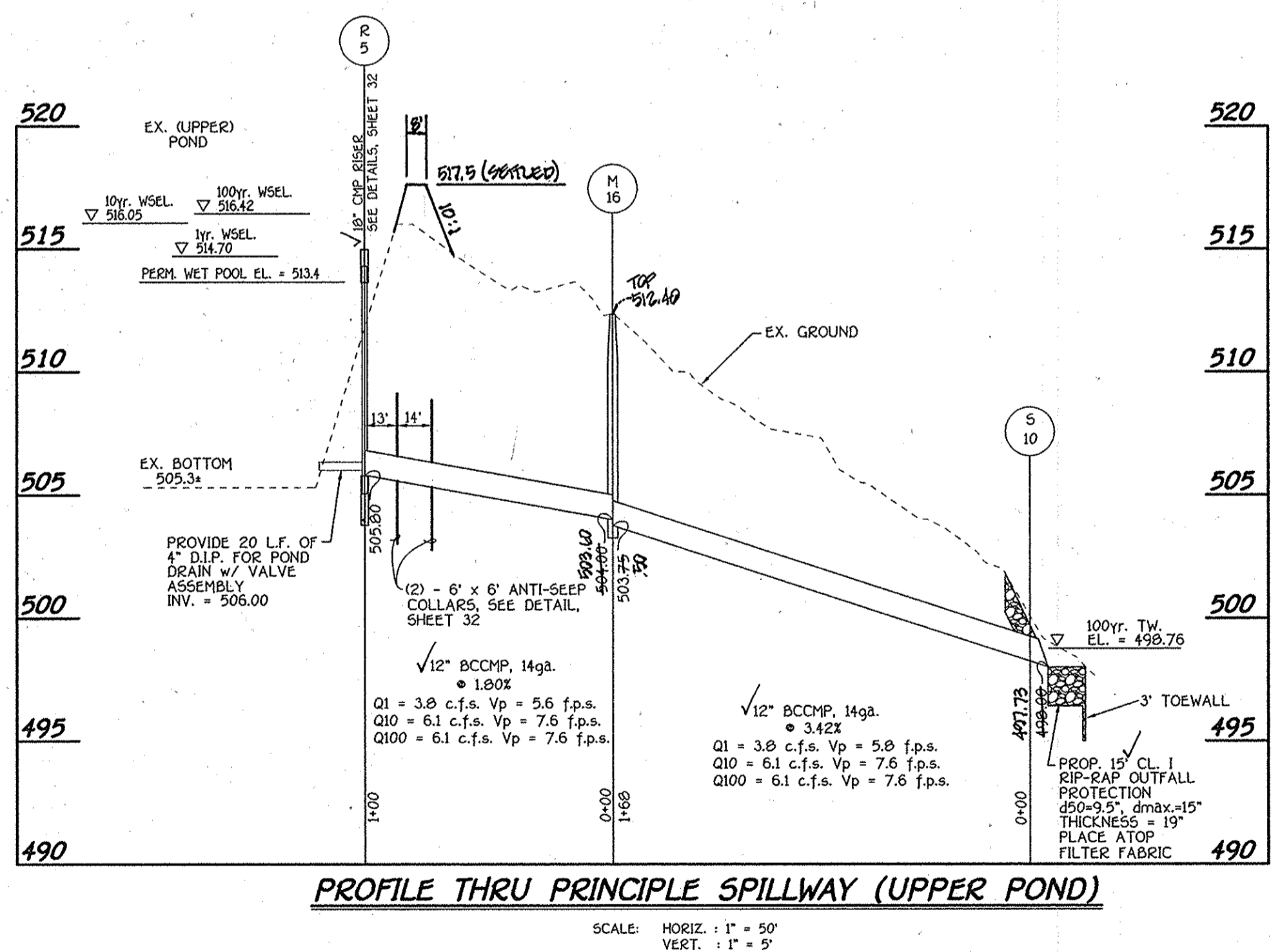
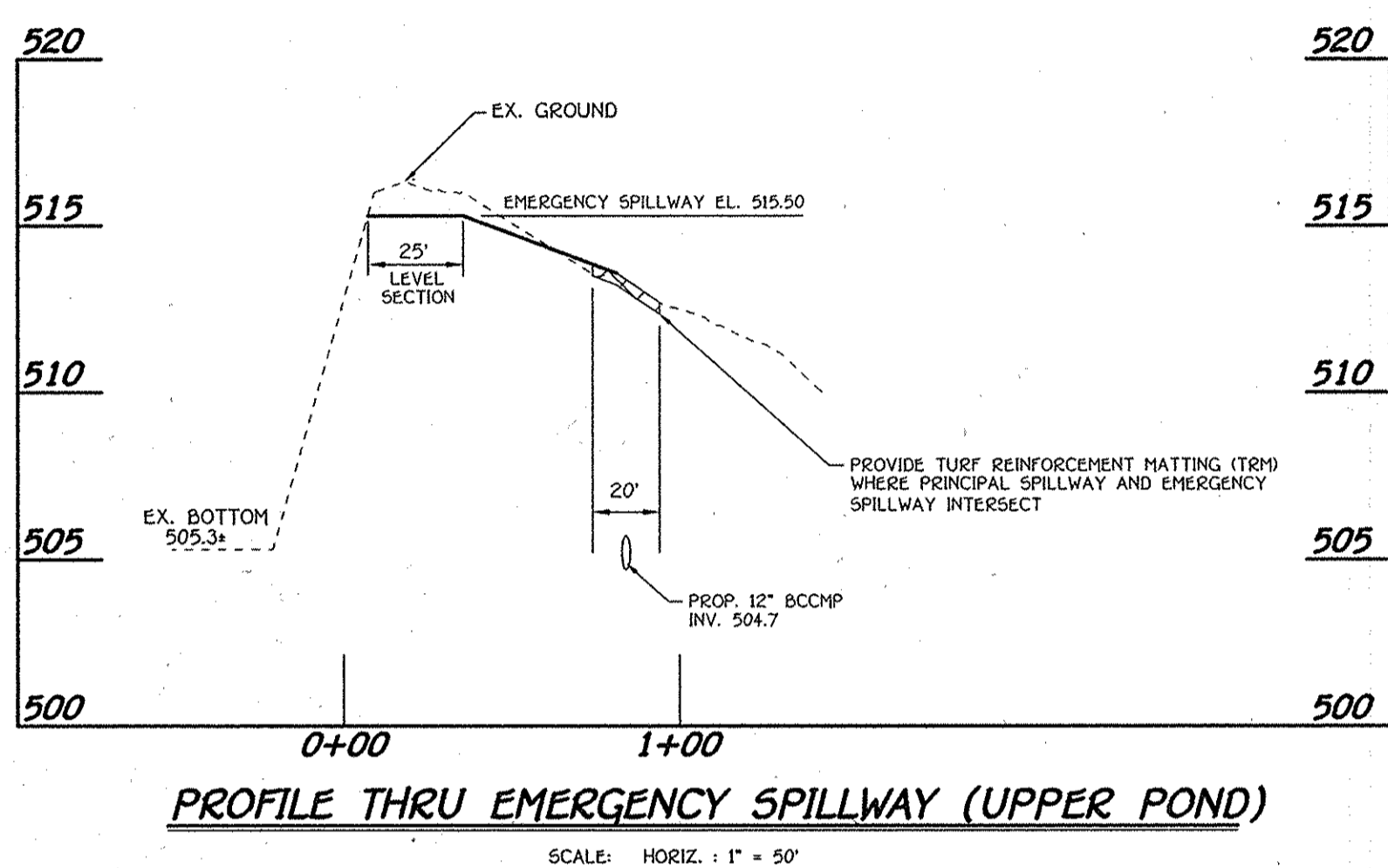
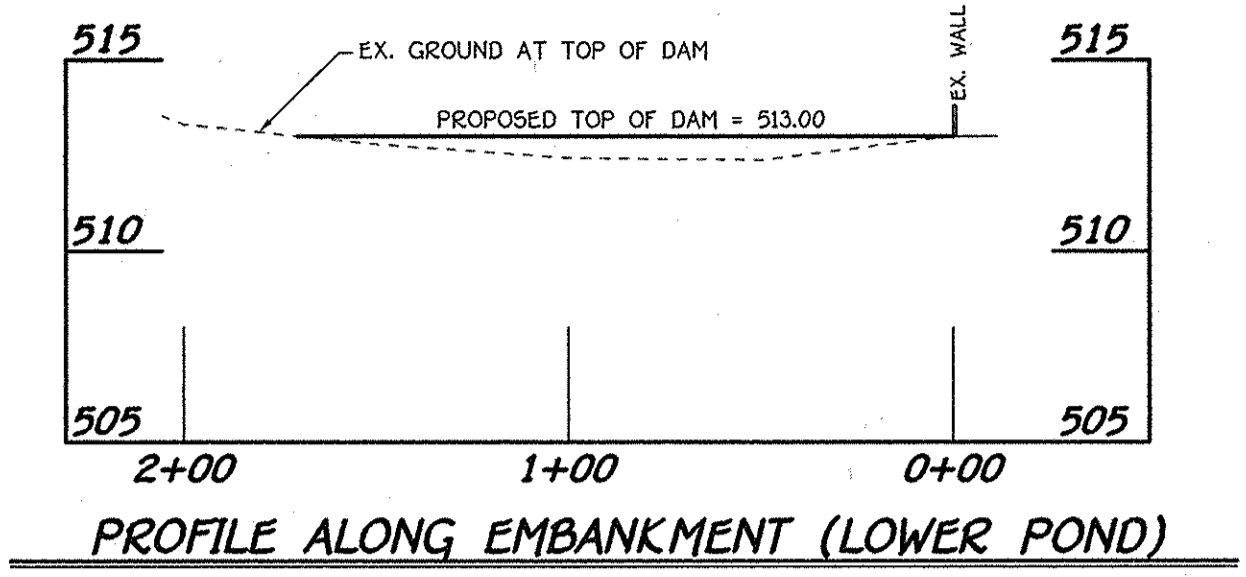
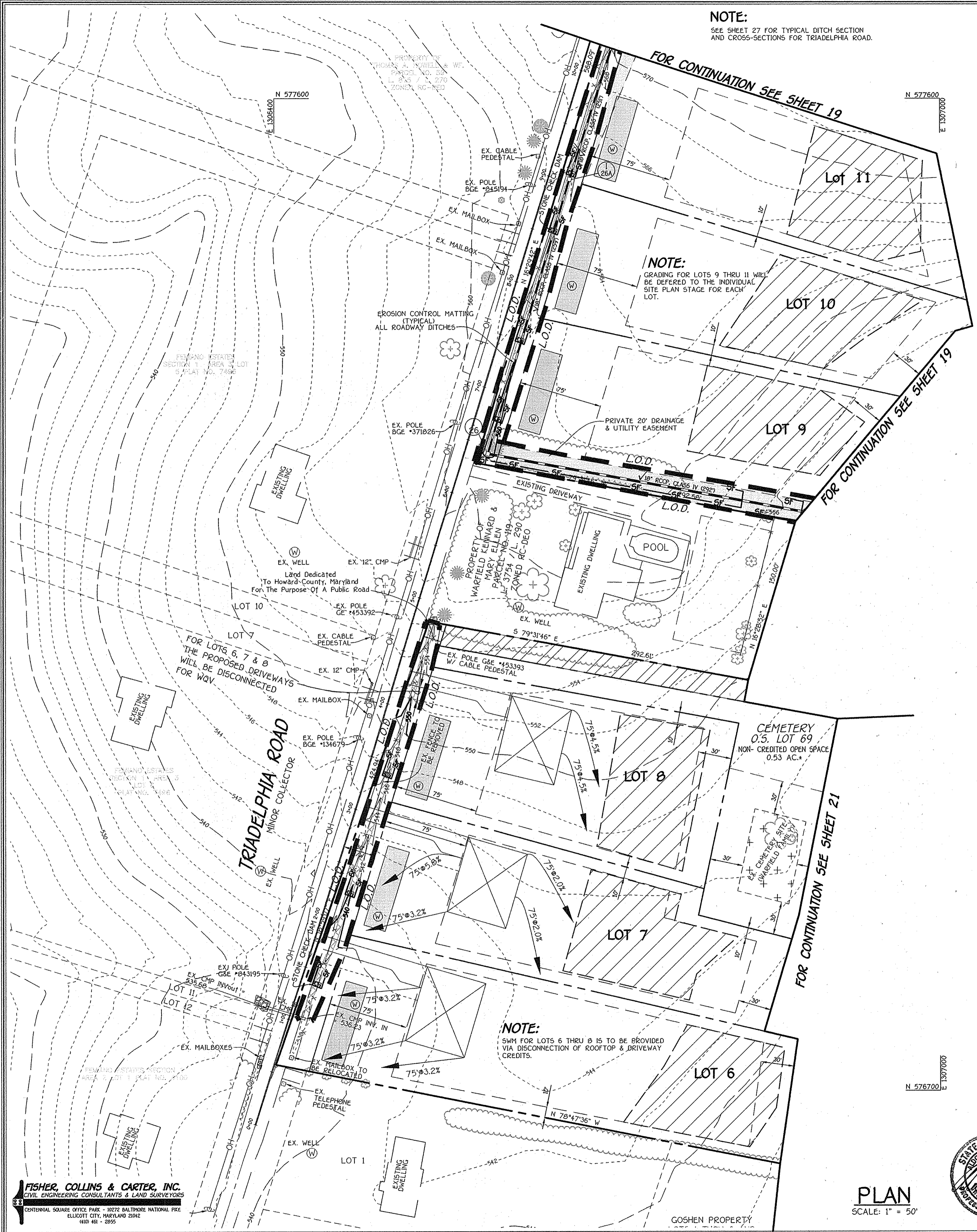
STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL "A" AND NON-BUILDABLE PRESERVATION PARCELS "B" THRU "I"
ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 19 OF 40

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 2282
410 481 - 2295

K:\Drawings\310310 Warfield Homes\310310 SECT-2 SHEET 16-21 STREET TREE AND SEDIMENT CONTROL PLAN.dwg, 3/14/2008 10:36:44 AM

F-07-040
AS-BUILT

NOTE:
SEE SHEET 27 FOR TYPICAL DITCH SECTION
AND CROSS-SECTIONS FOR TRIADELPHIA ROAD.



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.

Signature Of Developer: *Kennard Warfield, Jr.* Date: **3-18-08**
Printed Name Of Developer: **Kennard Warfield, Jr.**

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 Noted The Developer That He/She Must Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion.

Signature Of Engineer: *[Signature]* Date: **3-17-08**
Printed Name Of Engineer: **[Name]**

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.

USDA Natural Resources Conservation Service DATE: **3/17/08**

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

Signature: *[Signature]* Date: **4/7/08**
Howard Soil Conservation District

Approved: Department Of Public Works
Signature: *[Signature]* Date: **4-18-08**
Chief, Bureau Of Highways

Approved: Department Of Planning And Zoning
Signature: *[Signature]* Date: **4/21/08**
Chief, Division Of Land Development

Signature: *[Signature]* Date: **4/21/08**
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: *[Signature]* Date: **13-04**
P.E. No. **61814**

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.

- LEGEND**
- SSP-SSP-SSP SUPER-SILT FENCE
 - SF-SF-SF SILT FENCE
 - TF-TF-TF TREE PROTECTION FENCE
 - S.C.E. STABILIZED CONSTRUCTION ENTRANCE
 - EARTH DIKE
 - DENOTES L.O.D. LIMITS OF DISTURBANCE
 - E.C.M. DENOTES EROSION CONTROL MATTING
 - G.I.P. GABION INFLOW PROTECTION

AS-BUILT CERTIFICATION
I HERBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

Signature: *[Signature]* Date: **6/18/14**
CHARLES J. GRAY, P.E. No. 193204

OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
1451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

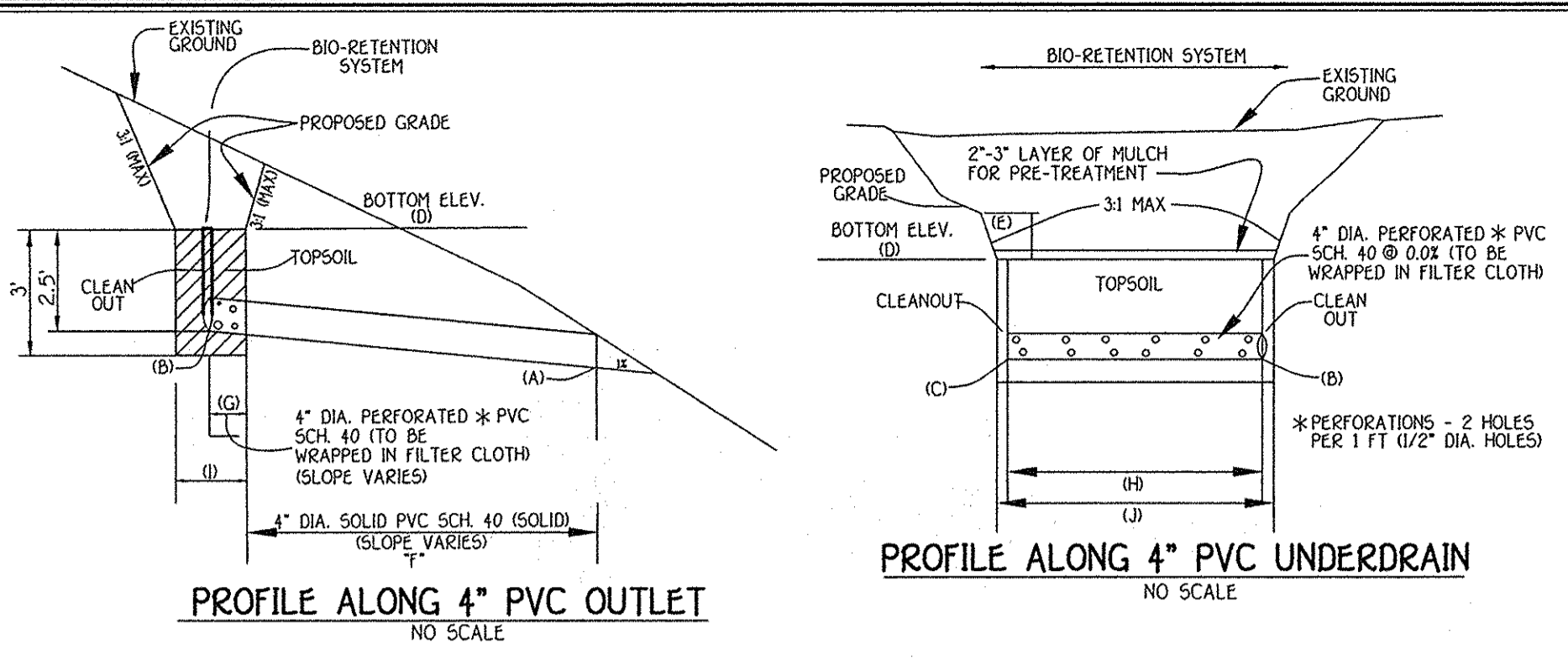
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 20 OF 40

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
3800 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-461-2555



PLAN
SCALE: 1" = 50'

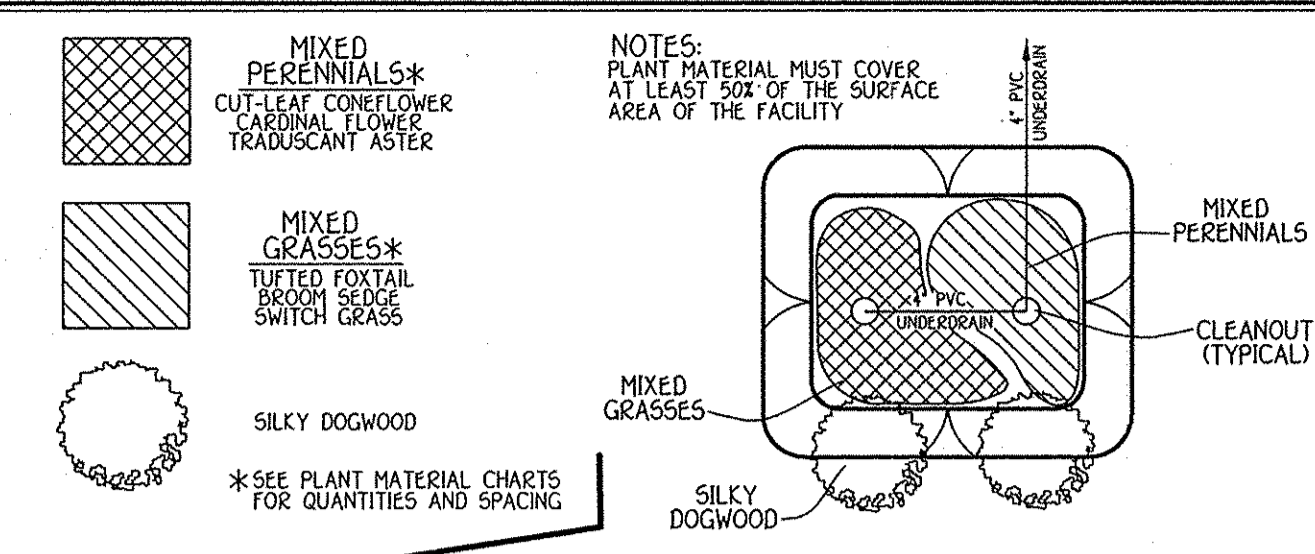
F-07-040
AS-BUILT



BIO-RETENTION FILTER DATA										
LOT NO.	A	B	C	D	E	F	G	H	I	J
29	500.00	500.50	500.50	503.00	503.50	40'	8.0'	25'	16'	35'
30	502.00	503.00	503.00	505.50	506.00	40'	8.0'	25'	16'	35'
31	503.00	504.00	504.00	506.50	507.00	50'	8.0'	25'	16'	35'
33	509.00	509.50	509.50	512.00	512.50	50'	8.0'	25'	16'	35'
59	531.00	532.50	532.50	535.00	535.50	50'	7.5'	7.0'	15'	80'

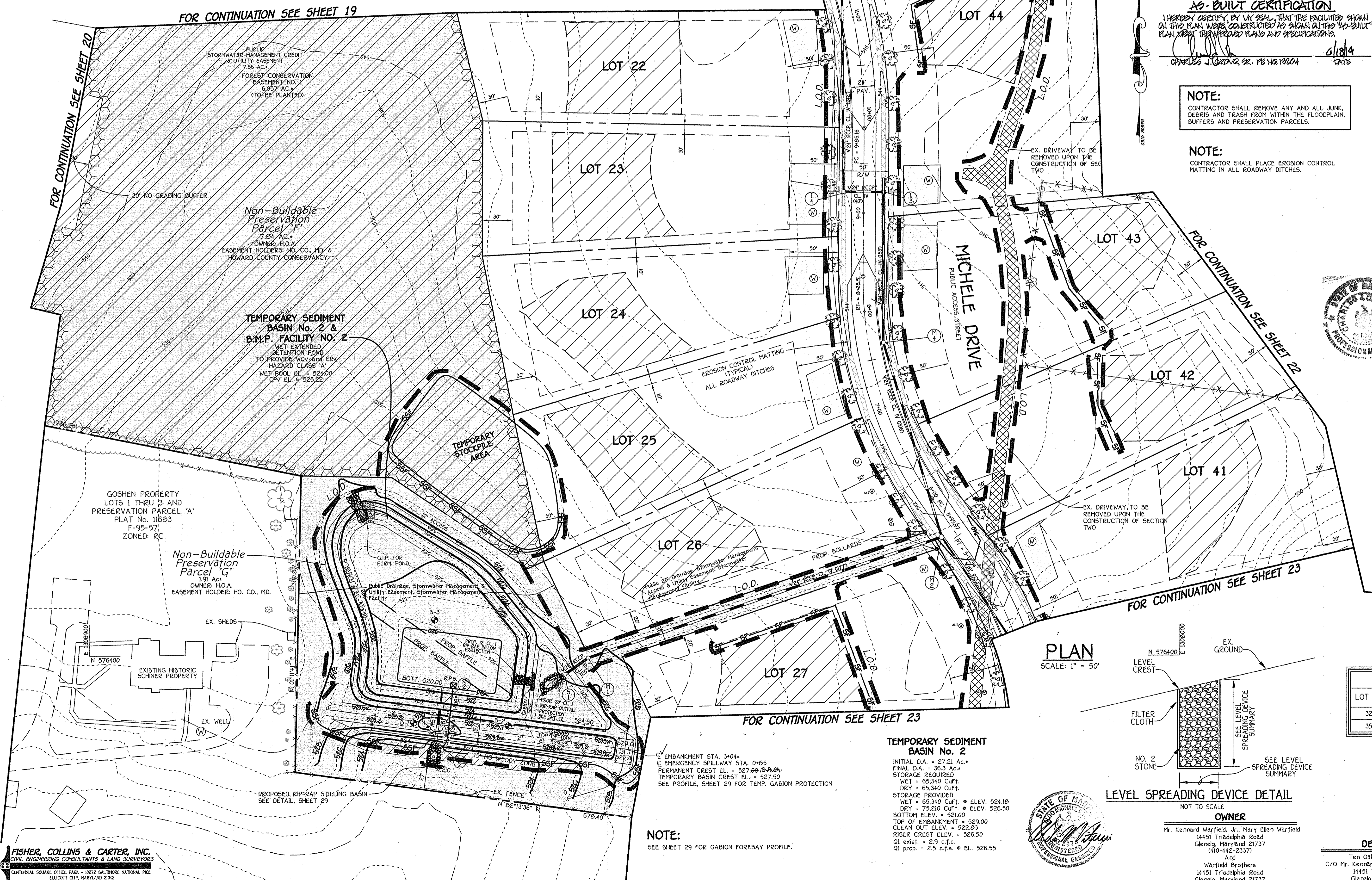
BIO-RETENTION FILTER PLANT MATERIAL (LOT 59)		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
150	MIXED PERENNIALS	2 FT.
150	MIXED GRASSES	2 FT.
2	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION

BIO-RETENTION FILTER PLANT MATERIAL (LOTS 29-31 & 33)		
QUANTITY	NAME	MAXIMUM SPACING (FT.)
70	MIXED PERENNIALS	2 FT.
70	MIXED GRASSES	2 FT.
1	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION



PRIVATE BIO-RETENTION FILTER OPERATION & MAINTENANCE SCHEDULE

- 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 CONSIDER BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAGES AND MIXES.
- 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.



AS-BUILT CERTIFICATION
 I HEREBY CERTIFY BY MY SEAL THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS AS-BUILT PLAN AND THE APPROVED PLANS AND SPECIFICATIONS.
 CHARLES J. GREGG, JR. P.E. No. 13204 DATE 6/18/14

NOTE:
 CONTRACTOR SHALL REMOVE ANY AND ALL JUNK, DEBRIS AND TRASH FROM WITHIN THE FLOODPLAIN, BUFFERS AND PRESERVATION PARCELS.

NOTE:
 CONTRACTOR SHALL PLACE EROSION CONTROL MATTING IN ALL ROADWAY DITCHES.

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.
 Signature Of Developer: *Kennard Warfield, Jr.* 12-30-07 Date
 Printed Name Of Developer: **Kennard Warfield, Jr.**

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 Noted The Developer That He/She Must Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion.
 Signature Of Engineer: *Charles J. Gregg, Jr.* 12-30-07 Date
 Printed Name Of Engineer: **Charles J. Gregg, Jr.**

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.
 Signature: *Shelly Selig* 4/2/08 Date
 Approved: Department Of Public Works
 Signature: *William J. ...* 4-10-07 Date
 Chief, Bureau Of Highways

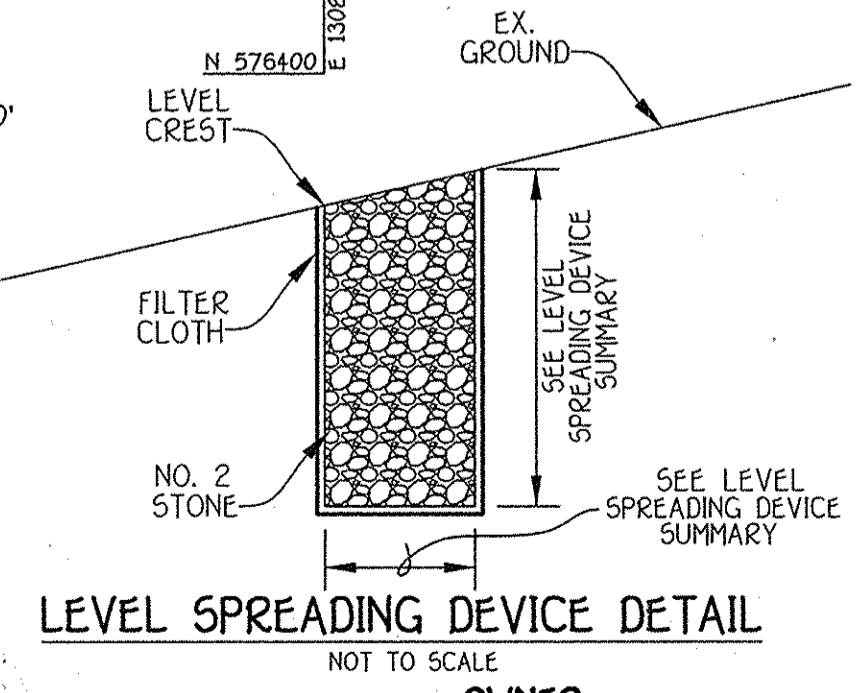
Approved: Department Of Planning And Zoning
 Signature: *Cindy Hamrick* 4/24/05 Date
 Chief, Division Of Land Development
 Signature: *John ...* 4/22/05 Date
 Chief, Development Engineering Division

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: *Charles J. Gregg, Jr.* 13204 P.E. No. 6/18/14 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.

LEGEND

- SSP-SSP-SSP SUPER-SILT FENCE
- SF-SF-SF SILT FENCE
- TP-TP-TP TREE PROTECTION FENCE
- S.C.E. STABILIZED CONSTRUCTION ENTRANCE
- Earth DIKE
- Denotes L.O.D. LIMITS OF DISTURBANCE
- E.C.M. DENOTES EROSION CONTROL MATTING
- G.I.P. GABION INFLOW PROTECTION
- R.P.S. REMOVABLE PUMPING STATION
- Denotes STORMWATER MANAGEMENT CREDIT & UTILITY EASEMENT

LEVEL SPREADING DEVICE SUMMARY					
LOT NO.	TRENCH LENGTH	TRENCH WIDTH & DEPTH	WQV VOLUME REQUIRED	WQV VOLUME PROVIDED	CREST ELEVATION
32	106'	2' X 3'	636 CU. FT.	636 CU. FT.	503.00
35	67'	2' X 3'	636 CU. FT.	636 CU. FT.	500.00



TEMPORARY SEDIMENT BASIN No. 2
 INITIAL D.A. = 27.21 Ac.
 PERMANENT CREST EL. = 527.00
 STORAGE REQUIRED
 WET = 65,340 Cuf.
 DRY = 65,340 Cuf.
 STORAGE PROVIDED
 WET = 65,340 Cuf. • ELEV. 524.18
 DRY = 75,210 Cuf. • ELEV. 526.50
 BOTTOM ELEV. = 521.00
 TOP OF EMBANKMENT = 529.00
 CLEAN OUT ELEV. = 522.93
 RISER CREST ELEV. = 526.50
 Q1 exist. = 2.9 c.f.s.
 Q1 prop. = 2.5 c.f.s. • EL. 526.55

NOTE:
 SEE SHEET 29 FOR GABION FOREBAY PROFILE.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTURIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2200

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 CHARLES J. GREGG, JR.
 No. 13204

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 1451 Triadelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337

STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 21 OF 40

F-07-040
AS-BUILT

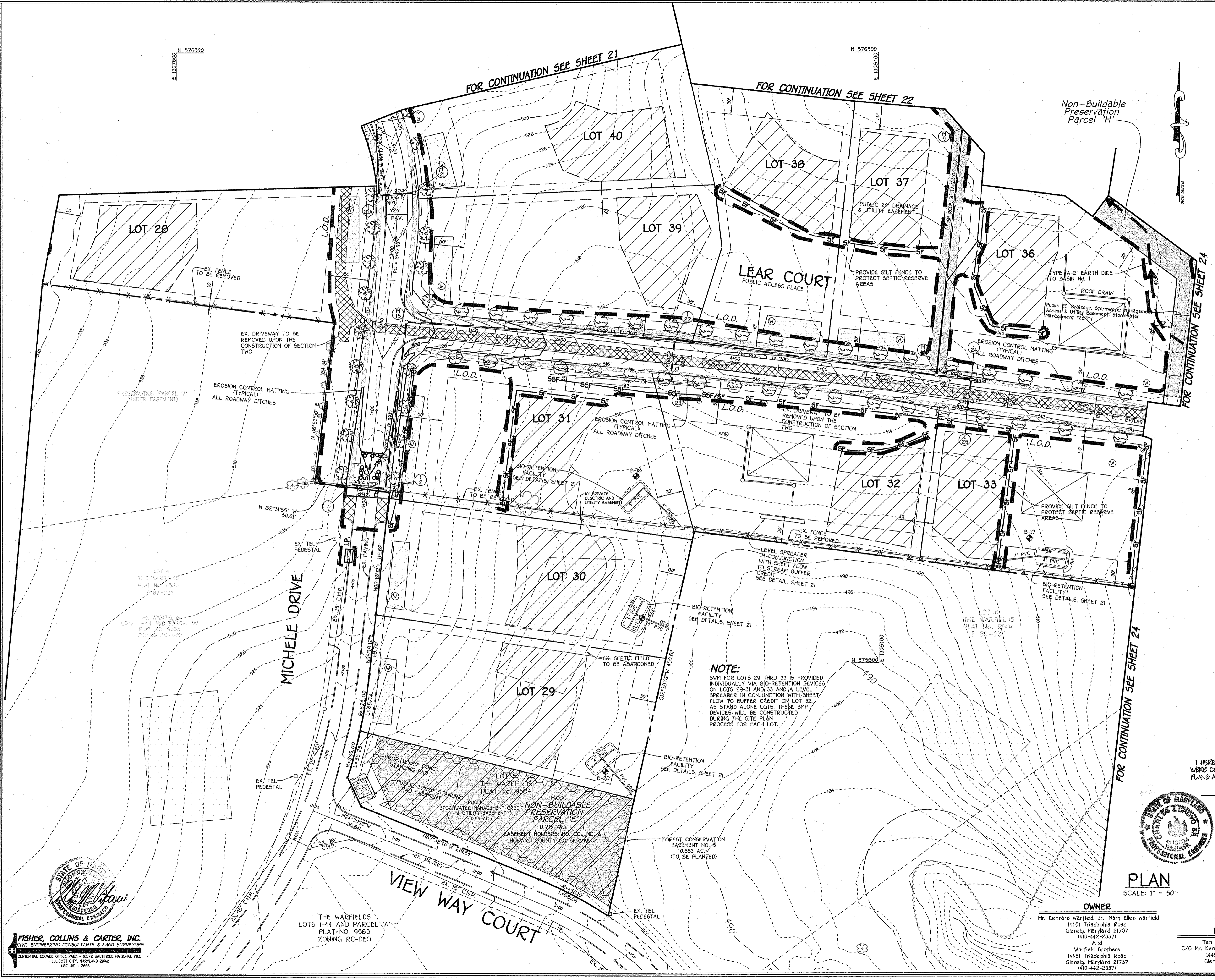
N 576500
E 1307500

N 576500
E 1308400

FOR CONTINUATION SEE SHEET 21

FOR CONTINUATION SEE SHEET 22

FOR CONTINUATION SEE SHEET 24



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.

Signature Of Developer: *Kennard Warfield, Jr.* Date: 12-20-07
 Printed Name Of Developer: Kennard Warfield, Jr.

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 Noted The Location Of The Pond And Have Provided The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion.

Signature Of Engineer: *Alfred M. ...* Date: 12-20-07
 Printed Name Of Engineer: Alfred M. ...

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.

USDA-Natural Resources Conservation Service Date: *4/1/08*
 These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.

Approved: Department Of Public Works
 Signature: *William Z. ...* Date: 4-10-07
 Chief, Bureau Of Highways

Approved: Department Of Planning And Zoning
 Signature: *Cindy ...* Date: 4/24/08
 Chief, Division Of Land Development

Signature: *Chris ...* Date: 4/22/08
 Chief, Development Engineering Division NJ

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.

LEGEND

- S—S—S— SUPER-SILT FENCE
- S—S—S— SILT FENCE
- T—T—T— TREE PROTECTION FENCE
- [S.C.E.] STABILIZED CONSTRUCTION ENTRANCE
- EARTH DIKE
- DENOTES L.O.D. LIMITS OF DISTURBANCE
- DENOTES EROSION CONTROL MATTING
- [G.I.P.] GABION INFLOW PROTECTION

NOTE:
 5MM FOR LOTS 29 THRU 33 IS PROVIDED INDIVIDUALLY VIA BIO-RETENTION DEVICES ON LOTS 29-31 AND 33 AND A LEVEL SPREADER IN CONJUNCTION WITH SHEET FLOW TO BUFFER CREDIT ON LOT 32. AS STAND ALONE LOTS, THESE BMP DEVICES WILL BE CONSTRUCTED DURING THE SITE PLAN PROCESS FOR EACH LOT.

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.



Signature: *Charles J. Crava* Date: 6/18/08
 CHARLES J. CRAVA, P.E. NO. 132024

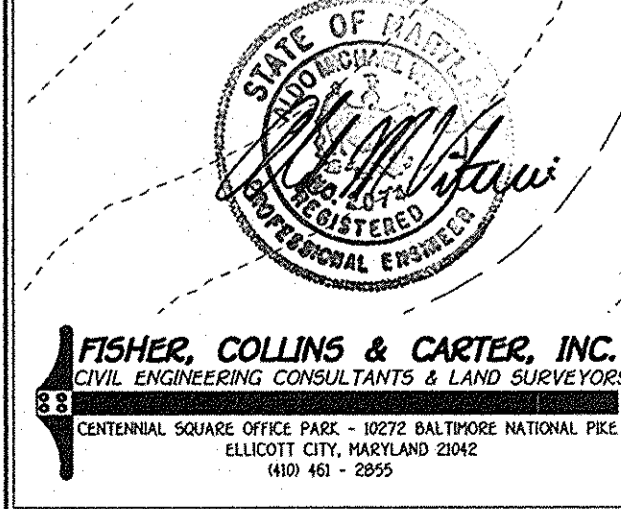
NOTE:
 CONTRACTOR SHALL PLACE EROSION CONTROL MATTING IN ALL ROADWAY DITCHES.

PLAN
 SCALE: 1" = 50'

OWNER
 Mr. Kennard Warfield, Jr. & Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-60, OPEN SPACE LOT 69, NON-BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 23 OF 40



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALDWIN NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 20822
 (410) 405-1200

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."
 Signature Of Developer: *Kennard Warfield, Jr.* Date: **3-18-08**
 Printed Name Of Developer: **Kennard Warfield, Jr.**

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 Asked The Developer That He/She Must Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Of The Pond Within 30 Days Of Completion."
 Signature Of Engineer: *A. P. ...* Date: **12-20-07**
 Printed Name Of Engineer: **A. P. ...**

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.
 USDA Natural Resources Conservation Service Date: **3-18-08**

These Plans For Small Pond Construction, Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.
 Howard Soil Conservation District Date: **4/7/08**

Approved: Department Of Public Works
 Chief Bureau Of Highways Date: **4-10-08**

Approved: Department Of Planning And Zoning
 Chief, Division Of Land Development Date: **4/14/08**

Chief, Development Engineering Division Date: **4/22/08**

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.

- LEGEND**
- SSF—SSF—SSF— SUPER-SILT FENCE
 - SF—SF—SF— SILT FENCE
 - TP—TP—TP— TREE PROTECTION FENCE
 - [S.C.E.] STABILIZED CONSTRUCTION ENTRANCE
 - EARTH DIKE
 - — — DENOTES L.O.D. LIMITS OF DISTURBANCE
 - — — DENOTES EROSION CONTROL MATTING
 - [G.I.P.] GABION INFLOW PROTECTION

NOTE:
 CONTRACTOR SHALL REMOVE ANY AND ALL JUNK, DEBRIS AND TRASH FROM WITHIN THE FLOODPLAIN, BUFFERS AND PRESERVATION PARCELS.

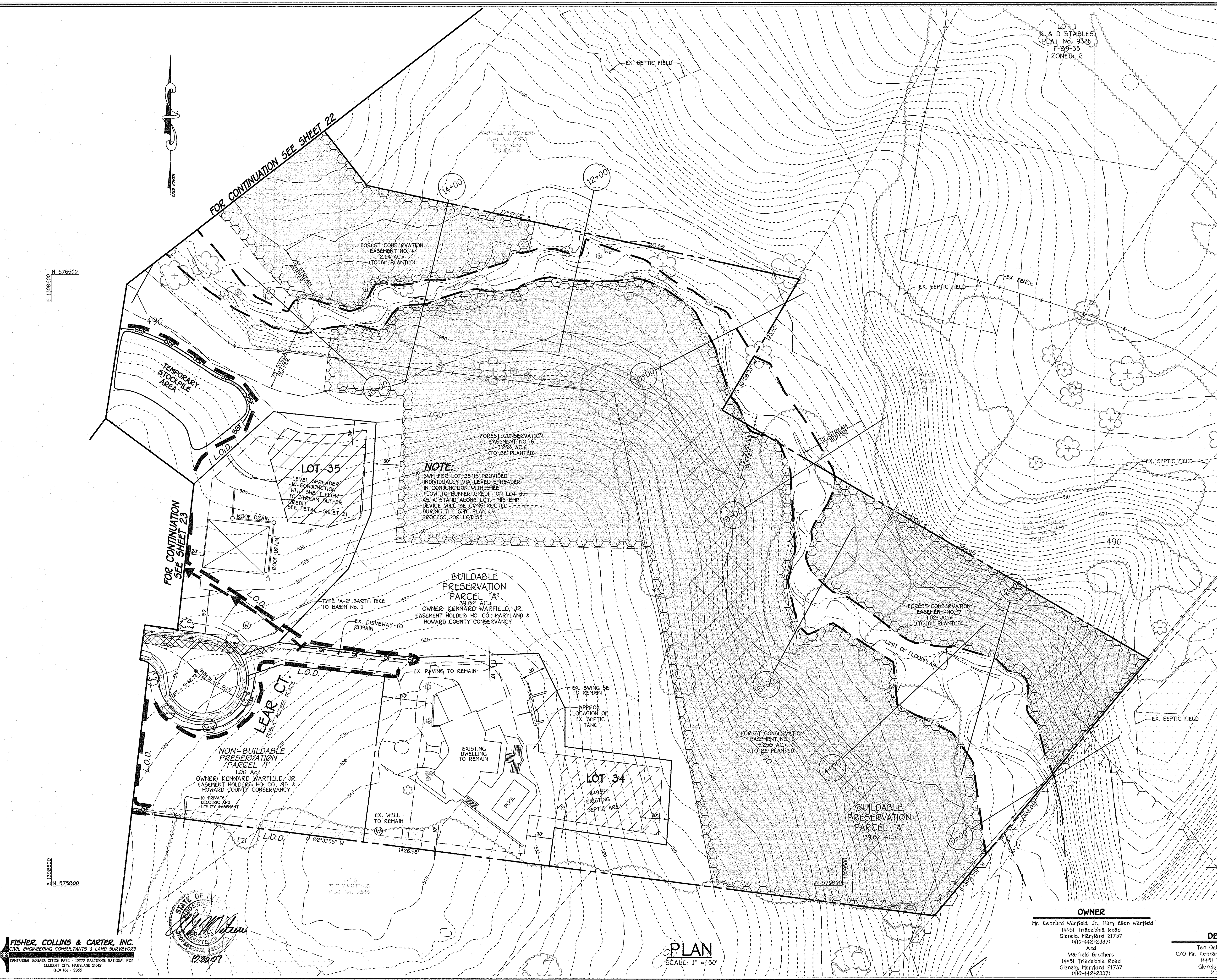
AS-BUILT CERTIFICATION
 I HEREBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
 Signature: *Charles J. ...* Date: **6/18/14**
 CHARLES J. ... SR. PE NO. 13204

STREET TREE, GRADING & SEDIMENT CONTROL PLAN
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 24 OF 40

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

PLAN
 SCALE: 1" = 50'



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTONAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 410-461-2009

Professional Engineer Seal for A. P. ...
 State of Maryland
 License No. 12307

K:\Drawings\330310 Warfield Homes\330310 SEC-2 SHEET 15-24 STREET TREE AND SEDIMENT CONTROL PLAN.dwg, 12/20/2007 2:44:44 PM

F-07-040
 AS-BUILT

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

Using vegetation as cover for barren soil to protect it from erosion and to cause erosion. Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall...

Site Preparation: 1. Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, wireways, or sediment control basins. 2. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.

Seeding: 1. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. 2. Seed shall be made available to the inspector to verify type and rate of seed used.

Methods of Seeding: 1. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer broadcast in drop method or a calibrated spreader. 2. Fertilizer is being applied at the time of seeding...

Straw Mulch: 1. Straw mulch shall be applied to all seeded areas at the rate of 2 tons/acre. 2. Straw mulch shall be applied to all seeded areas at the rate of 2 tons/acre. 3. Straw mulch shall be applied to all seeded areas at the rate of 2 tons/acre.

Soil Amendments: 1. Soil amendments shall be applied to the soil at the rate of 100 lbs per acre. 2. Soil amendments shall be applied to the soil at the rate of 100 lbs per acre. 3. Soil amendments shall be applied to the soil at the rate of 100 lbs per acre.

Construction Techniques: 1. Excavate and stabilize all temporary water, side ditches, or berms that will be removed. 2. Perform Phase I excavation, dress, and stabilize. 3. Perform Phase II excavation, dress, and stabilize.

Seeding: 1. Select one or more of the species or mixtures listed in Table 26 for the appropriate Plant Hardiness Zone. 2. For sites having disturbed areas over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in the table below.

Table with 5 columns: No., Species, Application Rate (lb/acre), Seeding Dates, Seeding Depth, Fertilizer Rate (lb/acre), and Lime Rate (lb/acre). Includes rows for Barley, Oats, and Rye.

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS. 53 CENTRAL SQUARE OFFICE PARK - 1072 BALTIMORE NATIONAL PIKE, ELKOTTS CITY, MARYLAND 21042.

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Definition: Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose: To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies: 1. For sites having disturbed areas over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the testing agency shall be written in the table below.

Construction and Material Specifications: 1. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications.

Topsoil Specifications - Soil to be used as topsoil must meet the following: 1. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority.

Soil amendments: 1. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

Topsoil Application: 1. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence, and Sediment Traps and Basins.

Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4" - 6" higher in elevation.

Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage.

Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below.

Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for sites having disturbed areas under 5 acres shall conform to the following requirements:

Composted sludge shall be applied, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.05.

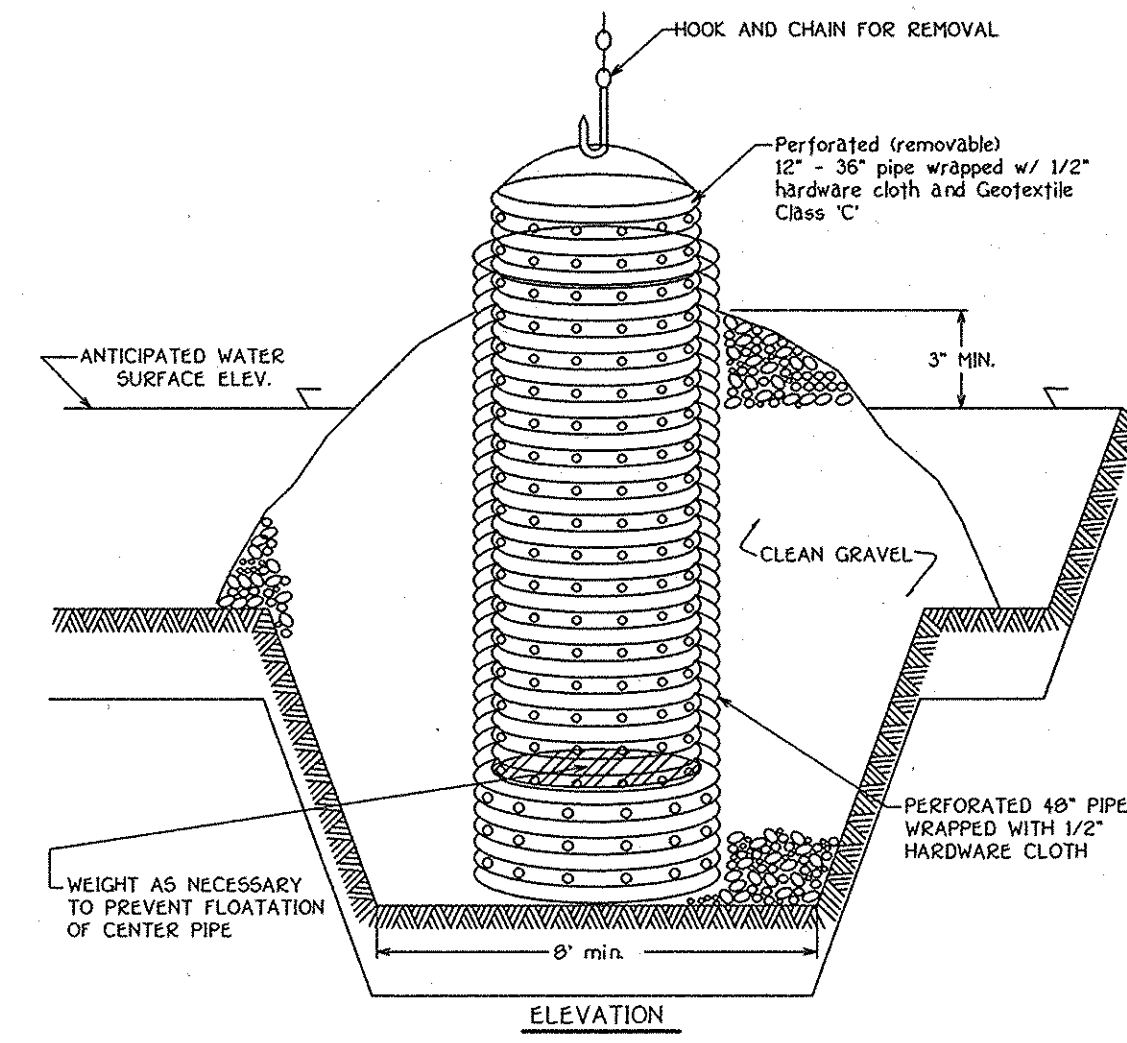
Composted sludge shall contain at least 1 percent nitrogen, 15 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.

Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.

Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/2 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. 1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1973.

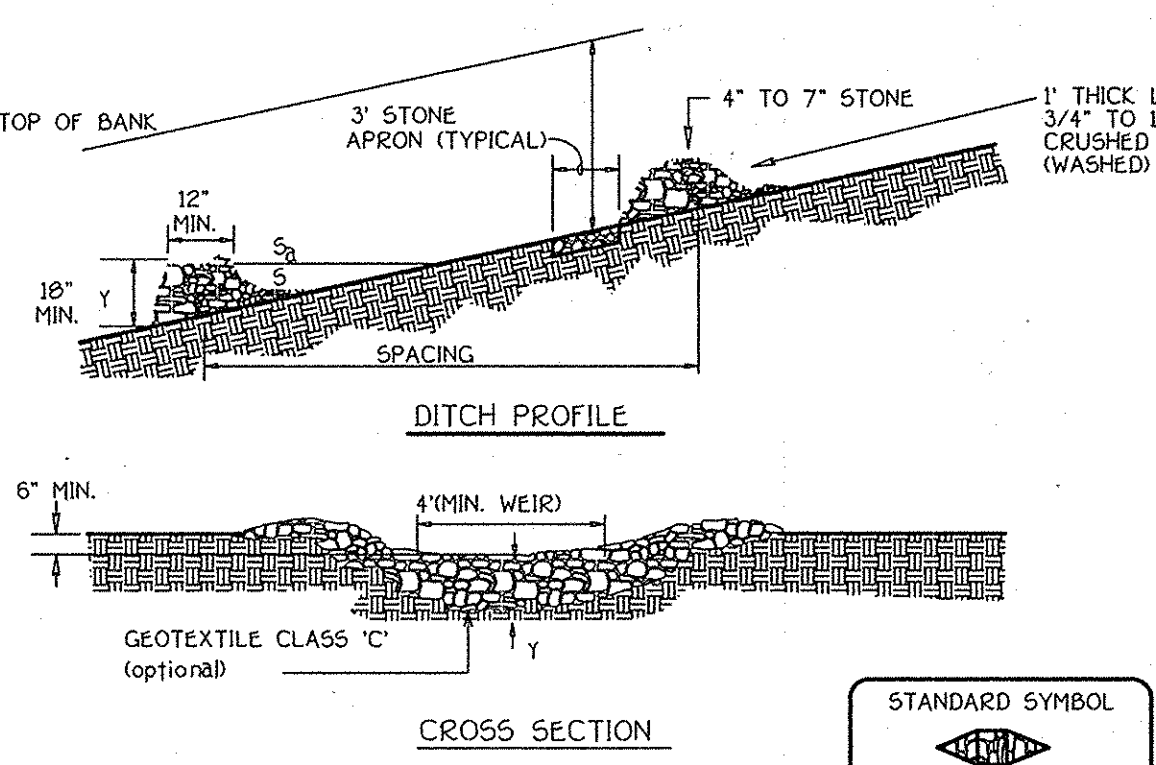
REMOVABLE PUMPING STATION



Construction Specifications

- 1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations. 2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel. 3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" x 6" dia. or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class C.

STONE CHECK DAM



CROSS SECTION

Table with 2 columns: SLOPE and SPACING. Rows include 2% or less, 2.1% to 4%, 4.1% to 7%, 7.1% to 10%, and over 10%.

Construction Specifications

- 1. Swales and ditches shall be prepared in accordance with the construction specifications described in Section A-2, Standards and Specifications for Temporary Swale. 2. The check dam shall be constructed of 4"-7" stone. The stone shall be placed so that it completely covers the width of the channel and keyed into the channel banks. 3. The top of the check dam shall be constructed so the the center is approximately 6" lower than the outer edges, forming a weir that water can flow across. 4. The maximum height of the check dam at the center shall not exceed 2'. 5. The upstream side of the check dam shall be lined with approximately 1" of 3/4" to 1 1/2" crushed aggregate.

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 Standards and Specifications of the Howard Soil Conservation District.

Signature: [Signature] Date: 12/20/07

DEVELOPER'S CERTIFICATE

I/We Certify That All Development And Construction Will Be Done According To This Plan Of Development And Plan For Erosion And Sediment Control And That All Responsible Personnel Involved 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 Inspections By The Howard Soil Conservation District Or Their Authorized Agents As Deemed Necessary.

Signature: [Signature] Date: 12/20/07

Reviewed For Howard County Soil Conservation District And Meets Technical Requirements.

U.S.D.A. - Natural Resources Conservation Service Date: [Signature]

Approved This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.

Signature: [Signature] Date: 4/7/08

Approved: Department Of Planning And Zoning

Signature: [Signature] Date: 4/24/08

Chief, Division Of Land Development

Signature: [Signature] Date: 4/24/08

Chief, Development Engineering Division

Approved: Howard County Department Of Public Works

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

Signature: [Signature] Date: 4-18-08

Chief, Bureau Of Highways

AS-BUILT CERTIFICATION

THIS IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.

Signature: [Signature] Date: 6/18/14

CHARLES J. CROOK, JR. PE NO 13204

Signature: [Signature] Date: 6/18/14

CHARLES J. CROOK, JR. PE NO 13204

Signature: [Signature] Date: 6/18/14

CHARLES J. CROOK, JR. PE NO 13204

SEDIMENT CONTROL NOTES & DETAILS

THE WARFIELDS II

SECTION TWO

BUILDABLE LOTS 6-6E, OPEN SPACE LOT 69, NON-BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED: RC-DO

TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55

TAX MAP NO. 27 GRID NO. 5, PARCEL NO. 55, 109 & 144

FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DATE: DECEMBER, 2007

SHEET 25 OF 40

OWNER: Mr. Kennard Warfield, Jr., Mary Ellen Warfield

DEVELOPER: Ten Oaks Properties, Inc. C/O Mr. Kennard Warfield, Jr., President

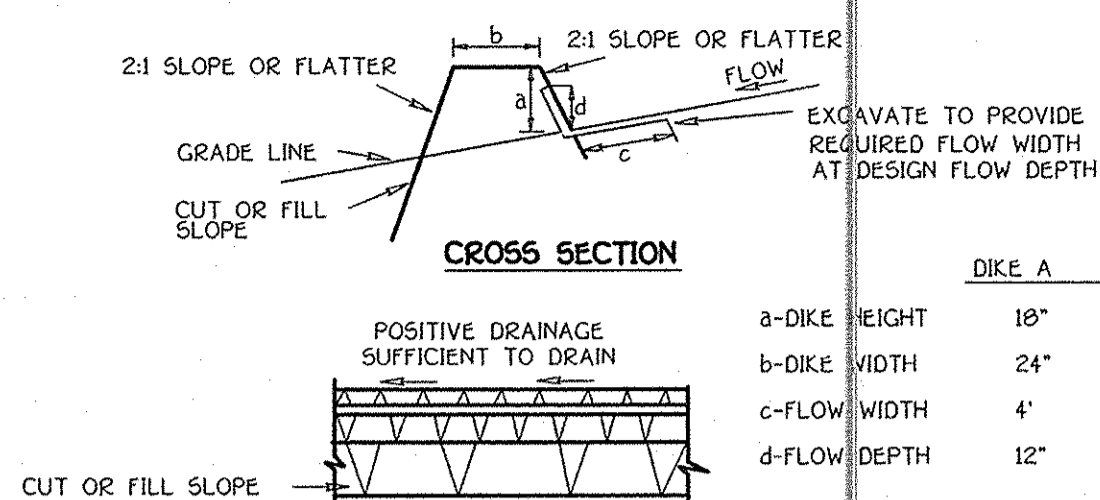
14451 Triadelphia Road, Glenelg, Maryland 21737 (410-442-2337)

F-07-040

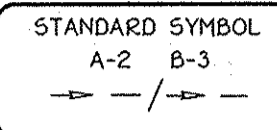
AS-BUILT

EARTH DIKE

NOT TO SCALE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4"	6"
d-FLOW DEPTH	12"	24"

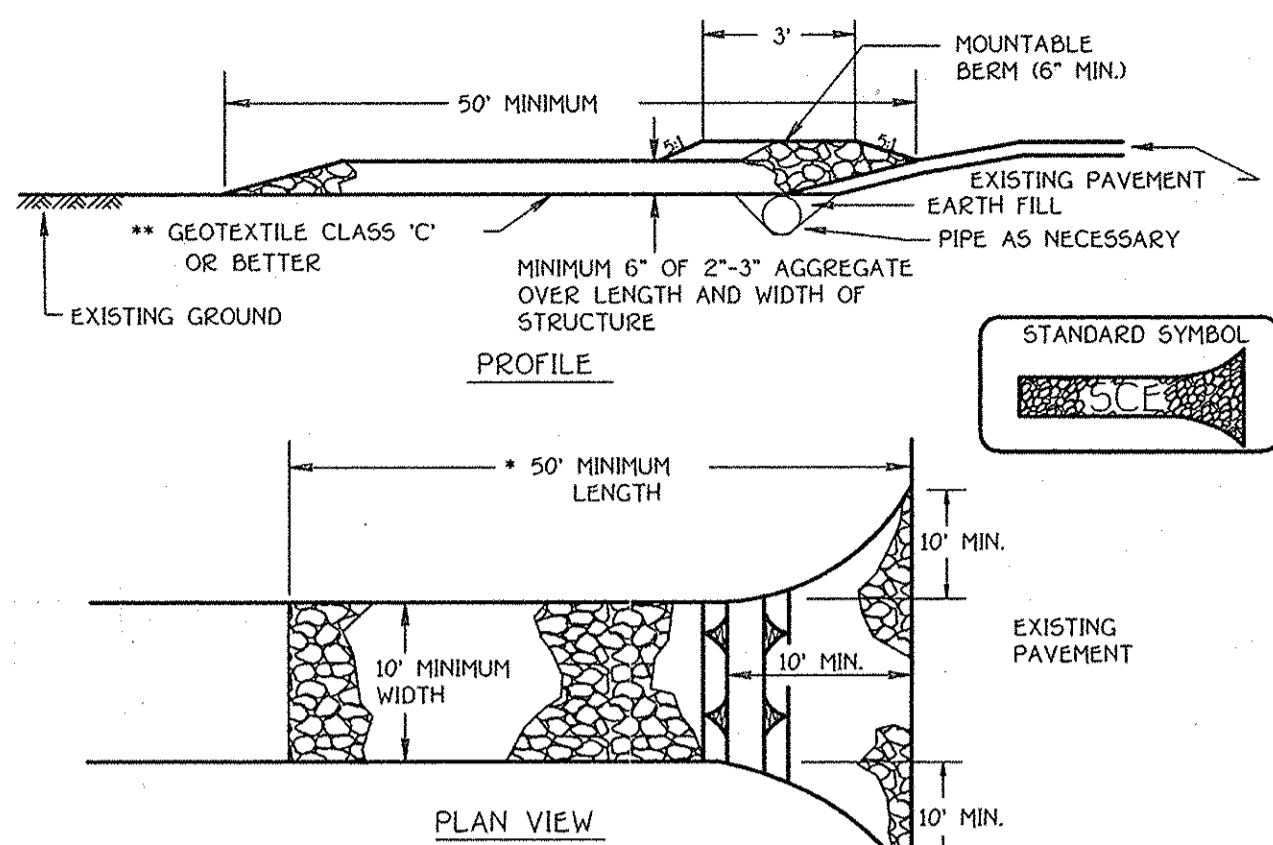


- Seed and cover with straw mulch.
- Seed and cover with Erosion Control Matting or line with sod.
- 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum.

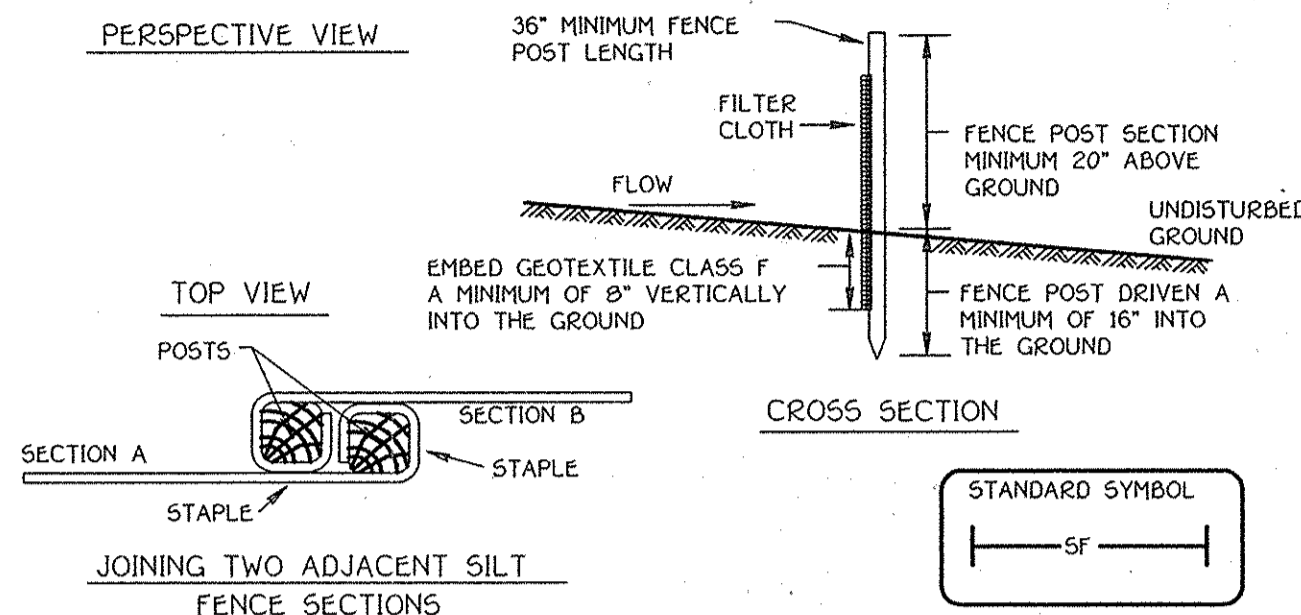
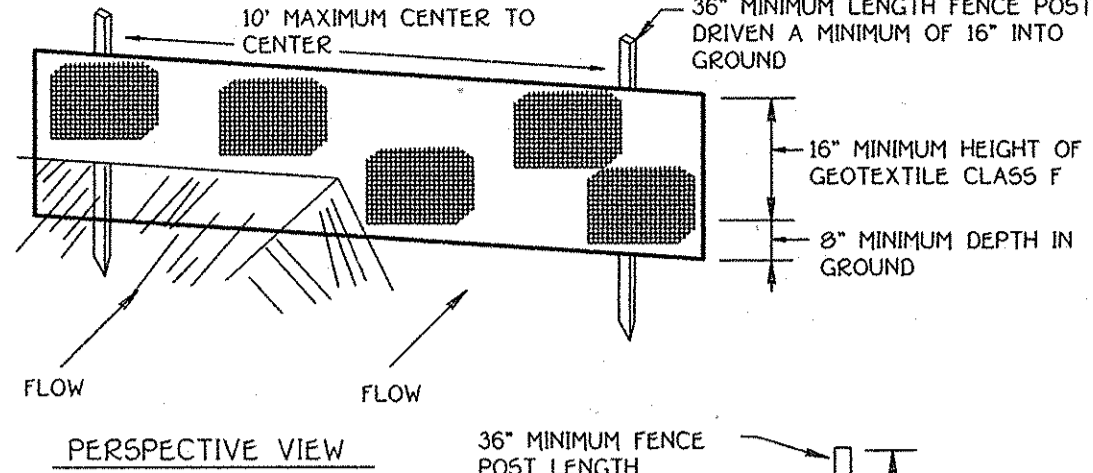
Construction Specifications

- All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1:12.
- Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
- Runoff diverted from an undisturbed area shall outlet directly to an undisturbed, stabilized area at a non-erosive velocity.
- All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.
- The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
- Fill shall be compacted by earth moving equipment.
- All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
- Inspection and maintenance must be provided periodically and after each rain event.

STABILIZED CONSTRUCTION ENTRANCE



- Length - minimum of 50' (*30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.



- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:
Tensile Strength 50 lbs/in (min) Test: MSMT 509
Tensile Modulus 20 lbs/in (min) Test: MSMT 509
Flow Rate 0.3 gal / ft / minute (max) Test: MSMT 322
Filtering Efficiency 75% (min) Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

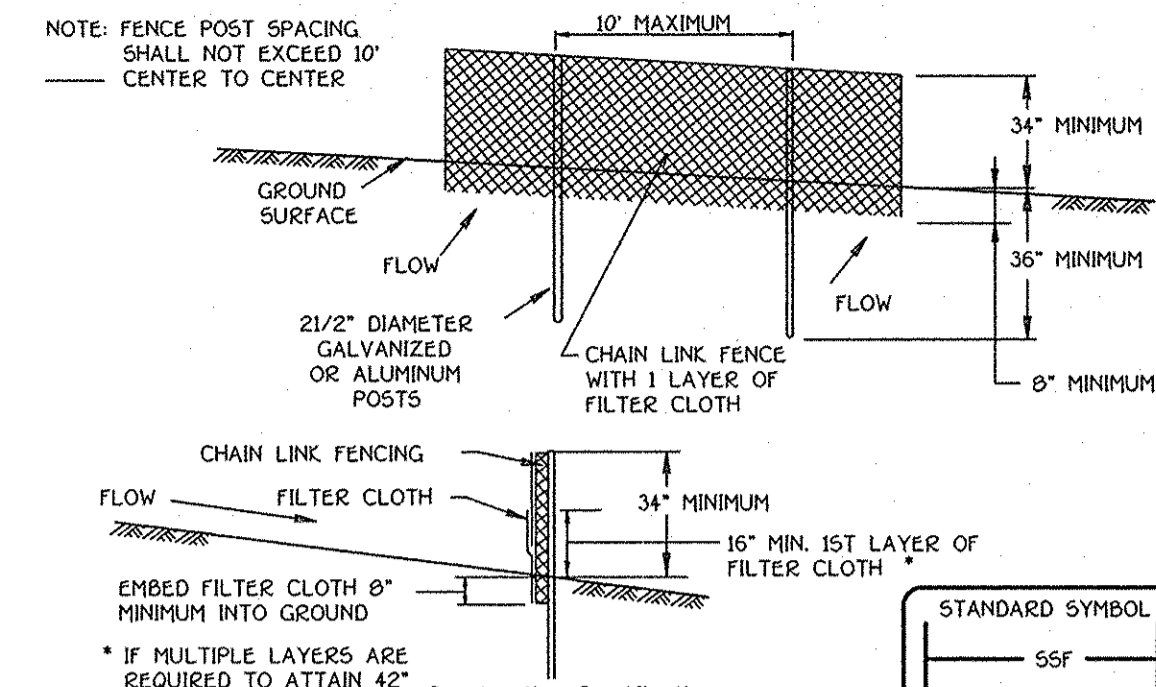
Slope Steepness	Silt Fence Design Criteria	
	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

SILT FENCE

NOT TO SCALE

SUPER SILT FENCE



- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6" fence shall be used, substituting 42" fabric and 6" length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:
Tensile Strength 50 lbs/in (min) Test: MSMT 509
Tensile Modulus 20 lbs/in (min) Test: MSMT 509
Flow Rate 0.3 gal / ft / minute (max) Test: MSMT 322
Filtering Efficiency 75% (min) Test: MSMT 322

Slope	Design Criteria	
	Slope Steepness	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited
10 - 20%	10:1 - 5:1	1,500 feet
20 - 33%	5:1 - 3:1	1,000 feet
33 - 50%	3:1 - 2:1	500 feet
50% +	2:1 +	250 feet

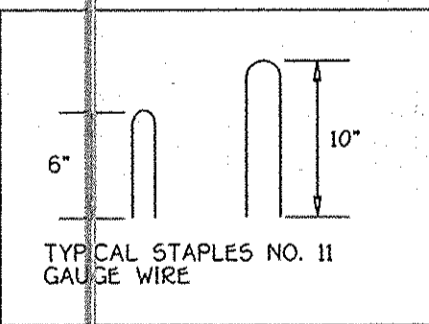
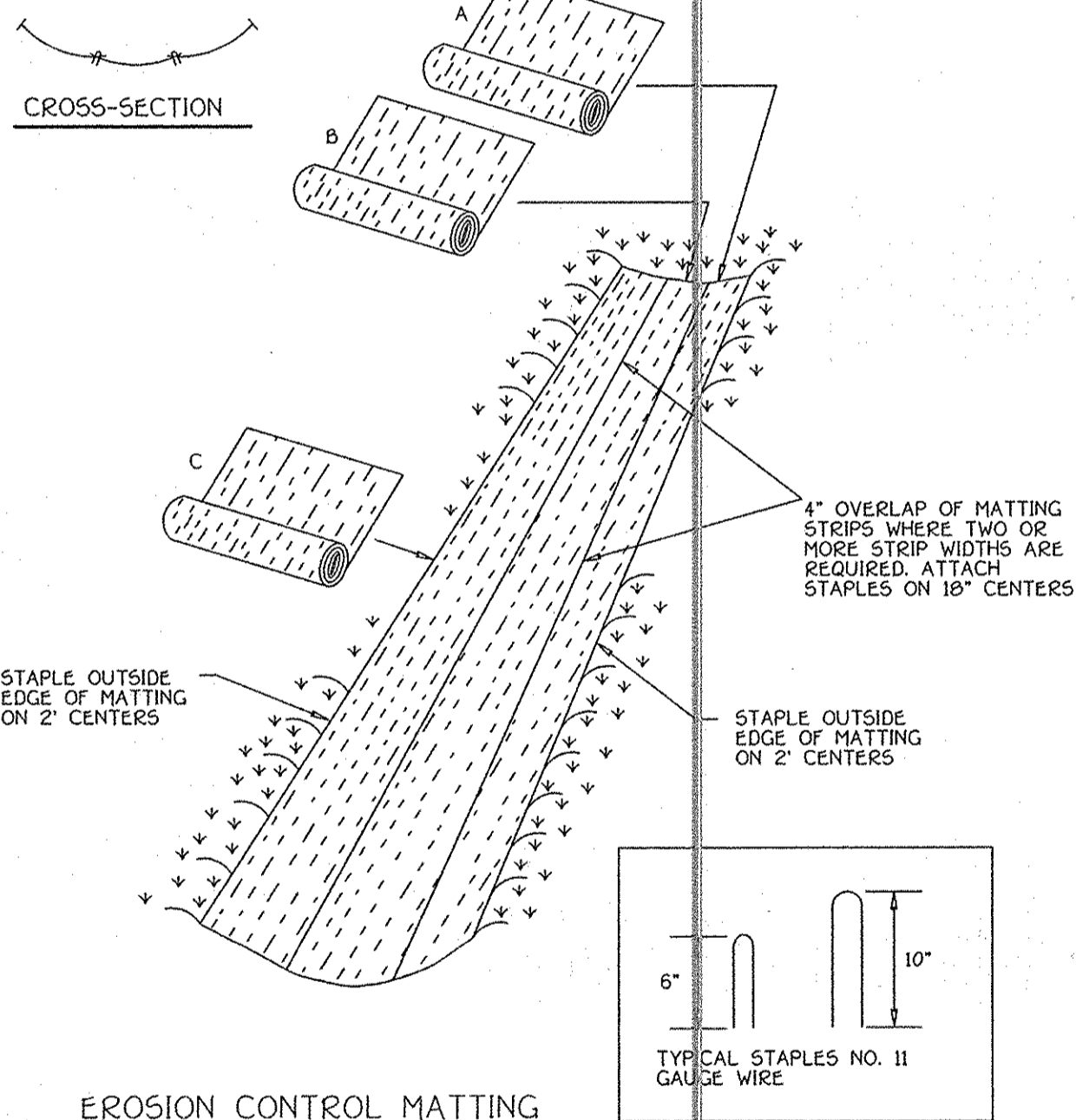
Sequence of Construction

- OBTAIN A GRADING PERMIT.
- 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 410-313-1330 24-HOURS BEFORE STARTING WORK.
- NO DISTURBANCE IS TO OCCUR UNTIL THE BASIN/POND COMPONENTS AND APPURTENANCES ARE ON THE JOB SITE.
- CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES ONLY. INSTALL STABILIZED CONSTRUCTION ENTRANCE. (2 weeks)
- INSTALL THE REMAINING SEDIMENT CONTROL MEASURES. THIS WOULD INCLUDE SEDIMENT BASIN #1, BASIN #2, BASIN #3, BASIN #4 AND ASSOCIATED EARTH DIKES, TREE PROTECTION FENCE AND SILT FENCE AS INDICATED ON THESE PLANS. NO LAYING WILL BE PERMITTED FOR THE EXCAVATION OF THE BASINS AND TRAPS. WHERE NECESSARY, RIPPING AND JACK HAMMERING SHOULD BE UTILIZED IN THE EXCAVATION OF EACH FACILITY. (4 weeks)
- FOR SWM/BASIN #3 INSTALL THE STORM DRAIN FROM EX. I-9 TO RISER R-3 EARLY BEFORE BASIN #3 AND MASS GRADING IN THIS AREA.
- THE PROPOSED STORM DRAIN RUN FROM I-23 TO S-3 IS TO BE CONSTRUCTED AFTER BASIN #1 AND BEFORE ANY MASS GRADING WITHIN THIS AREA.
- OBTAIN PERMISSION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO PROCEEDING.
- CLEAR AND GRUB FOR THE REMAINDER OF THE SITE. (2 weeks)
- GRADE SITE TO THE PROPOSED SUBGRADE FOR EACH ROAD AND INSTALL THE REMAINING STORM DRAIN SYSTEM AND UTILITIES. STABILIZE ALL ROADWAY SLOPES IMMEDIATELY UPON COMPLETION OF GRADING AS SHOWN. (4 weeks)
- INSTALL BASE COURSE PAVING FOR THE PROPOSED ROADS. (1 week)
- STABILIZE ALL AREAS AND OBTAIN PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR PRIOR TO PROCEEDING.
- APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE PAVING. (1 week)
- PERFORM EXISTING FARM POND REPAIRS AS SHOWN ON PLANS THIS WORK CAN BE PERFORMED SEPERATE OF NEW SITE WORK. (3 weeks)
- WHEN ALL CONTRIBUTING AREAS TO THE BASINS AND TRAPS HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE TEMPORARY DEVICE MAY BE REMOVED, BACKFILLED OR REGRADED TO THE PROPOSED FINAL GRADES FOR ALL SWM FACILITIES. THIS INCLUDES THE BMP FACILITIES #1 THRU #6 AND THE TWO FARM POND REPAIRS. STABILIZE ALL REMAINING AREAS WITH PERMANENT SEEDING NOTES. (4 weeks)
- NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR A FINAL INSPECTION OF THE COMPLETED PROJECT TO INCLUDE THE AS-BUILTS OF ALL PONDS INCLUDING THE TWO FARM POND REPAIRS.

SEQUENCE NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL EVENT AND ON A DAILY BASIS. REMOVE SEDIMENTS FROM ALL TRAPS WHEN CLEAN OUT ELEVATIONS ARE REACHED. ALL SEDIMENTS MUST BE PLACED UPSTREAM OF ANY APPROVED BASIN OR TRAP DEVICE.

EROSION CONTROL MATTING

NOT TO SCALE

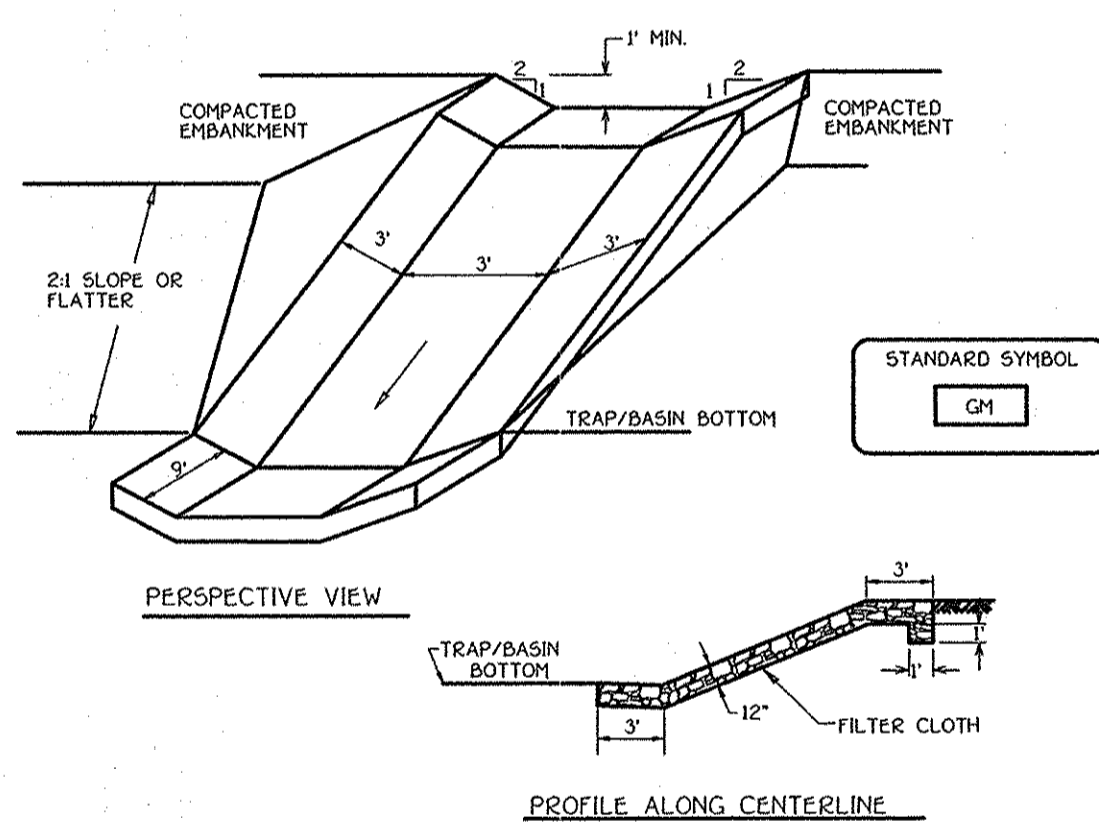


- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
- Staple the 4" overlap in the channel center using an 18" spacing between staples.
- Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
- Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
- Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shingle fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
- The discharge end of the matting line should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed-in.

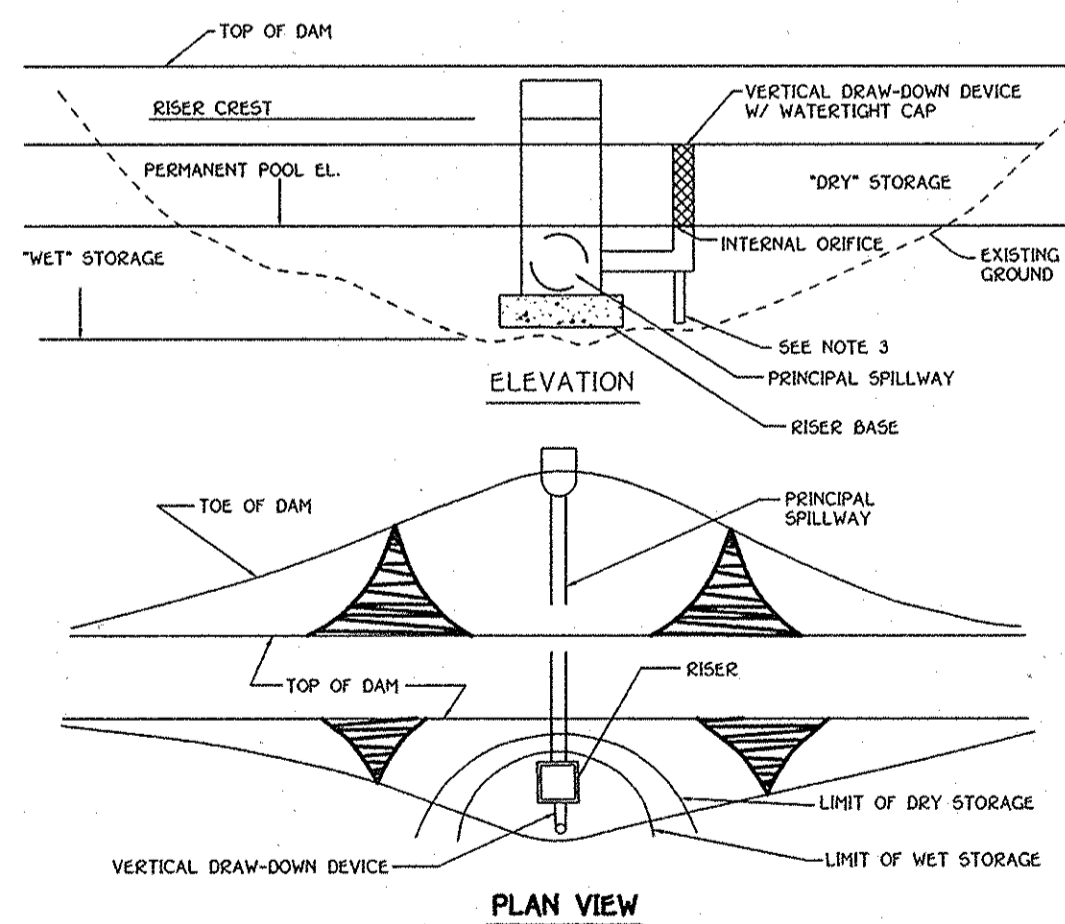
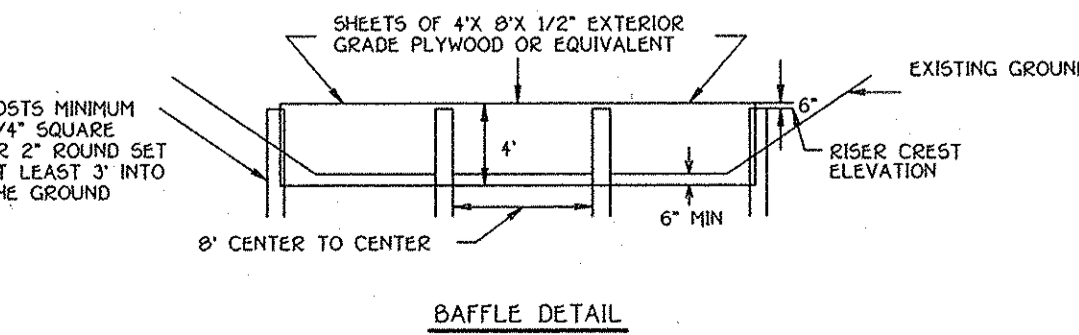
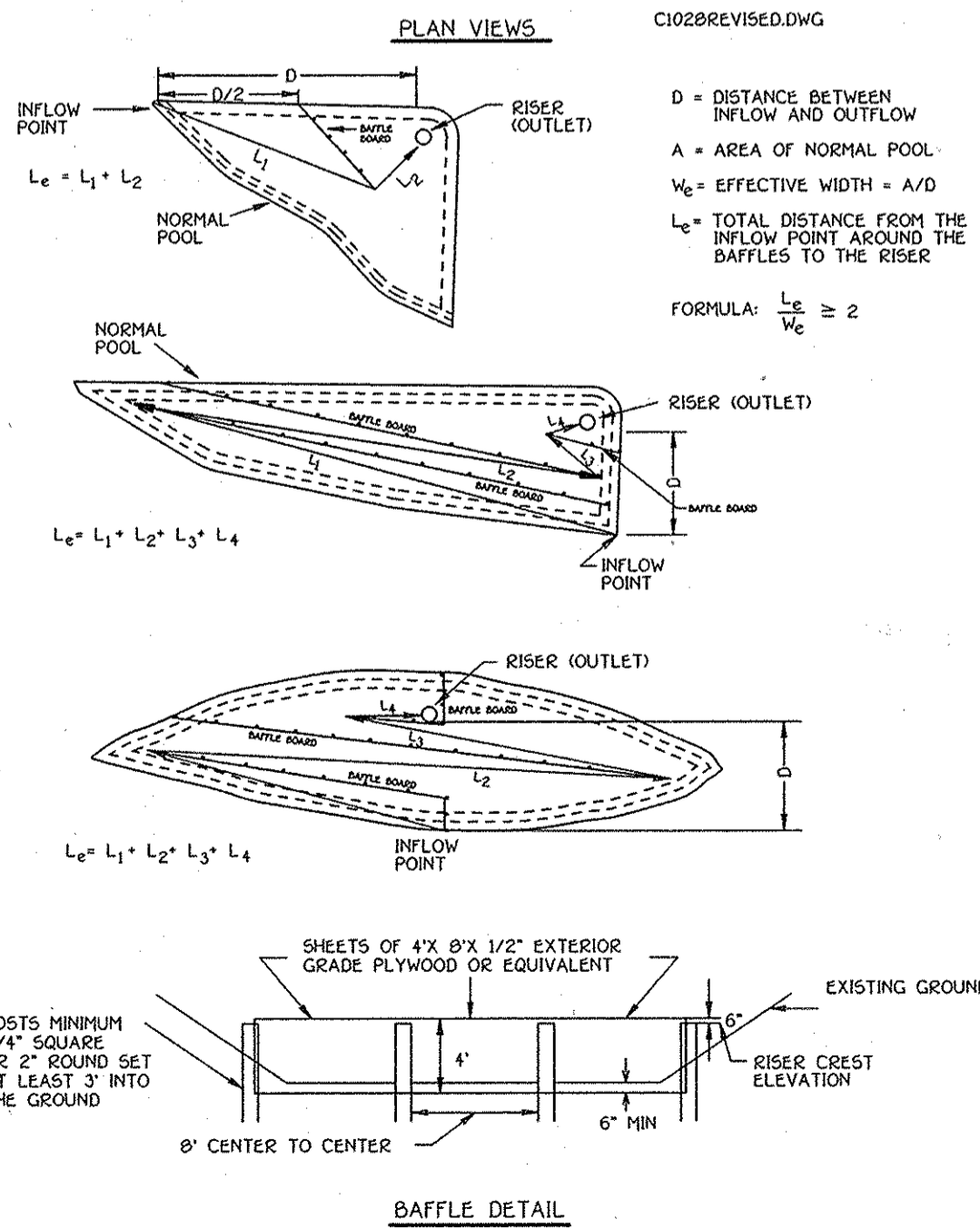
GABION INFLOW PROTECTION

NOT TO SCALE



- Gabion inflow protection shall be constructed of 9' x 3' x 9' gabion baskets forming a trapezoidal cross section 1' deep, with 2:1 side slopes, and a 3' bottom width.
- Geotextile Class C shall be installed under all gabion baskets.
- The stone used to fill the gabion baskets shall be 4" - 7".
- Gabions shall be installed in accordance with manufacturers recommendations.
- Gabion Inflow Protection shall be used where concentrated flow is present on slopes steeper than 4:1.

SEDIMENT BASIN BAFFLES



- PERFORATIONS IN THE DRAW-DOWN DEVICE MAY NOT EXTEND INTO THE WET STORAGE.
- THE TOTAL AREA OF THE PERFORATIONS MUST BE GREATER THAN 2 TIMES THE AREA OF THE INTERNAL ORIFICE.
- THE PERFORATED PORTION OF THE DRAW-DOWN DEVICE SHALL BE WRAPPED WITH 1/2" HARDWARE CLOTH AND GEOTEXTILE FABRIC. THE GEOTEXTILE FABRIC SHALL MEET THE SPECIFICATIONS FOR GEOTEXTILE CLASS E.
- PROVIDE SUPPORT OF DRAW-DOWN DEVICE TO PREVENT SAGGING AND FLOATAION AN ACCEPTABLE PREVENTATIVE MEASURE IS TO STAKE BOTH SIDES OF DRAW-DOWN DEVICE WITH 1" STEEL ANGLE, OR 1" BY 4" SQUARE OR 2" ROUND WOODEN POSTS SET 3" MINIMUM INTO THE GROUND THEN JOINING THEM TO THE DEVICE BY WRAPPING WITH 12 GAUGE MINIMUM WIRE.

VERTICAL DRAW-DOWN DEVICE

NOT TO SCALE

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.

Signature of Engineer: *[Signature]* Date: 3-17-08

DEVELOPER'S CERTIFICATE

I/we certify that all Development and Construction will be Done According to This Plan of Development and Plan for Erosion and Sediment Control and That All Responsible Personnel Involved 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]* Date: 3-18-08

Reviewed For Howard County Soil Conservation District and Meets Technical Requirements.

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

Approved: This Development Is Approved For Erosion and Sediment Control By the Howard Soil Conservation District.

Signature of District Engineer: *[Signature]* Date: 4/7/08

Approved: Department Of Planning And Zoning

Signature of Chief, Division of Land Development: *[Signature]* Date: 4/21/08

Signature of Chief, Development Engineering Division: *[Signature]* Date: 4/21/08

Approved: Howard County Department Of Public Works

Signature of Chief, Bureau of Highways: *[Signature]* Date: 4-10-08

SEDIMENT CONTROL DETAILS

THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)
And
Warfield Brothers
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

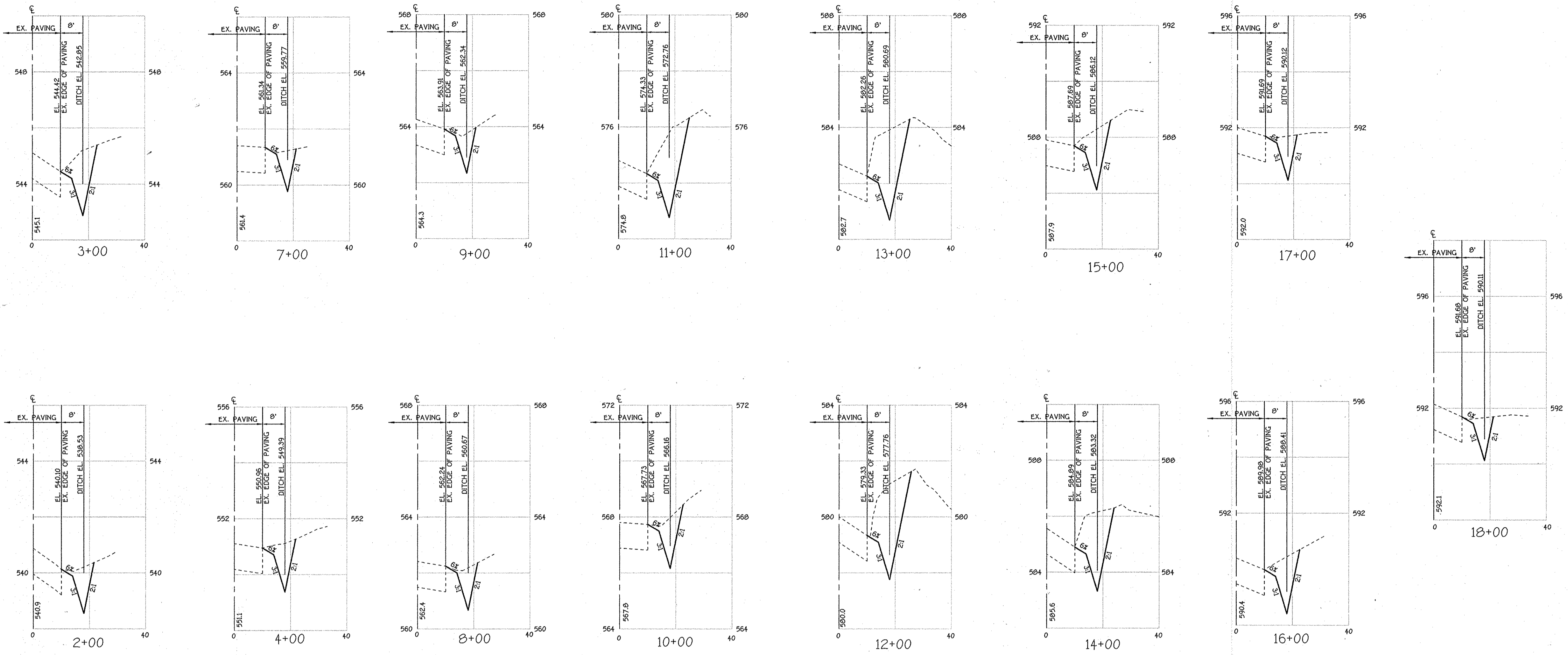
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 114
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 26 OF 40

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21114
410.661.2995

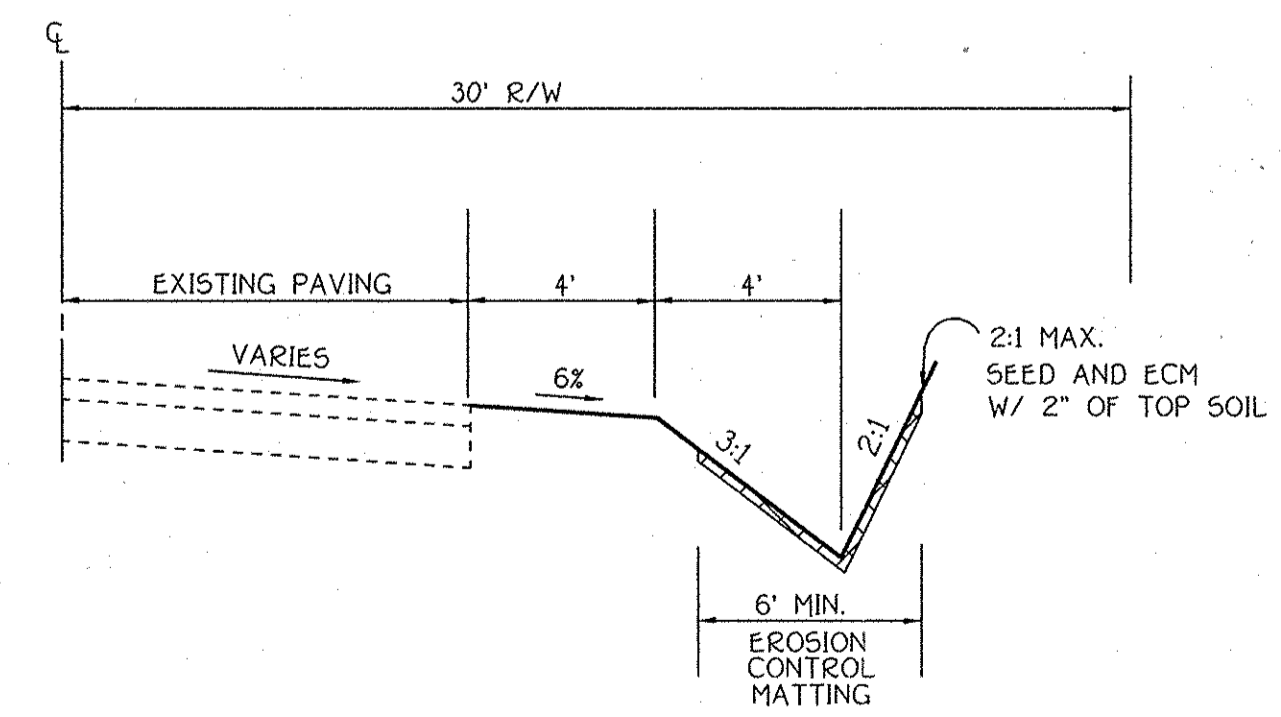


AS-BUILT CERTIFICATION
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.
Signature: *[Signature]* Date: 6/10/14
CHARLES J. GOFF, P.E. NO. 13204

Approved: Department Of Planning And Zoning
 Chief, Division Of Land Development *Cindy Harvett* 4/28/05
 Chief, Development Engineering Division *Michael Dammann* 4/22/05
 Approved: Howard County Department Of Public Works
 Chief, Bureau Of Highways *William J. White* 4-10-05

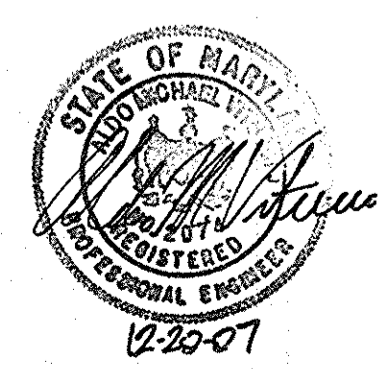


CROSS-SECTIONS
 SCALE: HOR. 1" = 20'
 VER. 1" = 2'



STA. 1+00 TO STA. 4+82 & STA. 6+32 TO STA. 18+50
TYPICAL WIDENING (TRIADELPHIA ROAD)
 NO SCALE

AS-BUILT CERTIFICATION
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.
Charles J. Crava, Jr. 6/18/14
 CHARLES J. CRAVA, JR. PE NO. 13204 DATE



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FEE
 ELLESMERE CITY, MARYLAND 21042
 (410) 461-2895

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

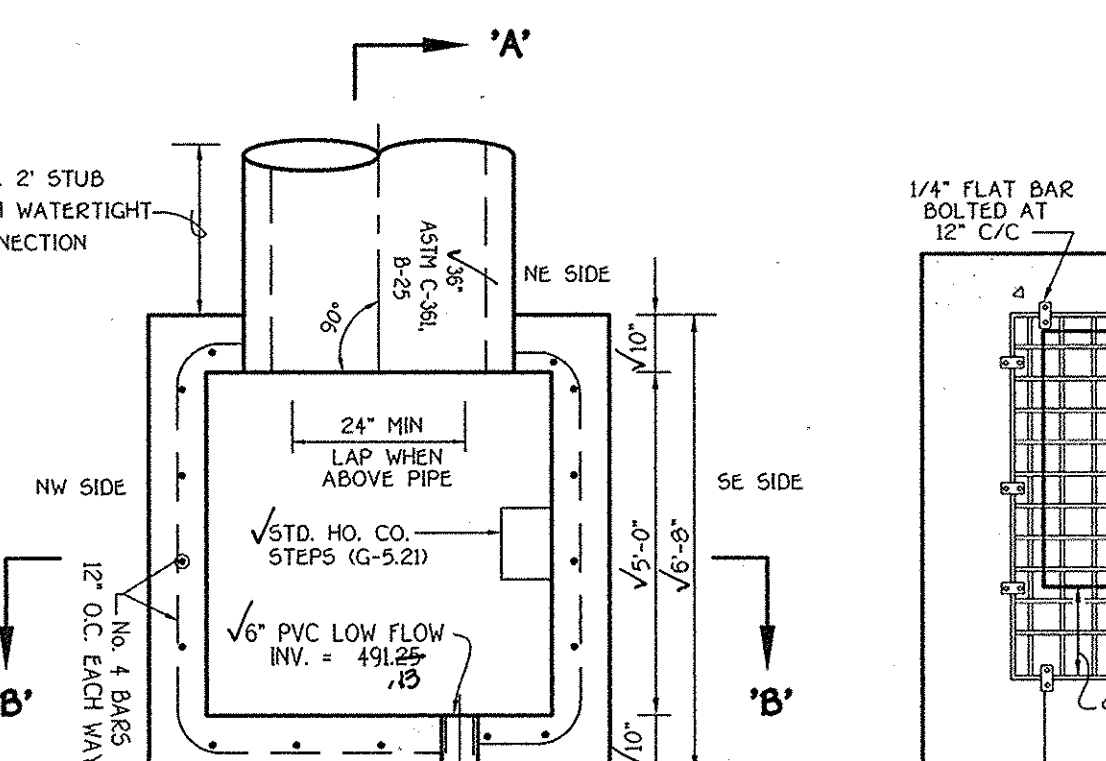
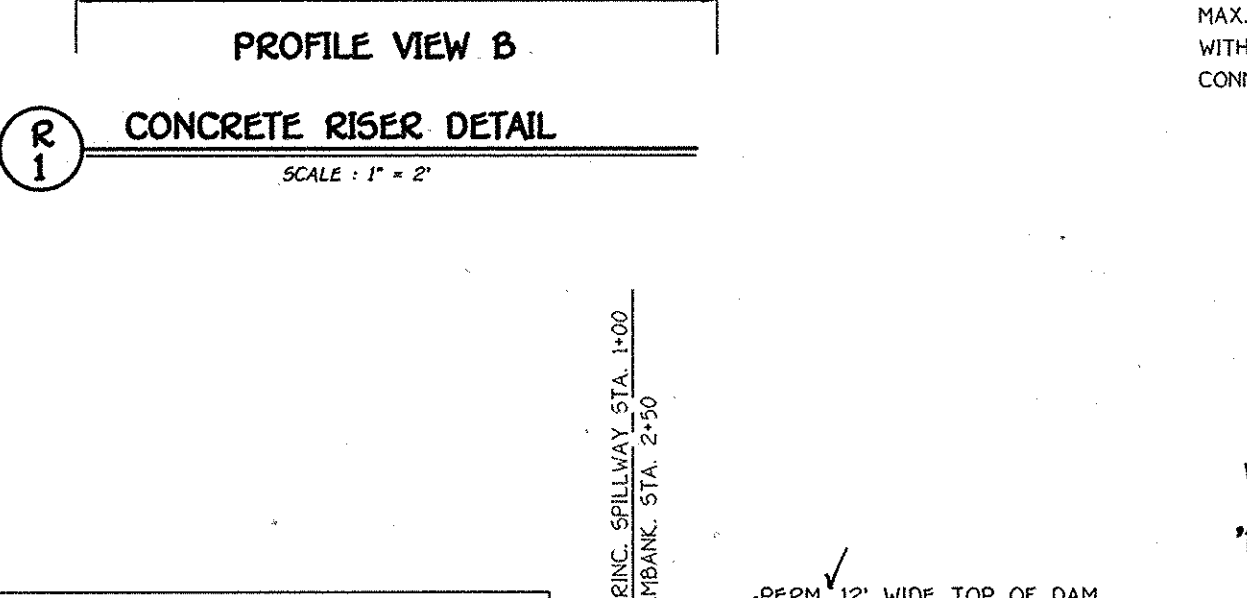
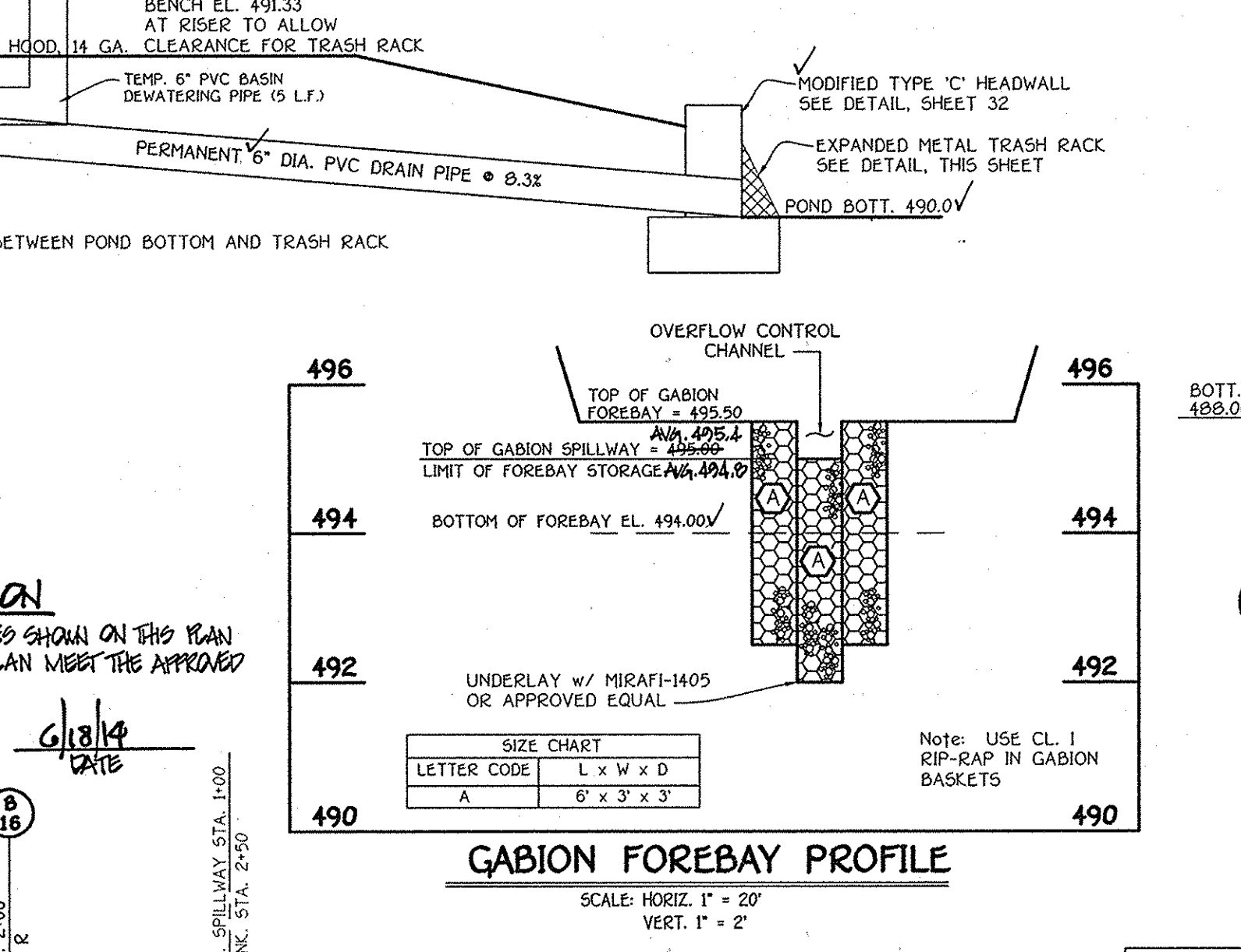
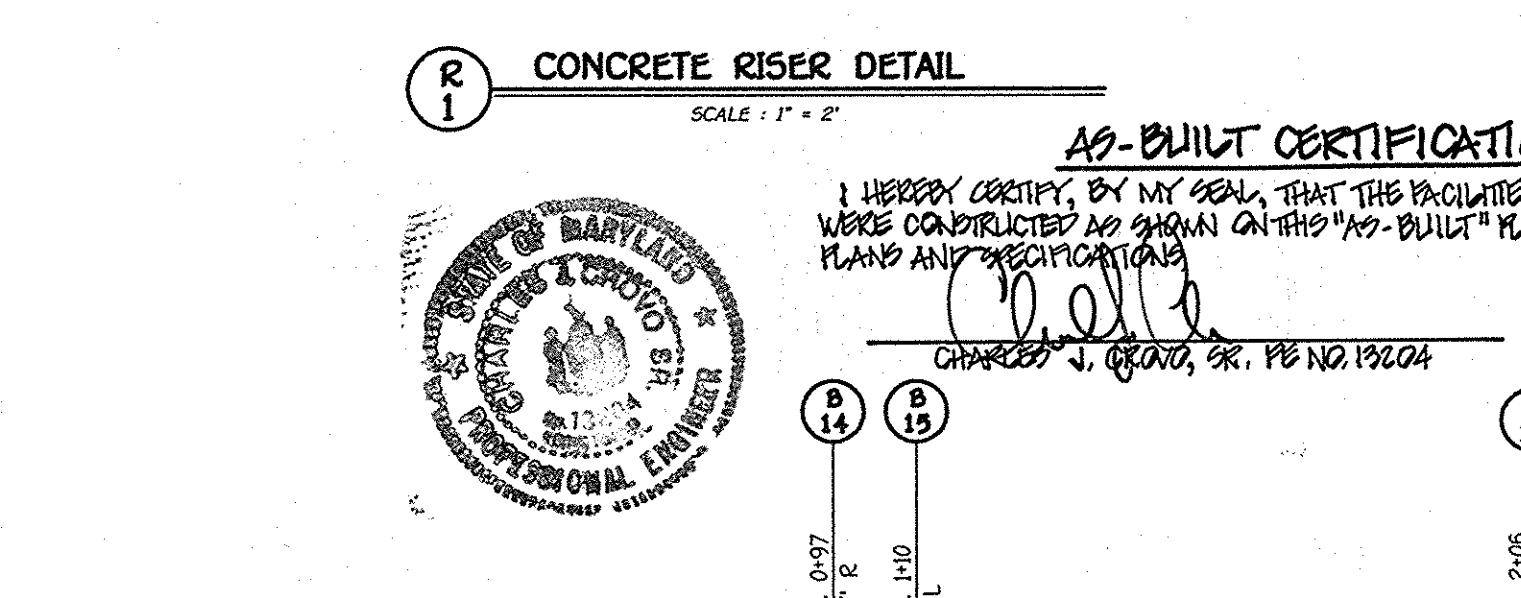
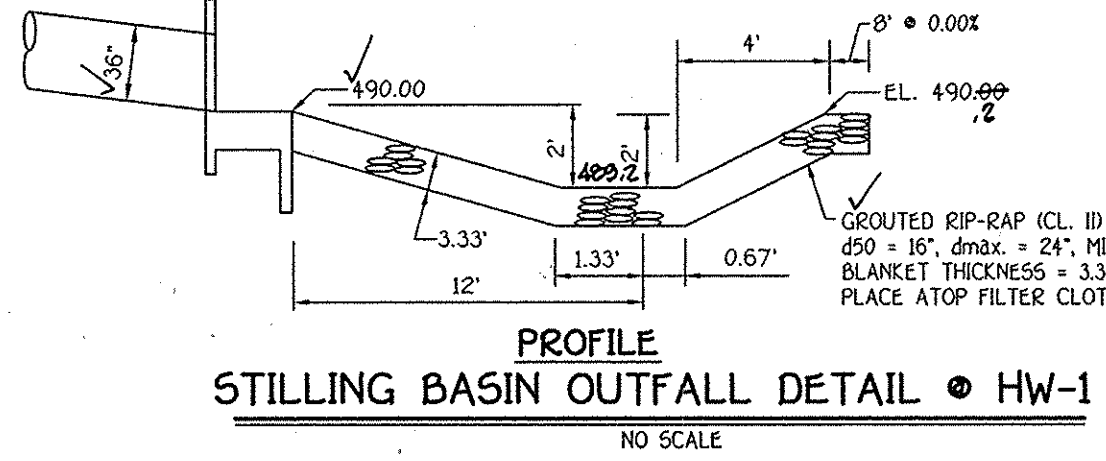
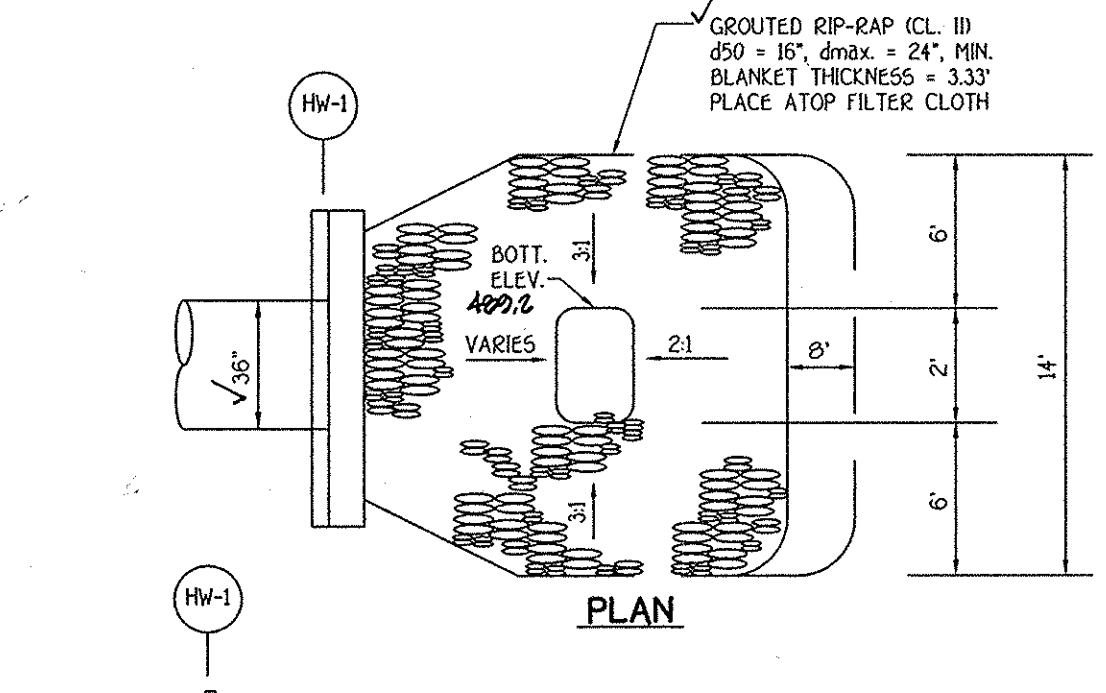
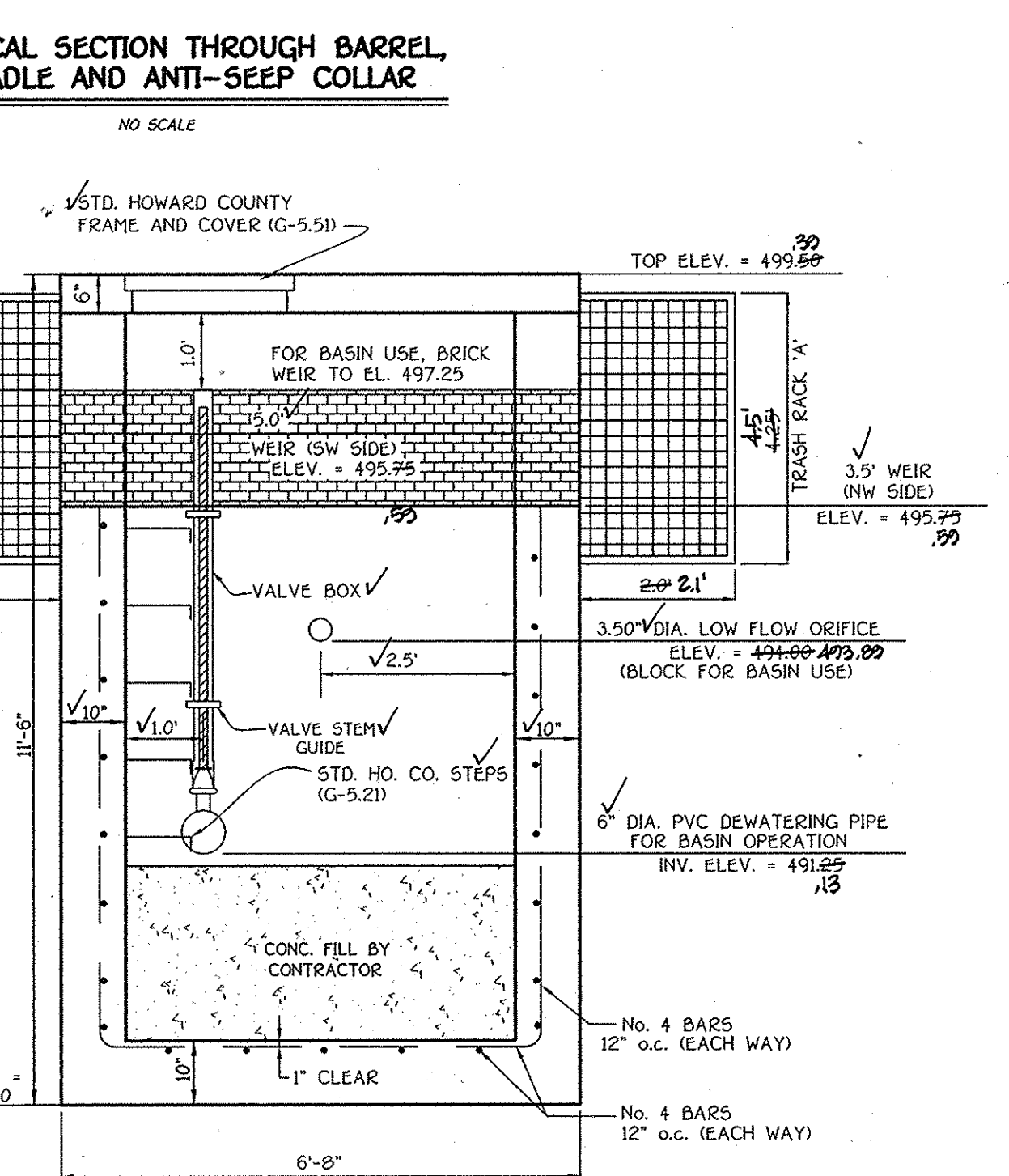
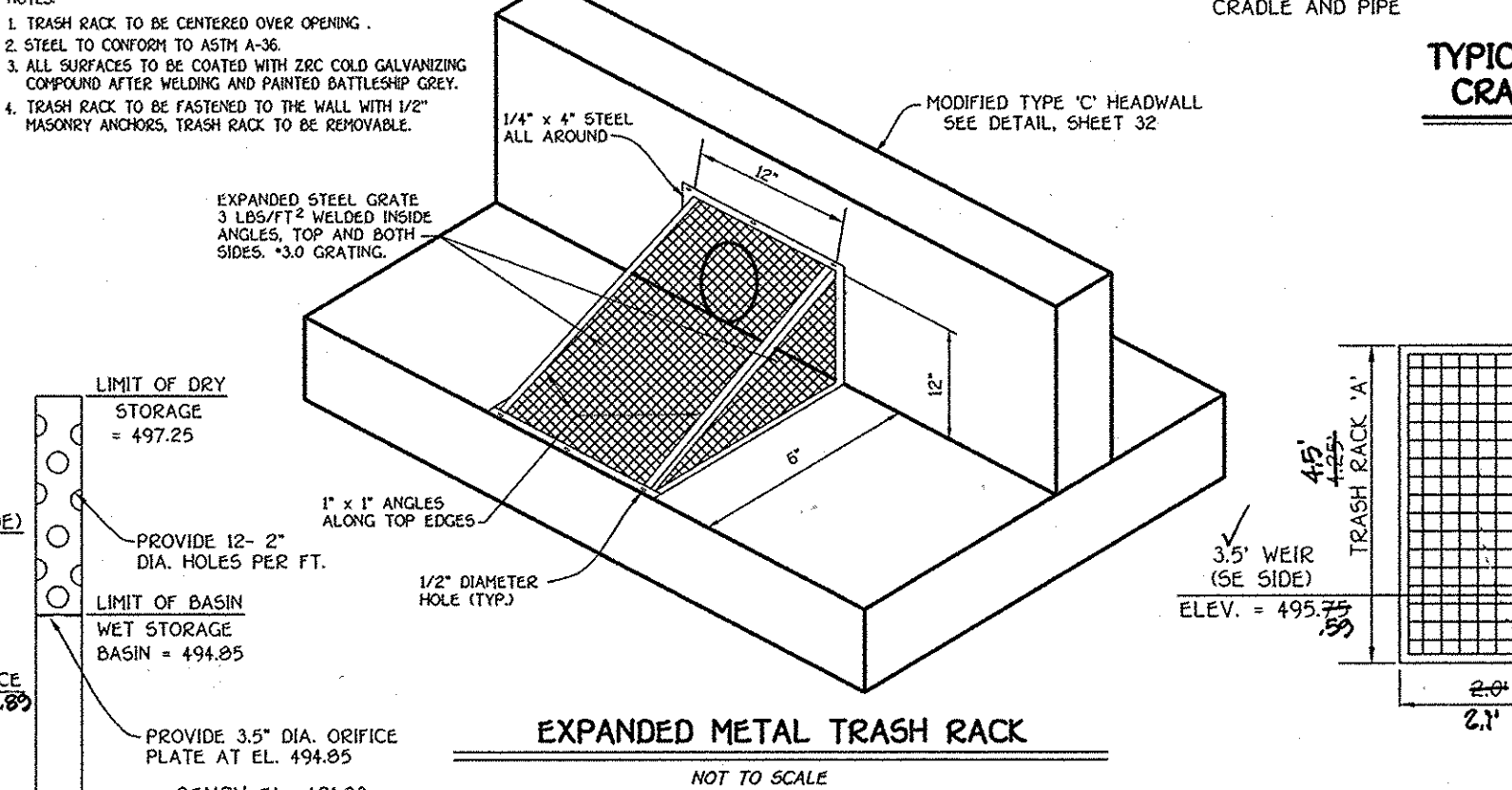
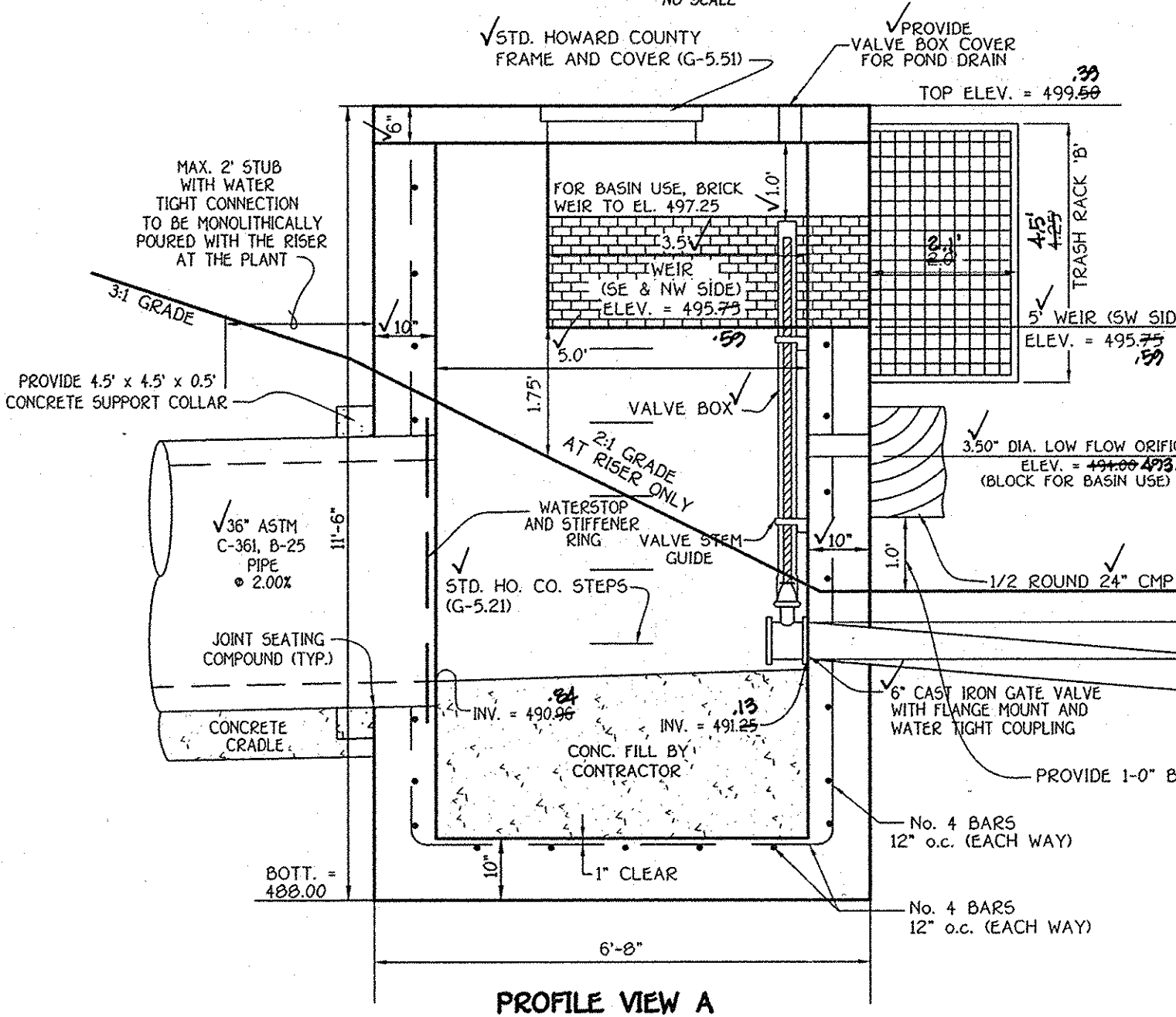
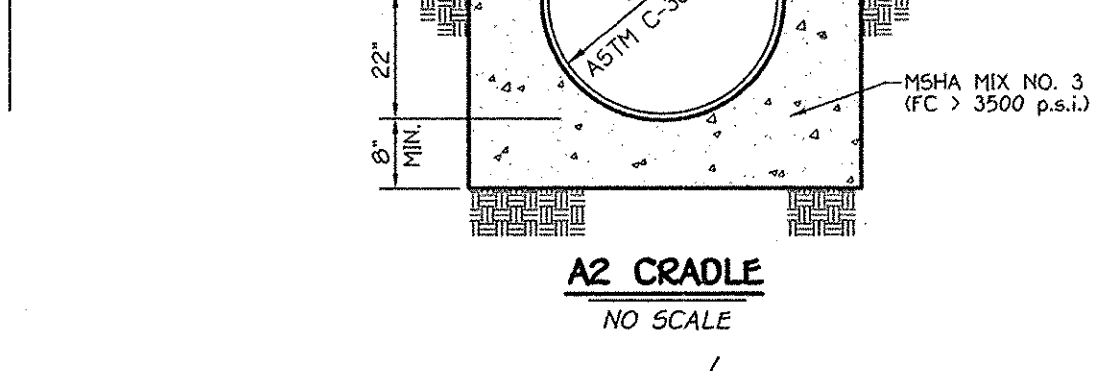
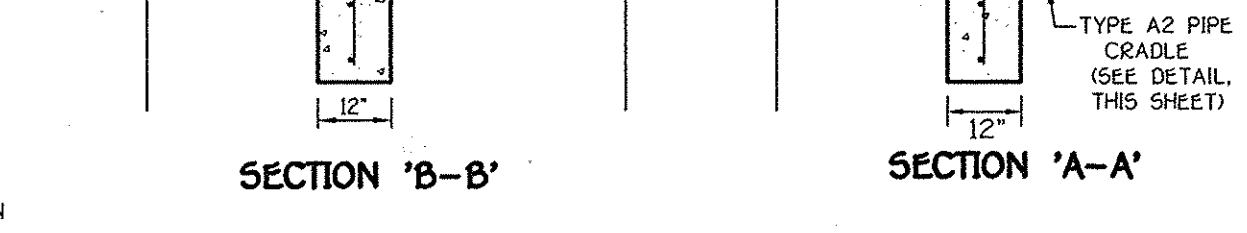
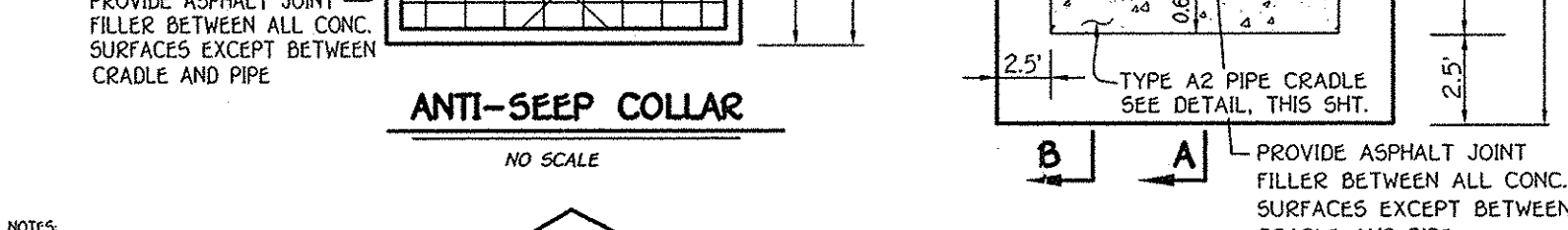
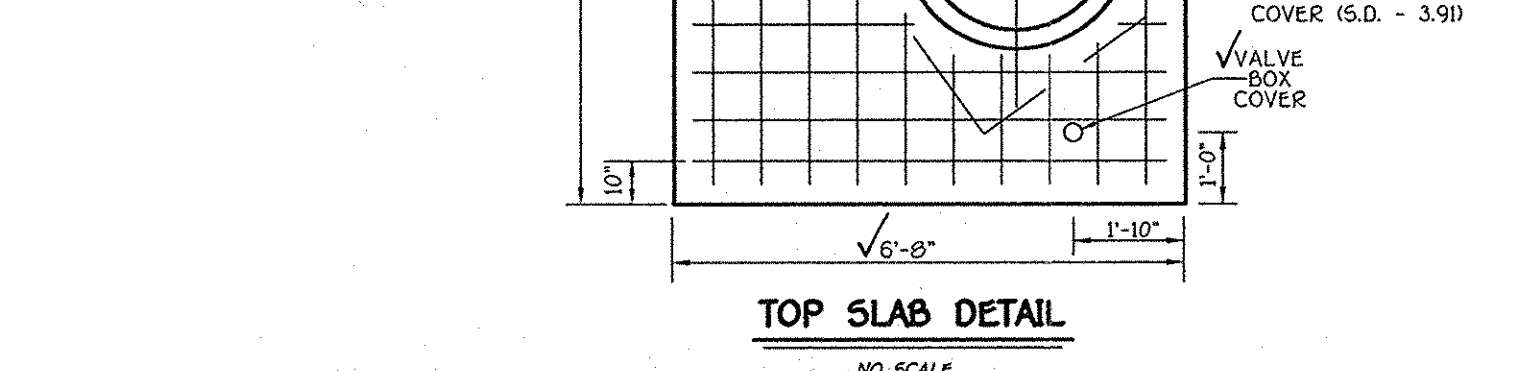
DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410-442-2337)

TRIADELPHIA ROAD CROSS-SECTIONS
 STA. 2+00 TO STA. 18+00
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-6B, OPEN SPACE LOT
 69, BUILDABLE PRESERVATION PARCEL 'A'
 AND NON-BUILDABLE PRESERVATION PARCELS
 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 27 GRID NO. 23 PARCEL NO. 55
 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 27 OF 40

F-07-040
AS-BUILT

K:\Drawings\330310 Warfield Homeowners\FINALS\330310 SECT-2 SHEET 26-27 SEGMENT CONTROL DETAILS.dwg, 12/19/2007 1:17:28 PM

- NOTES:
1. CONCRETE SHALL BE MSHA MIX NO. 3 (FC > 3500 P.S.I.)
 2. REINFORCING STEEL: GRADE 60
 3. FOR WALLS OF STRUCTURE SHALL UTILIZE L-14
 4. SCOTFIELD CO. T-9055 FORM LINERS (RANDOM SPLIT-FACE ROCK) OPTIONAL.
 5. PROVIDE ROUGH BROOM FINISH
 6. ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6.07.03.59 OF THE MSHA STANDARDS AND SPECS.
 7. ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIA. UNLESS OTHERWISE SHOWN.



By The Developer:
Signature of Developer: *Kennard Warfield, Jr.*
Printed Name of Developer: **Kennard Warfield, Jr.**
Date: **3-18-08**

By The Engineer:
Signature of Engineer: *William J. Warfield, Sr.*
Printed Name of Engineer: **William J. Warfield, Sr.**
Date: **3-17-08**

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.

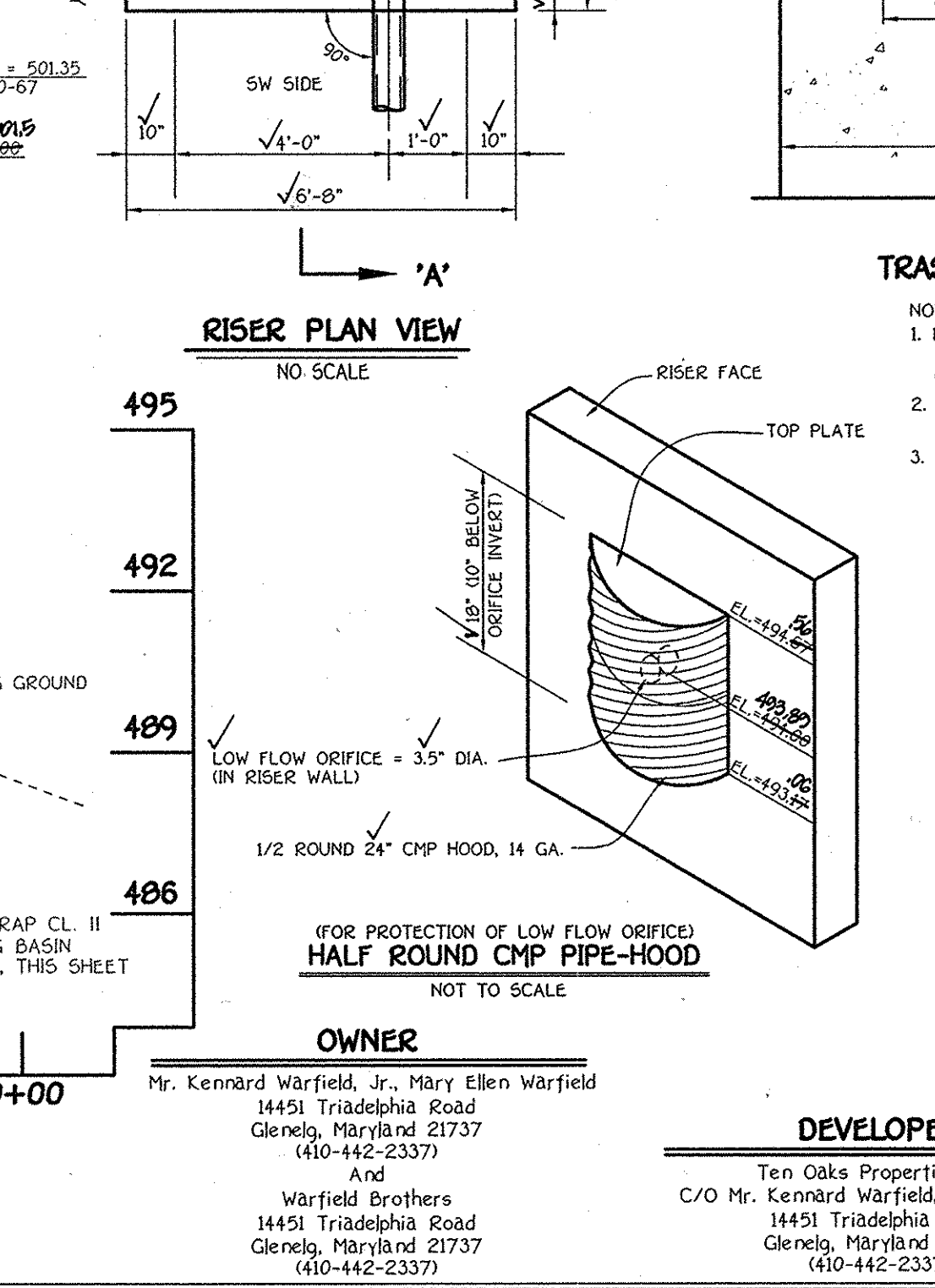
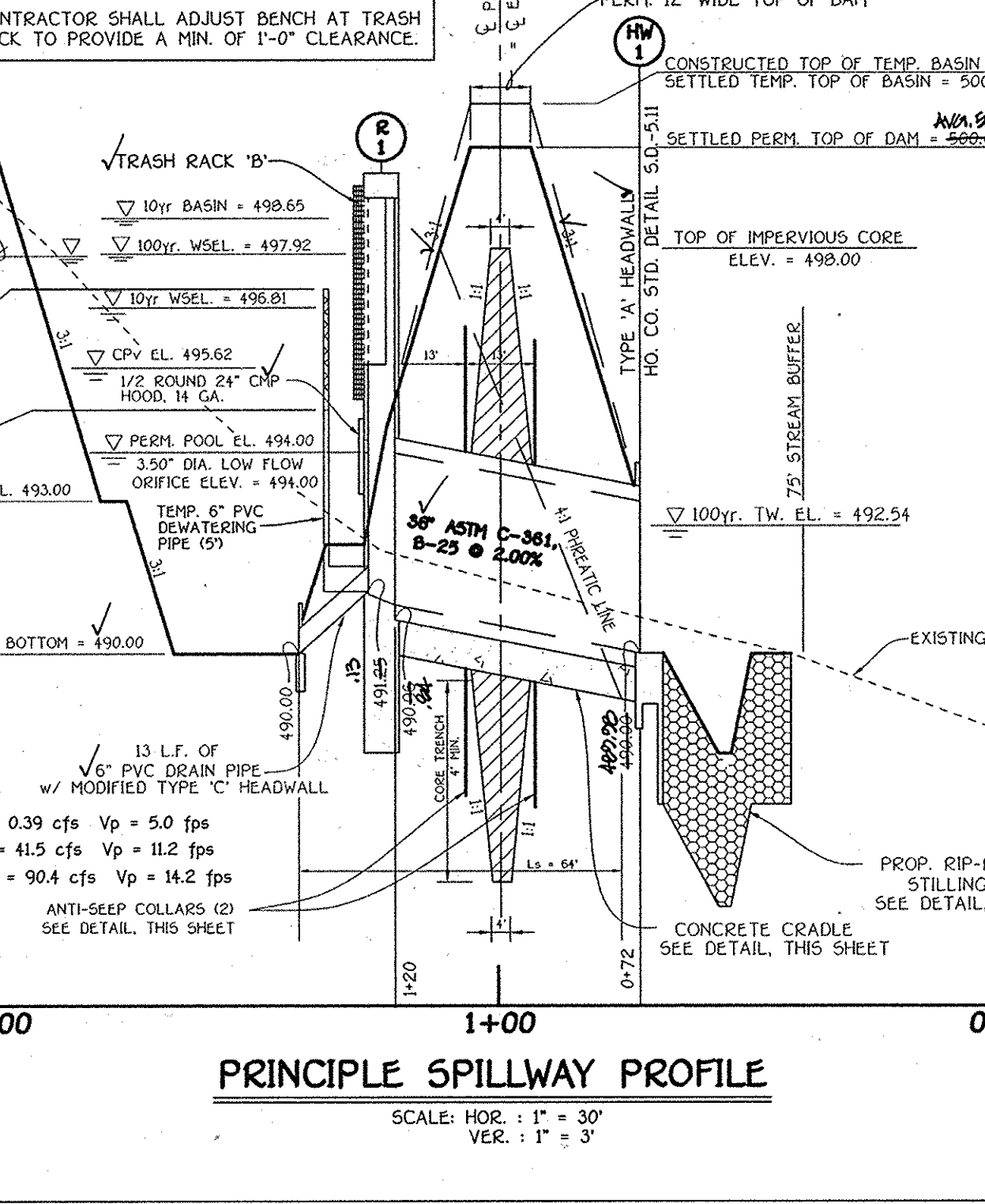
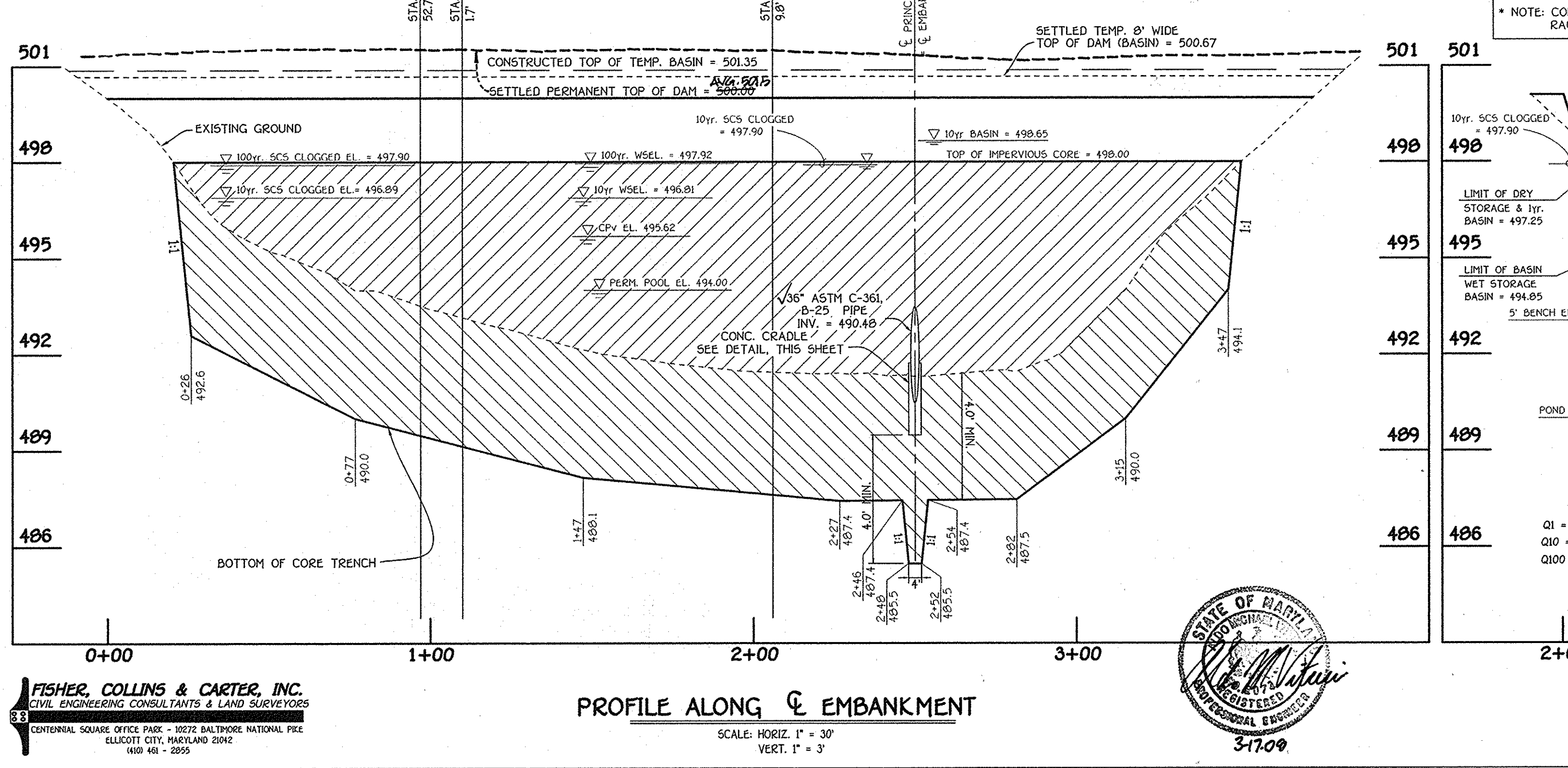
Approved Department of Public Works:
Signature: *William J. Warfield, Sr.*
Date: **4-1-08**

Approved Department of Planning And Zoning:
Signature: *Cindy Harsh*
Date: **4-10-07**

Chief, Development Engineering Division:
Signature: *William J. Warfield, Sr.*
Date: **4-24-08**

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: *William J. Warfield, Sr.*
Date: **13204**
P.E. No. **61814**

CERTIFICATION
I Herby Certify, By My Seal, That The Facilities Shown On This Plan Were Constructed As Shown On This As-Built Plan Meets The Approved Plans And Specifications.
Signature: *William J. Warfield, Sr.*
Date: **6/18/08**



TRASH RACK 'A'
TRASH RACK 'B'

NOTES:
1. FIELD MEASURE THE STRUCTURE DIMENSIONS TO INSURE EXACT FIT OF TRASH RACK.
2. GALVANIZE ENTIRE TRASH RACK AFTER FABRICATION.
3. PAINT BATTLESHIP GRAY.

TRASH RACK 'A' & 'B' DETAIL
NO SCALE

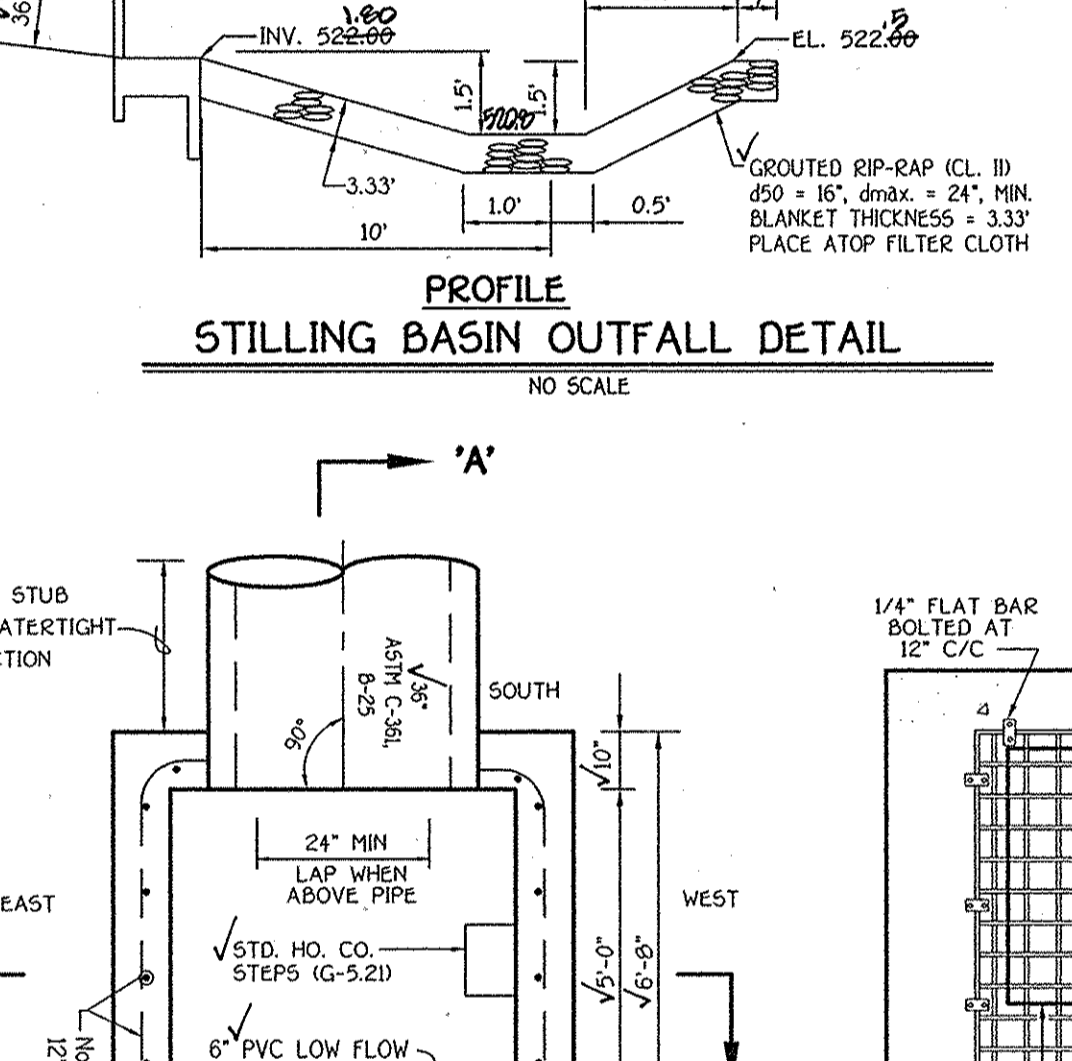
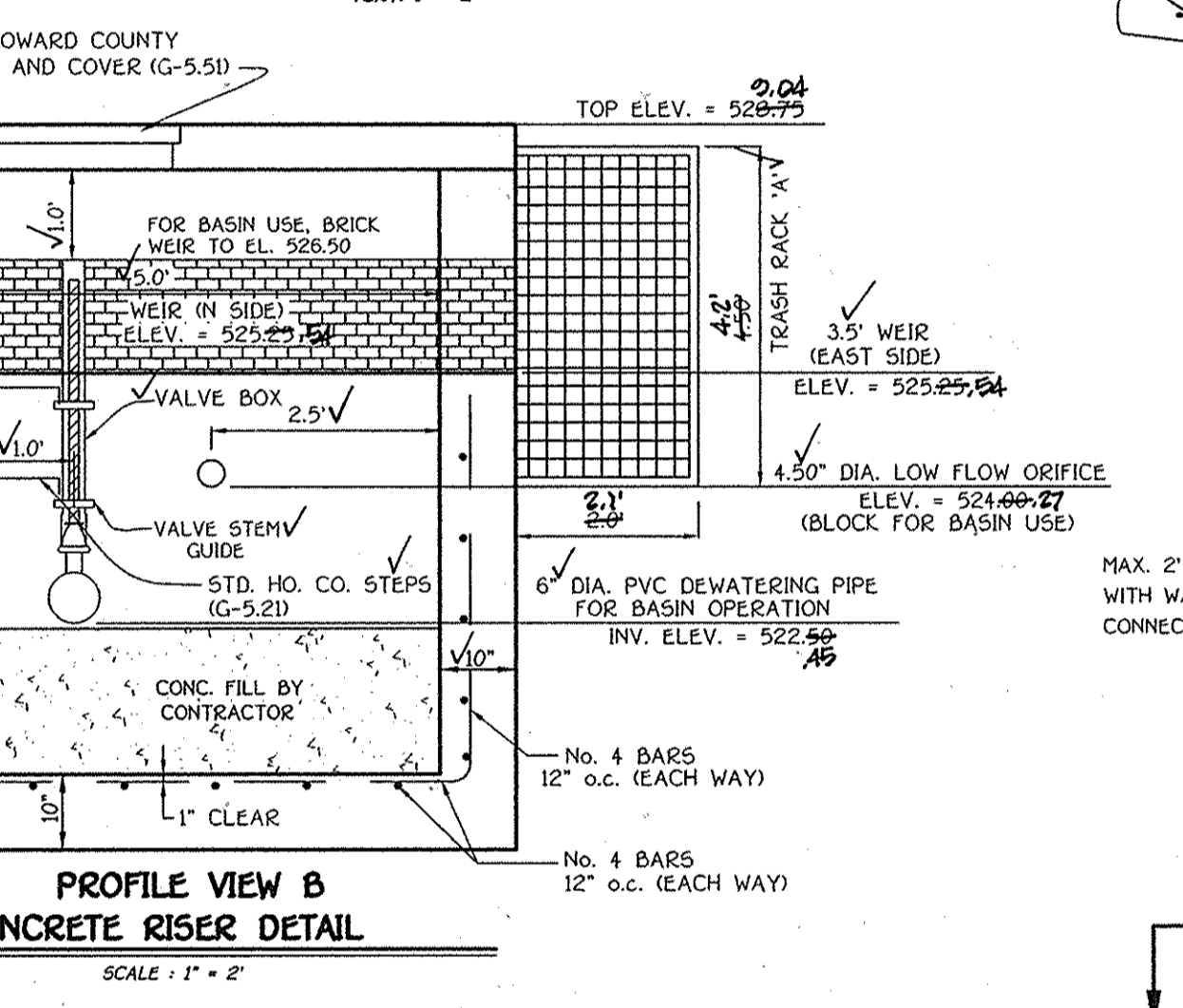
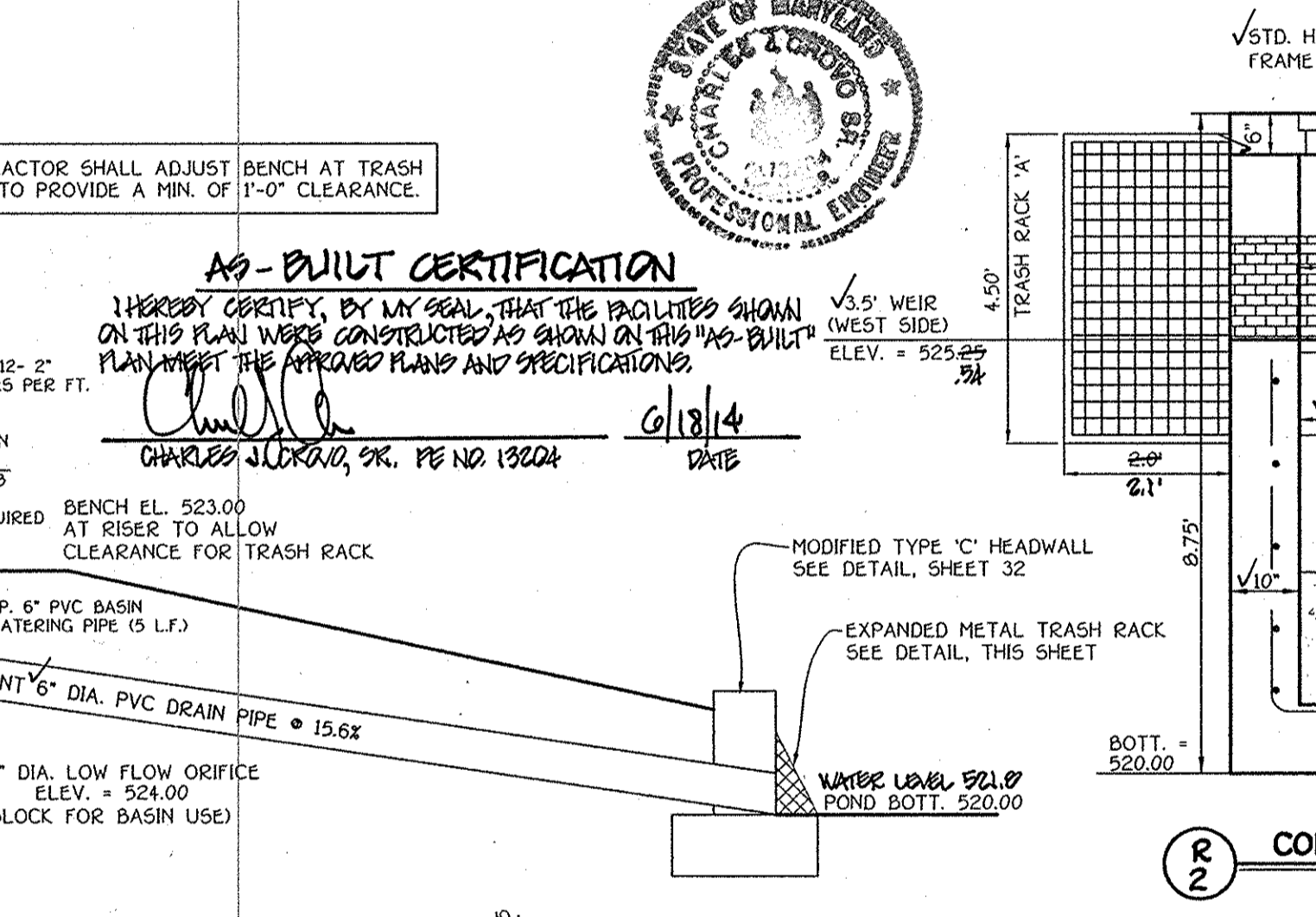
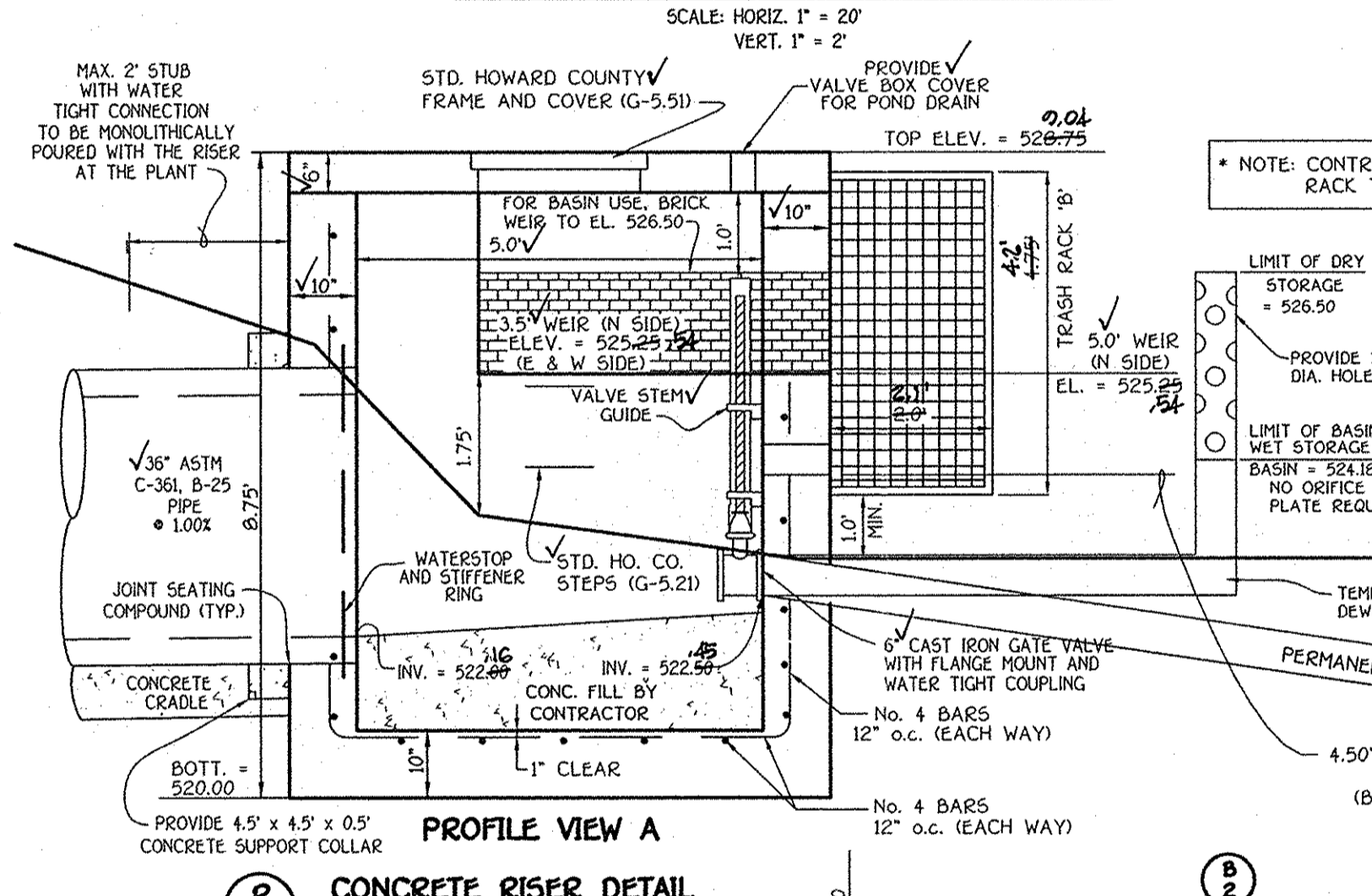
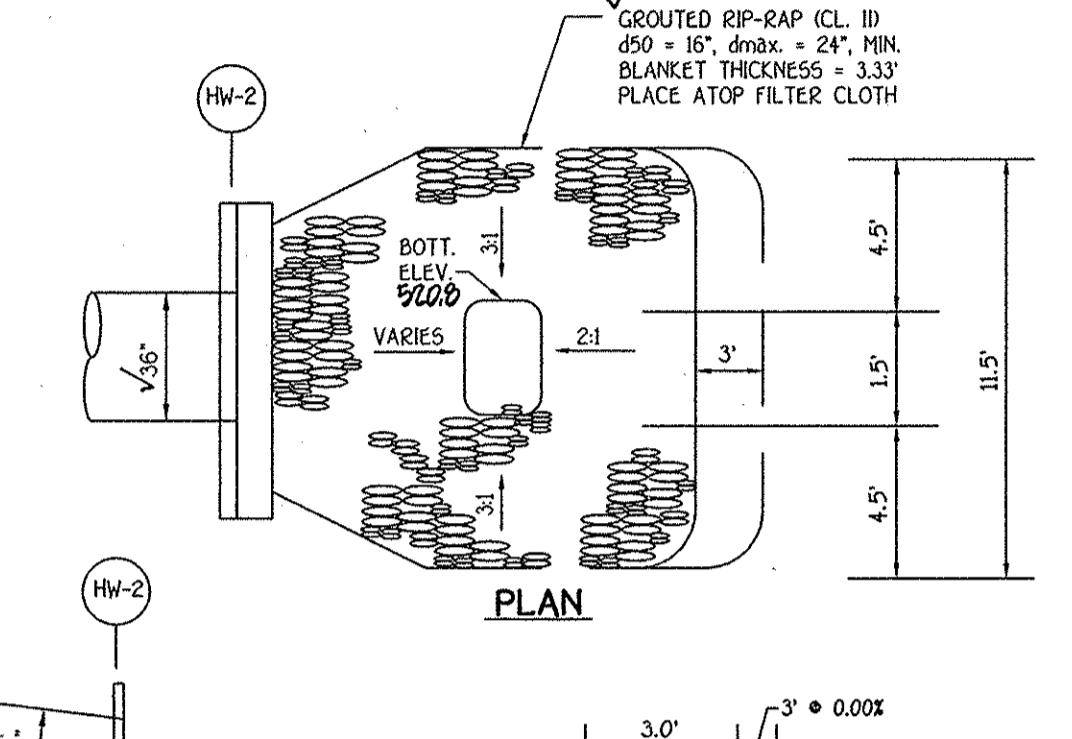
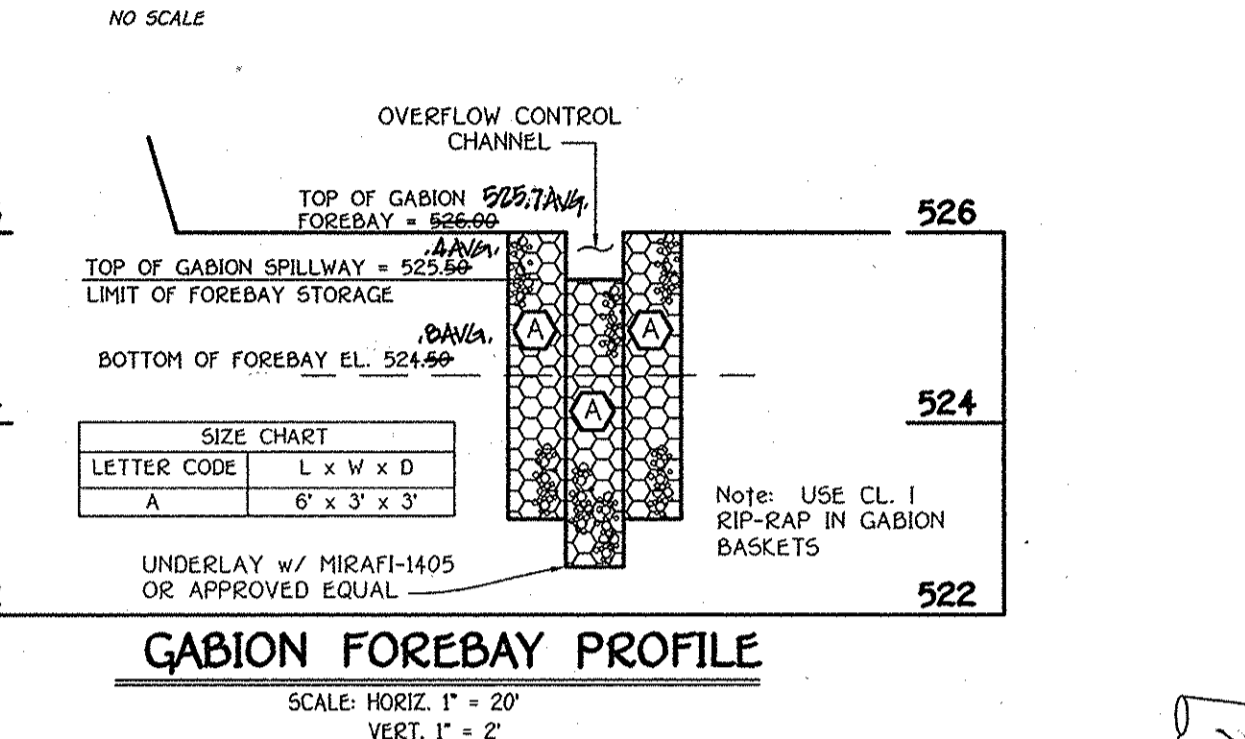
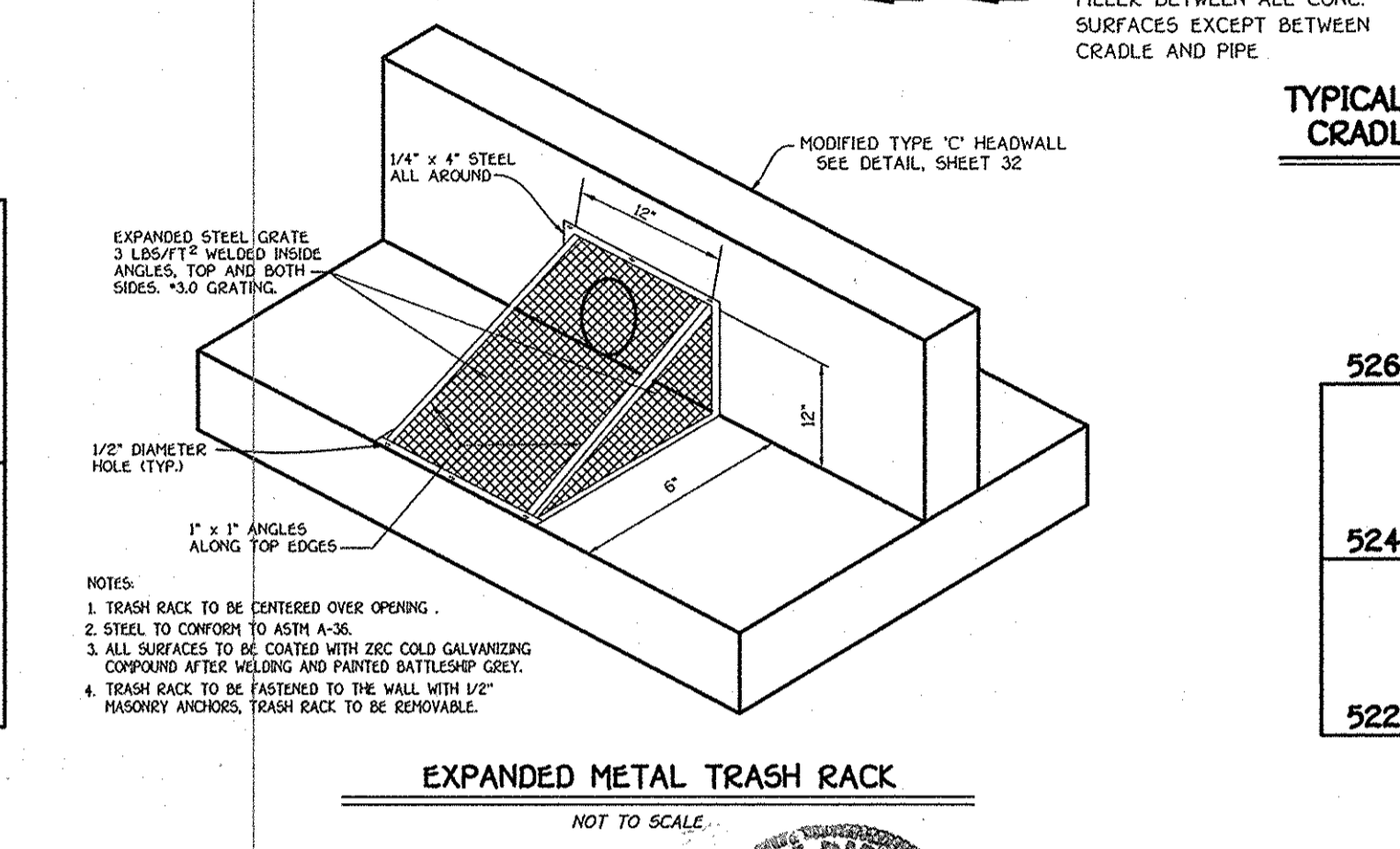
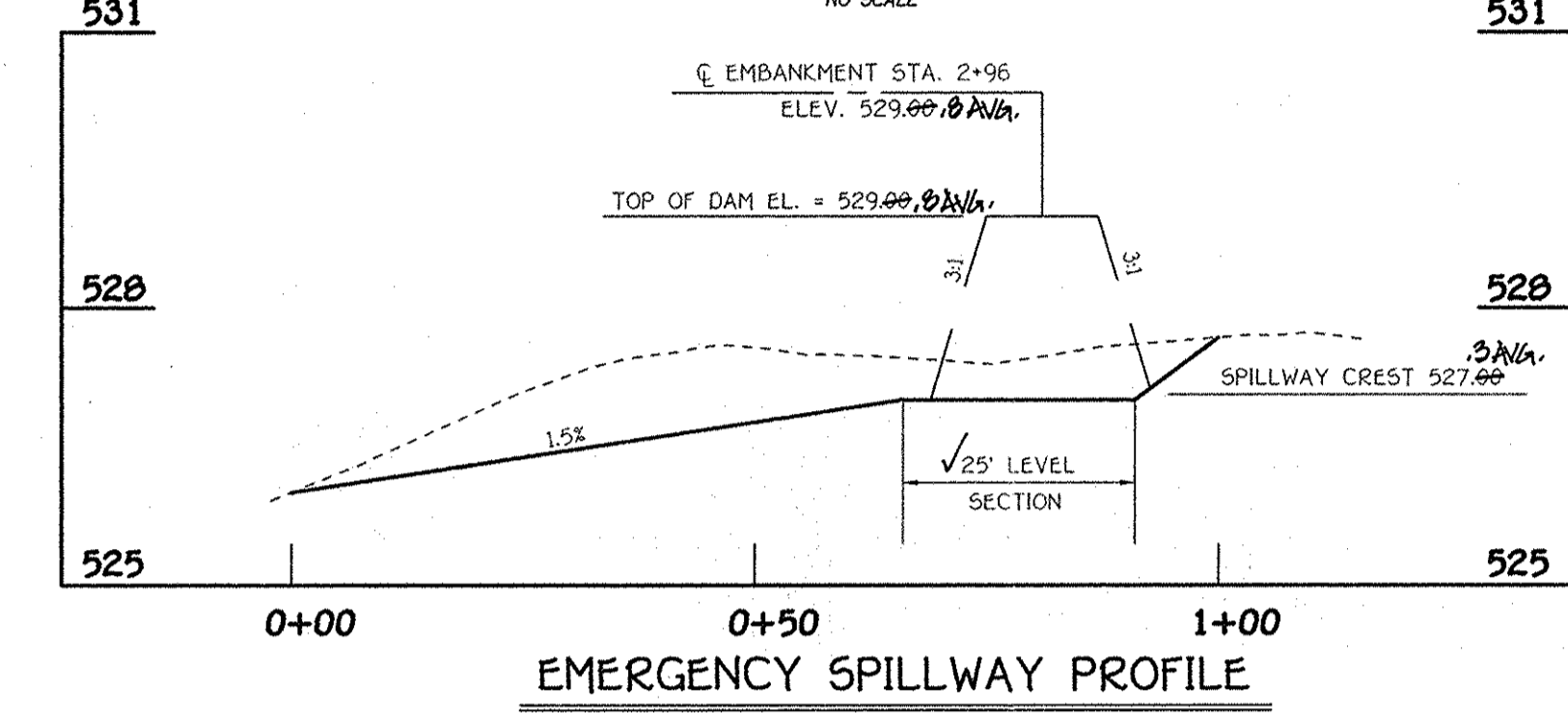
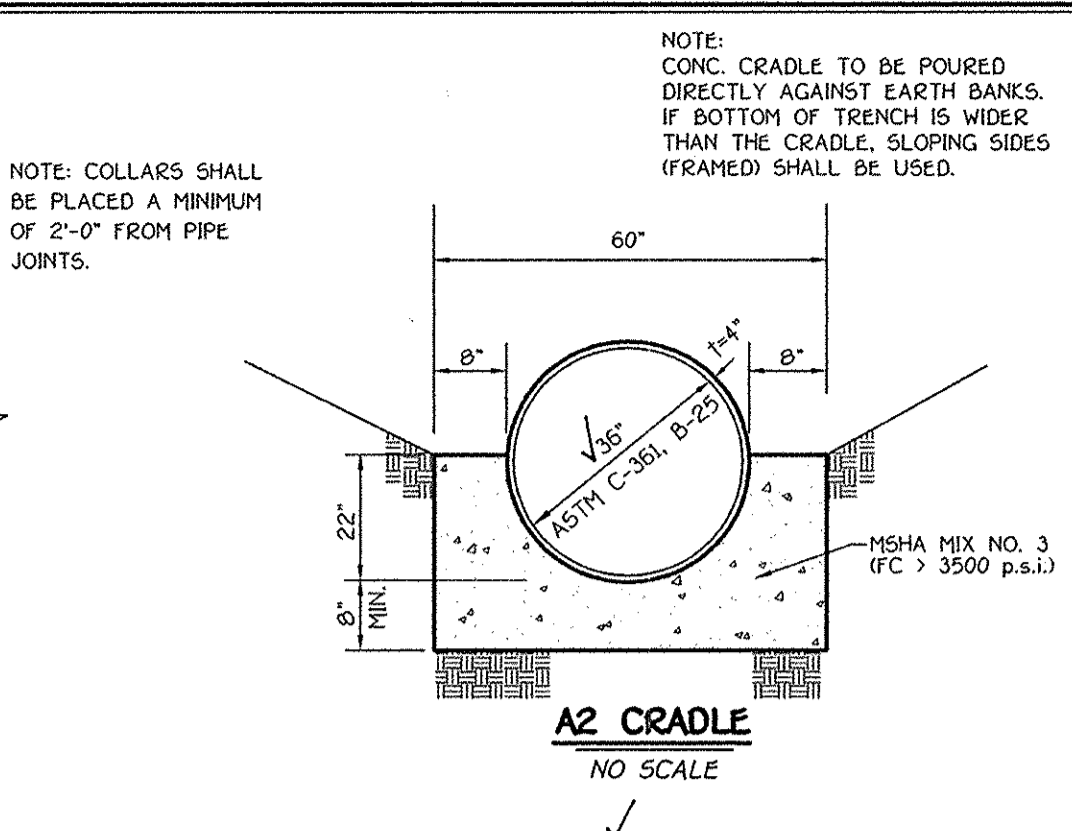
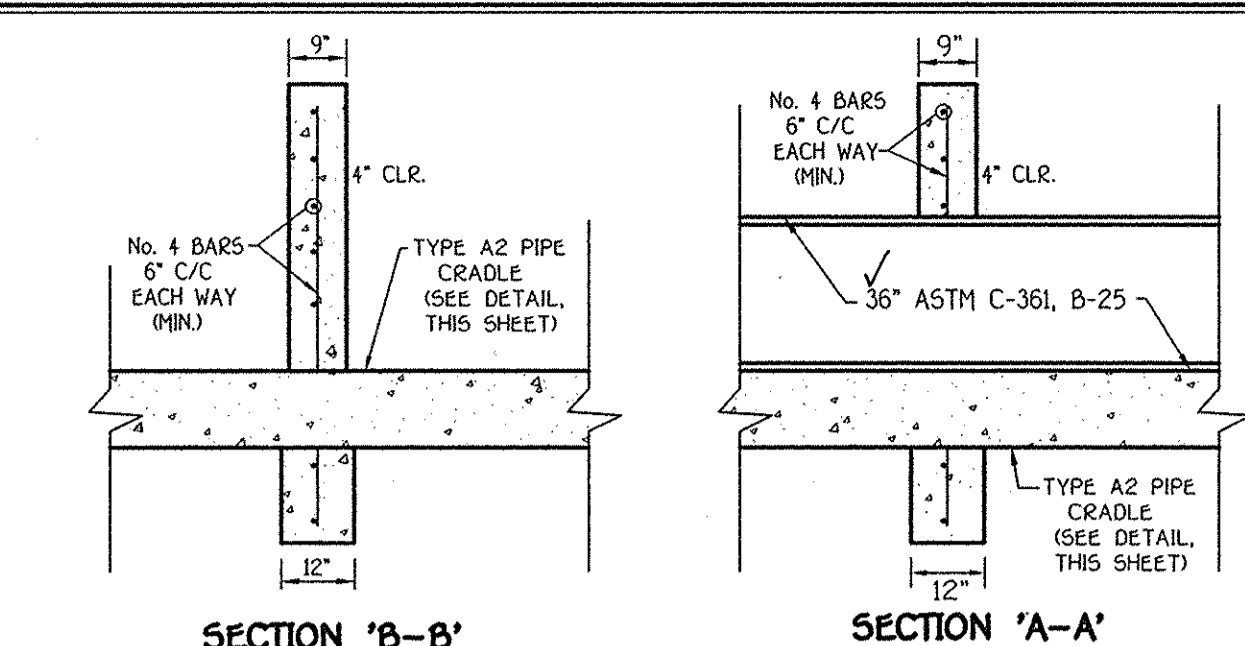
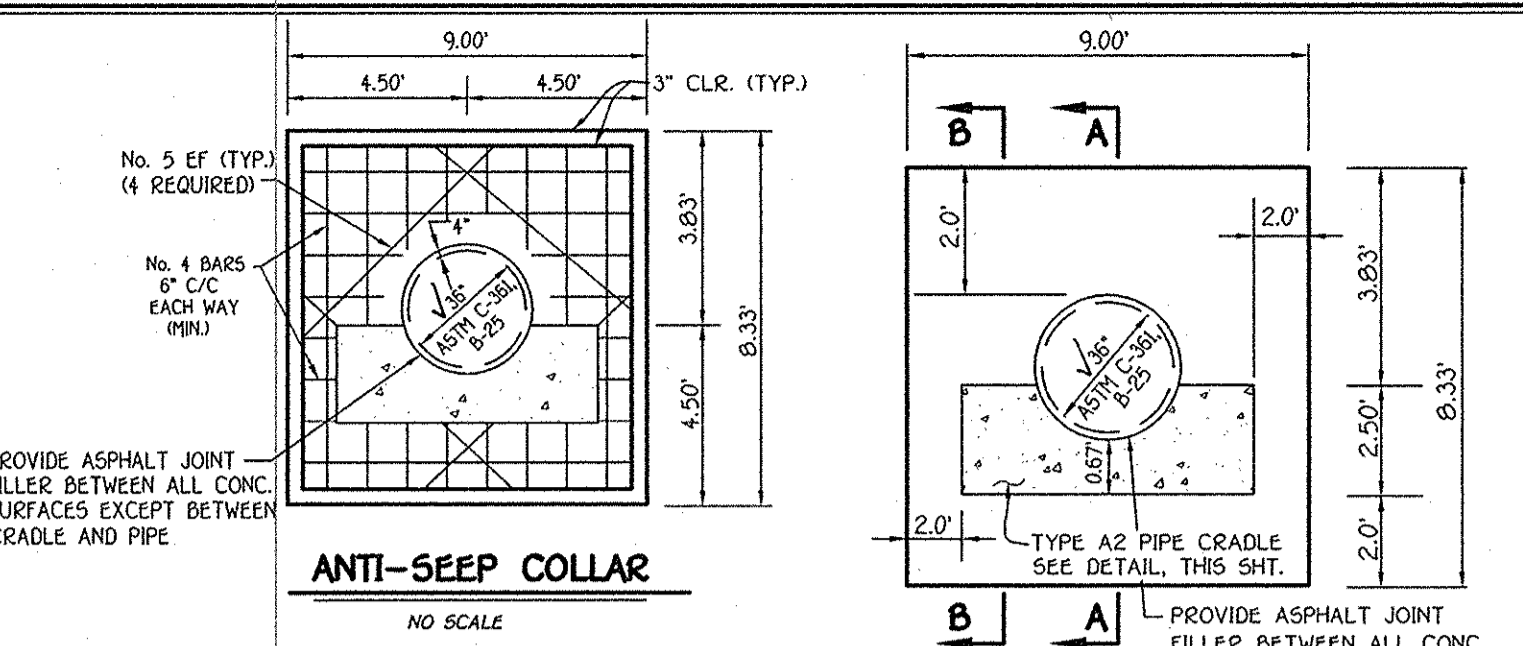
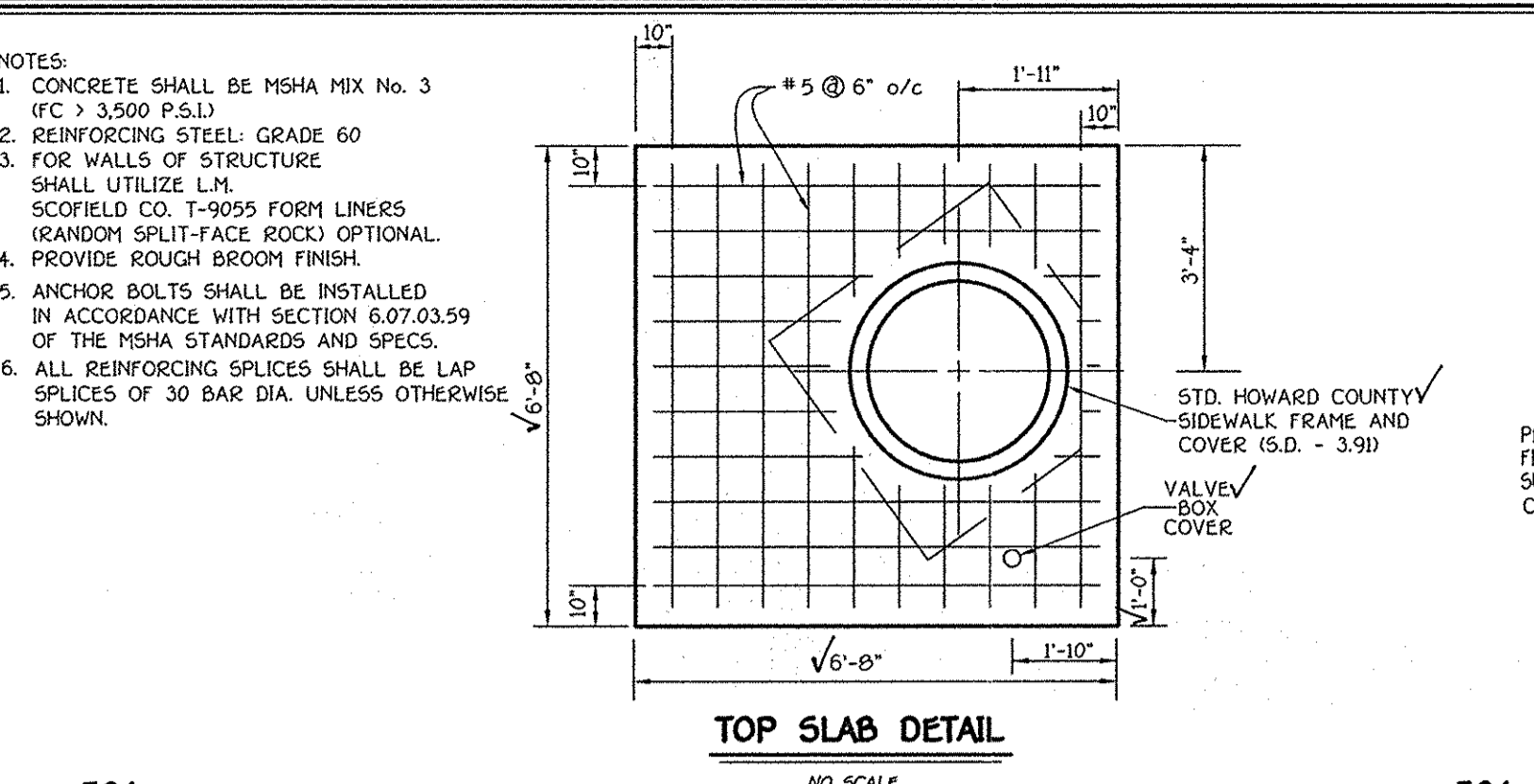
STORMWATER MANAGEMENT PROFILES AND DETAILS B.M.P. NO. 1
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 28 OF 40





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 Shall Provide On-Site Inspections By The Howard Soil Conservation District.

Signature of Developer: *Kennard Warfield, Jr.*
Printed Name of Developer: **Kennard Warfield, Jr.**
Date: **3-18-08**

By the Engineer:
I Certify That I am a Professional Engineer in the State of Maryland and I am Licensed in the State of Maryland. I have Reviewed These Plans and I Certify That They Meet the Requirements of the Howard Soil Conservation District. I Have Reviewed the Plans and I Certify That They Meet the Requirements of the Howard Soil Conservation District. I Shall Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Within 30 Days Of Completion.

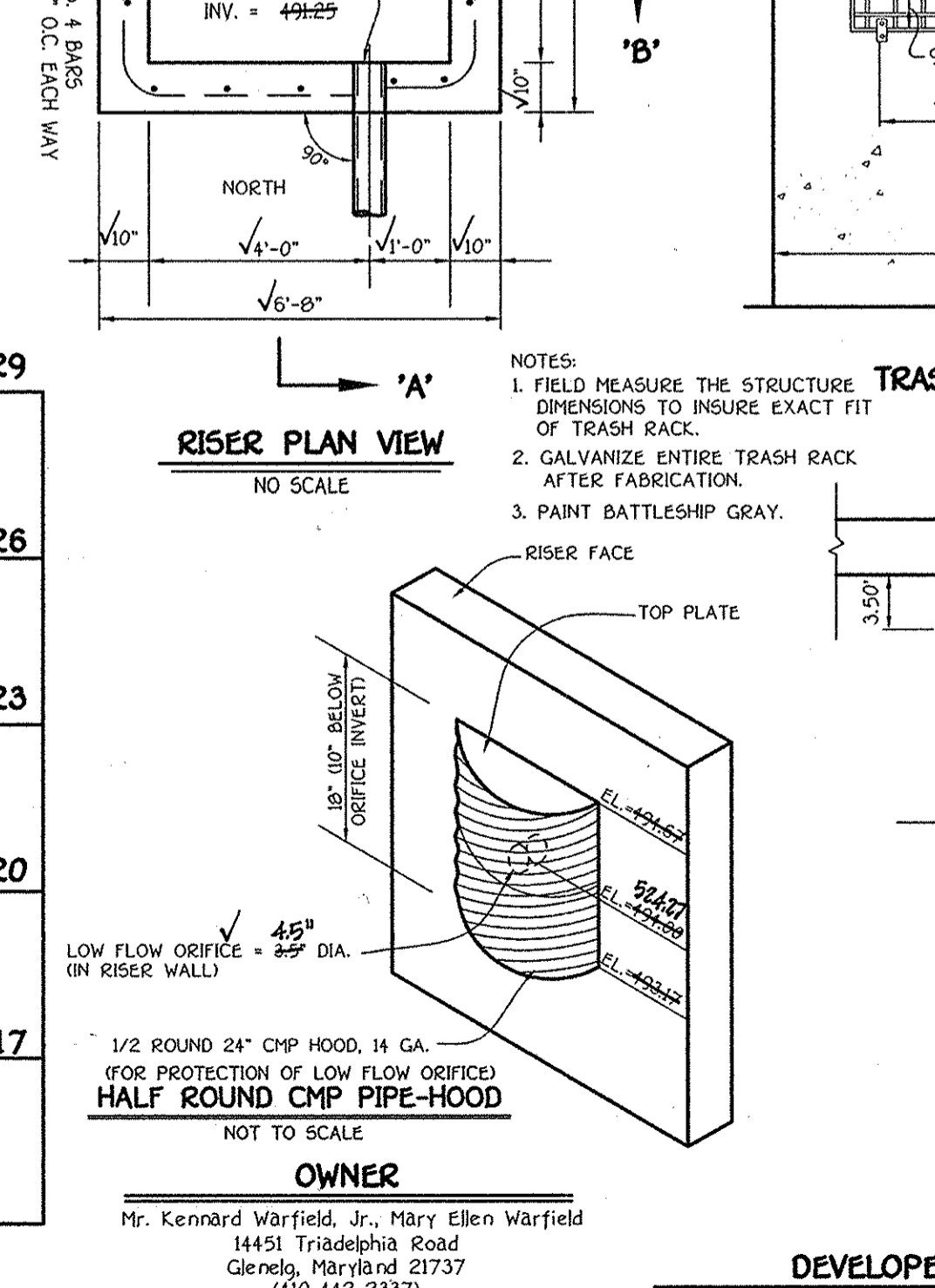
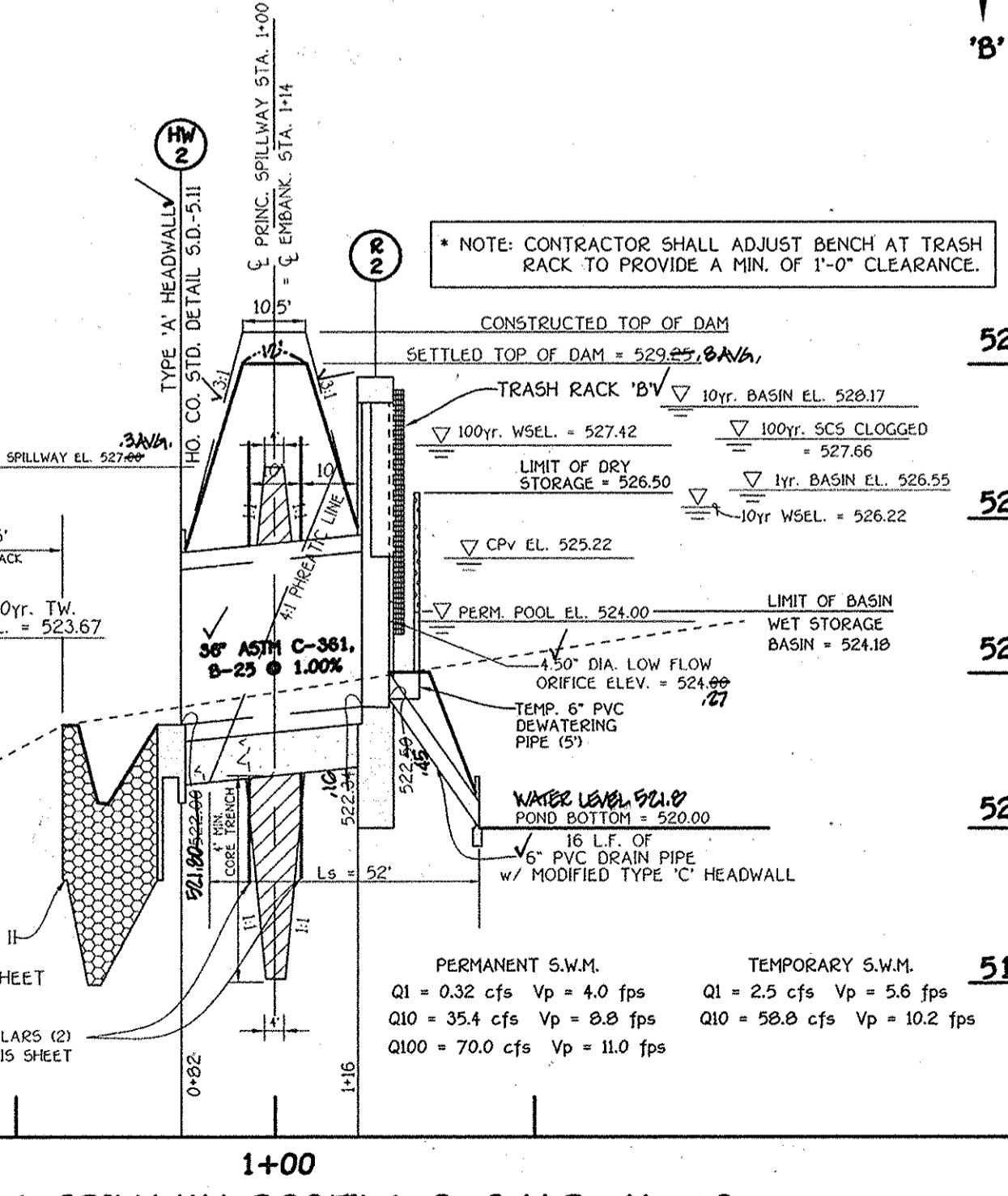
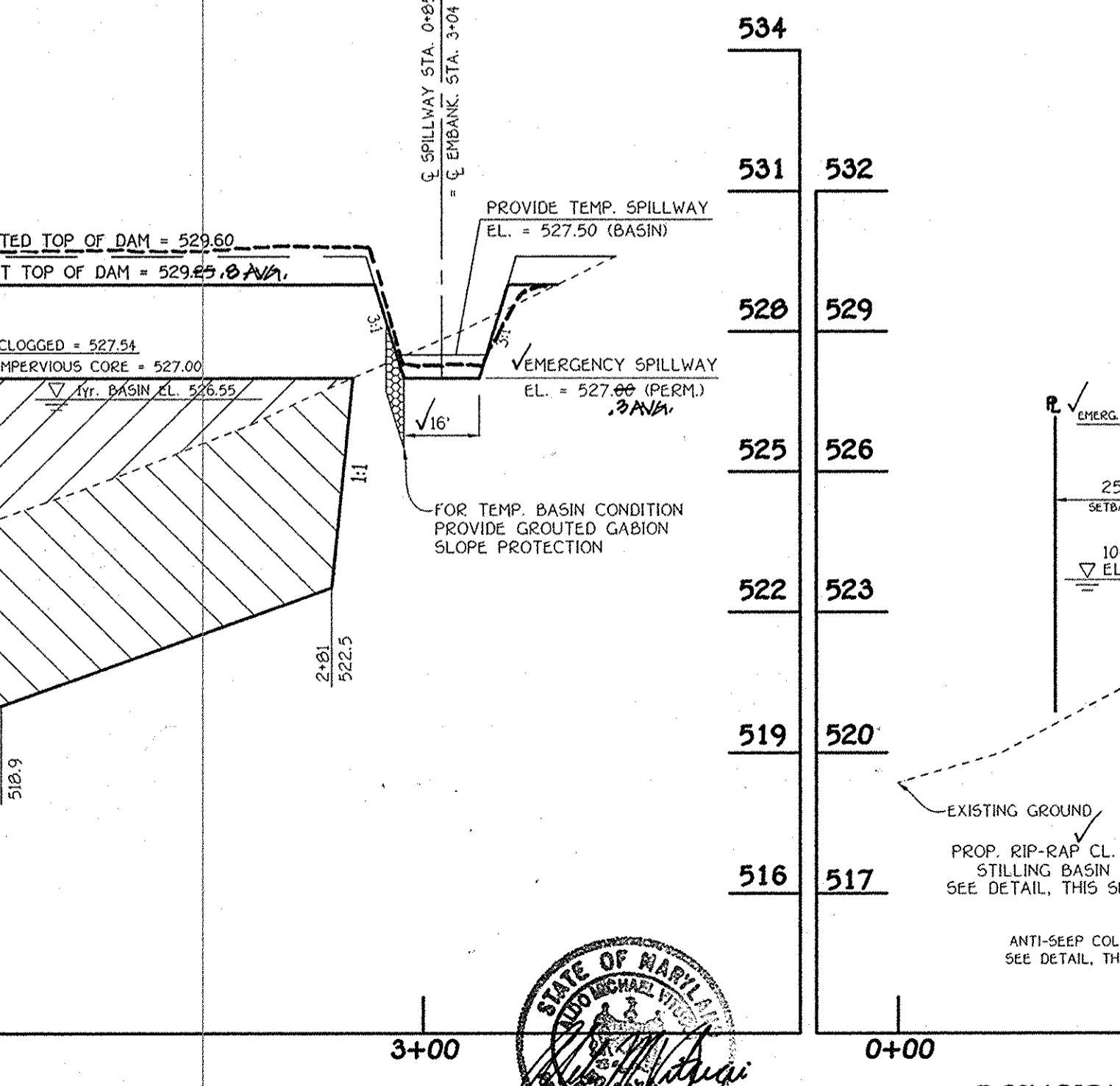
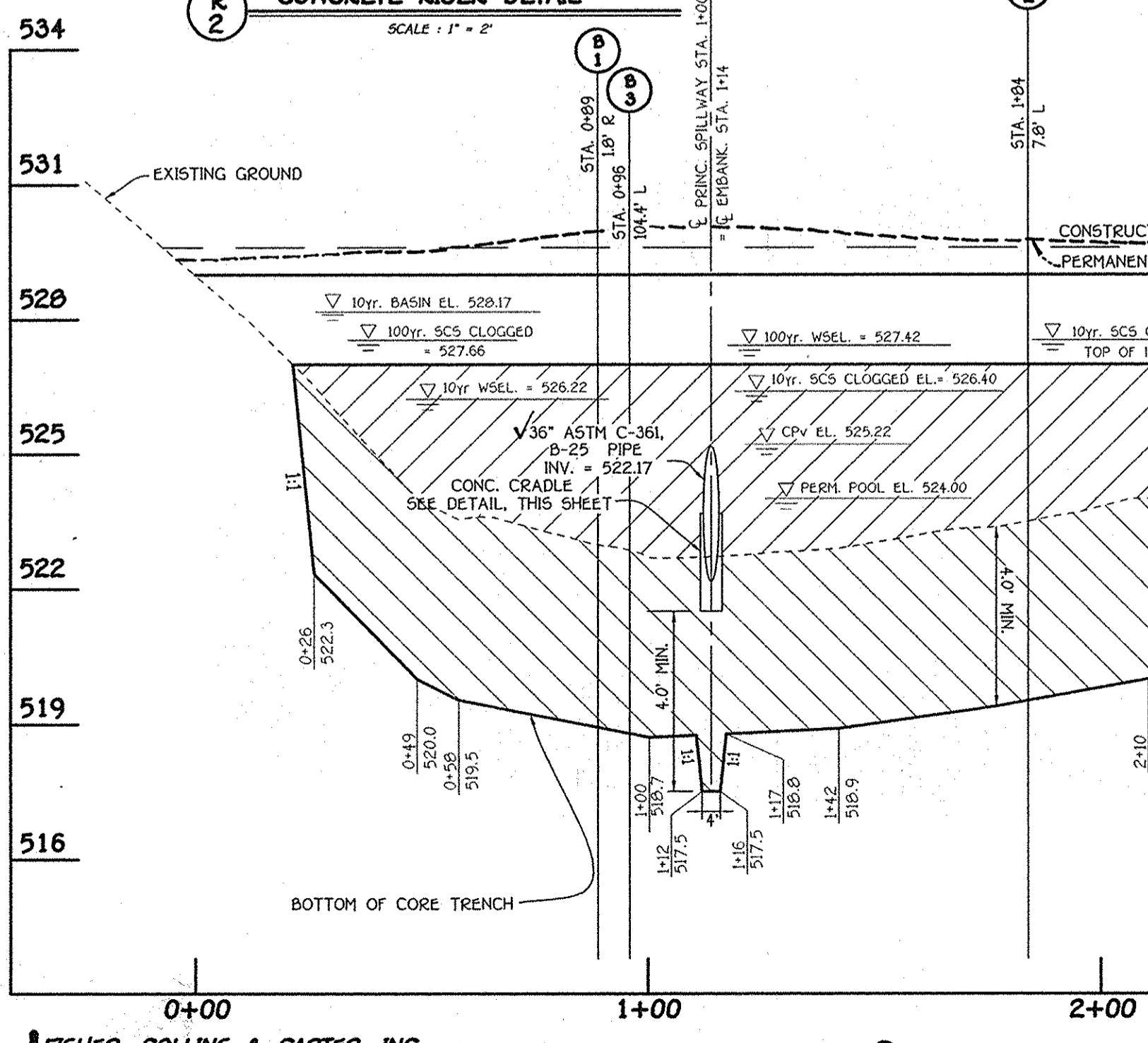
Signature of Engineer: *Charles J. Sluder, P.E.*
Printed Name of Engineer: **Charles J. Sluder, P.E.**
Date: **3/17/08**

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.

USDA 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.
Signature: *John S. ...* Date: **4/17/08**
Approved Department of Public Works
Signature: *William R. ...* Date: **4-10-07**
Chief, Bureau Of Highways
Approved Department of Planning And Zoning
Signature: *Cinda ...* Date: **4/4/08**
Chief, Division Of Land Development
Signature: *John ...* Date: **4/22/08**
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: *Charles J. Sluder, P.E.* Date: **6/18/14**
P.E. No. **13204**
Date: _____

Engineer 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.



OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

TAX MAP NO. 27 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 29 OF 40

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SERVICE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-461-2295

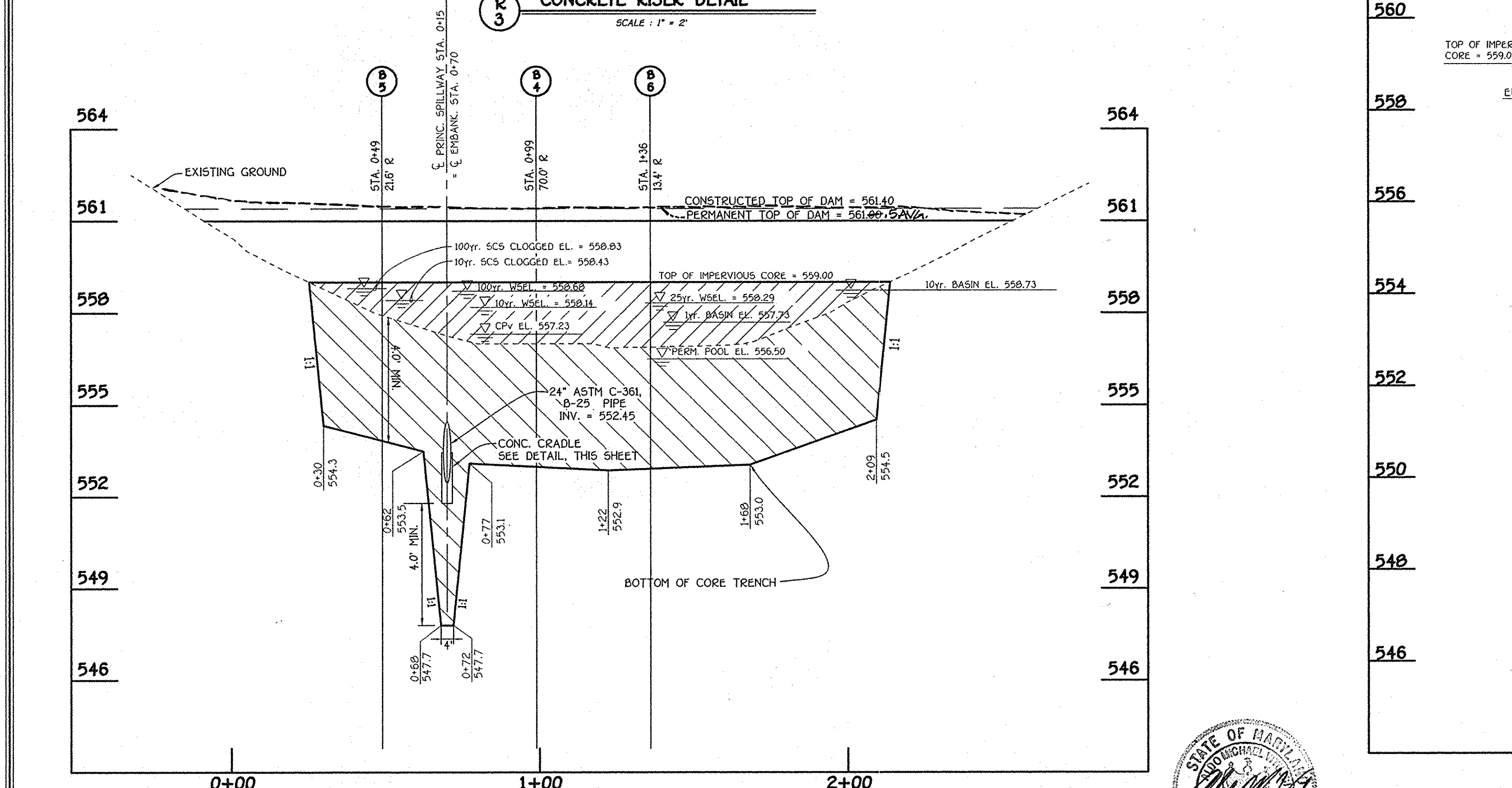
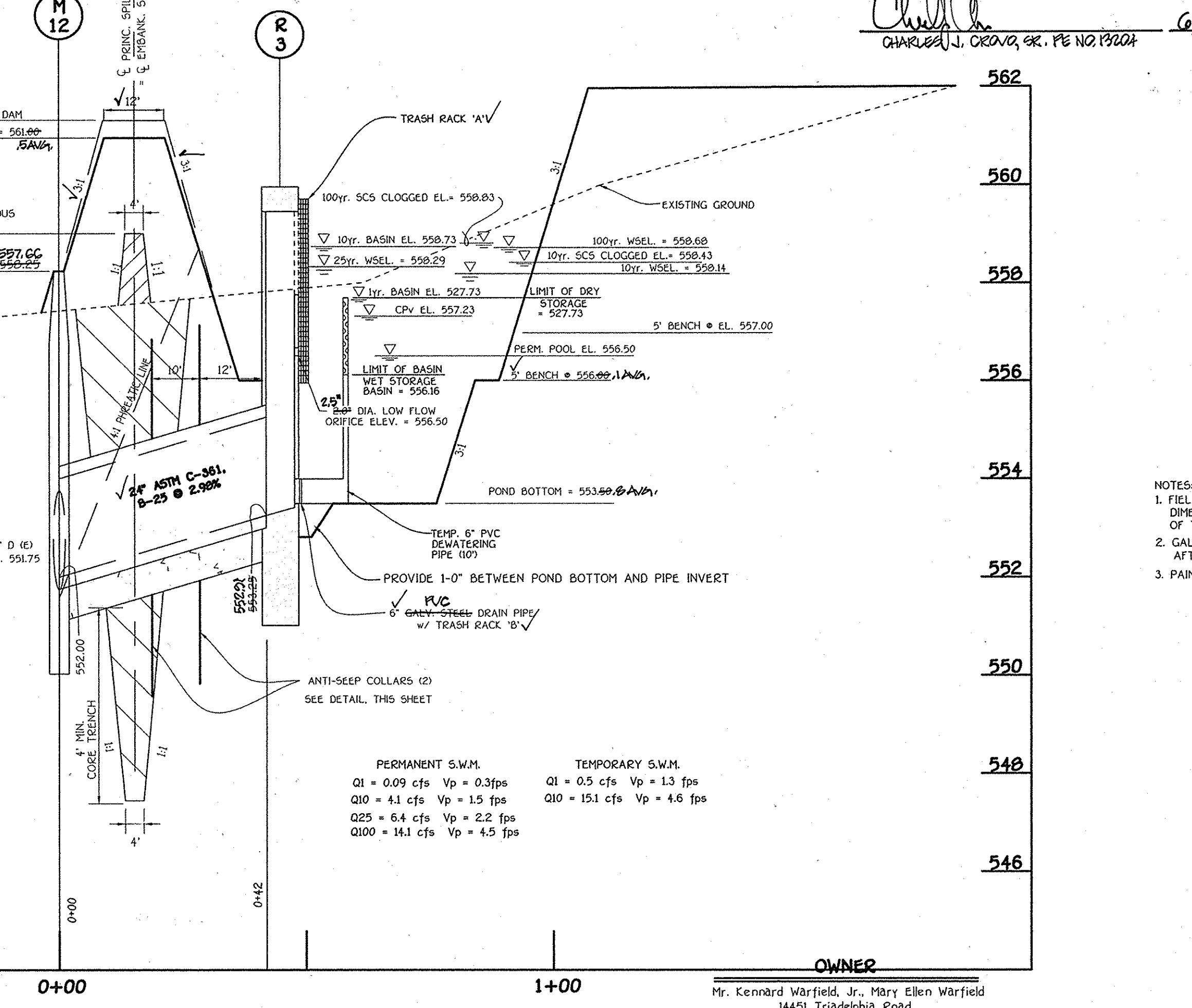
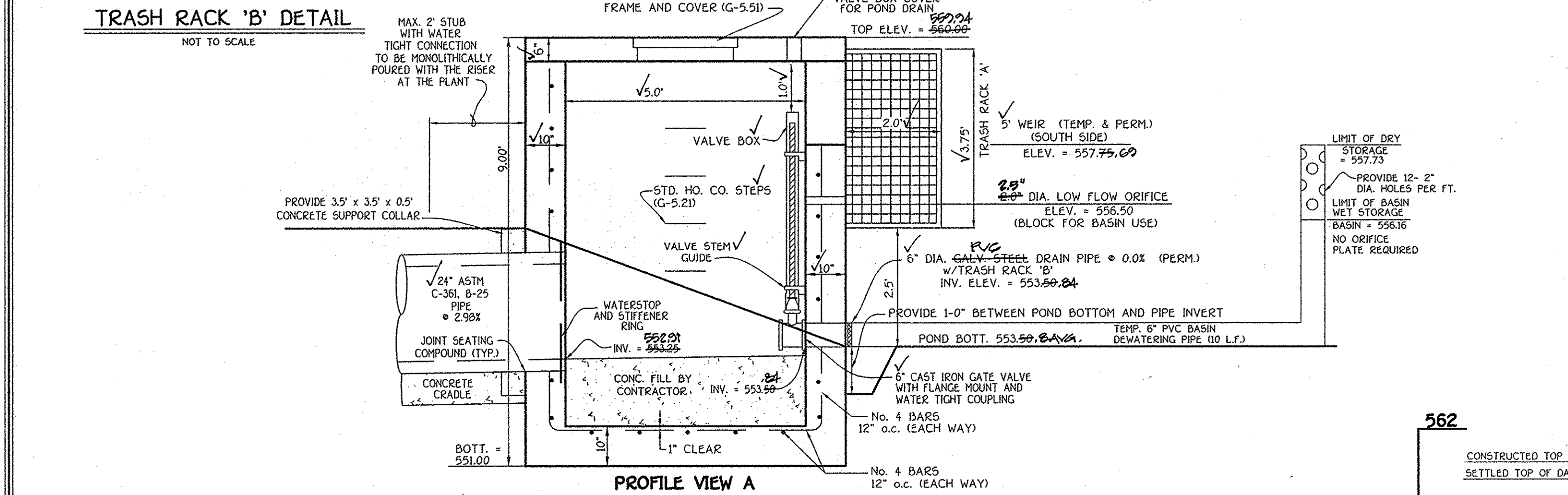
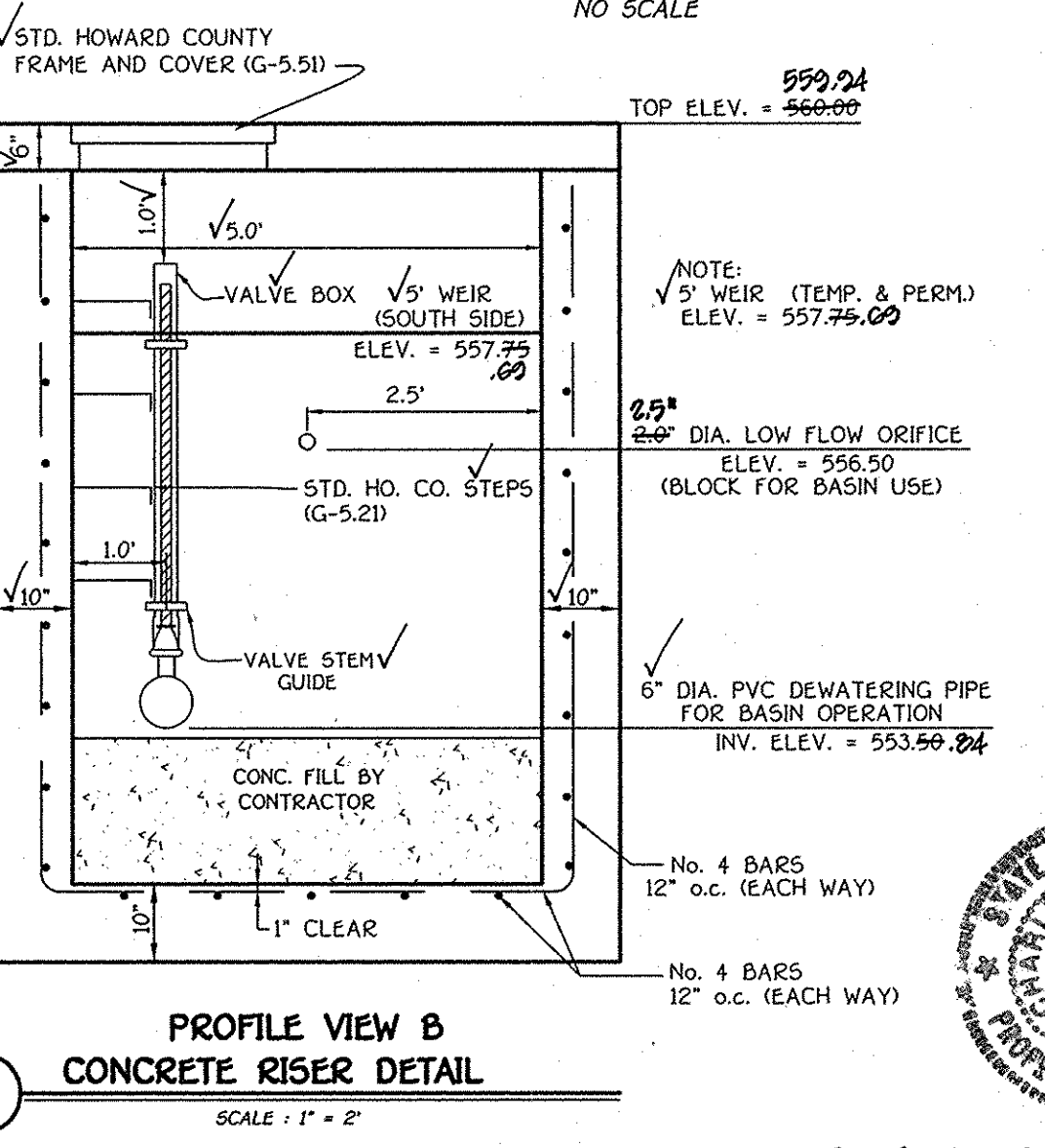
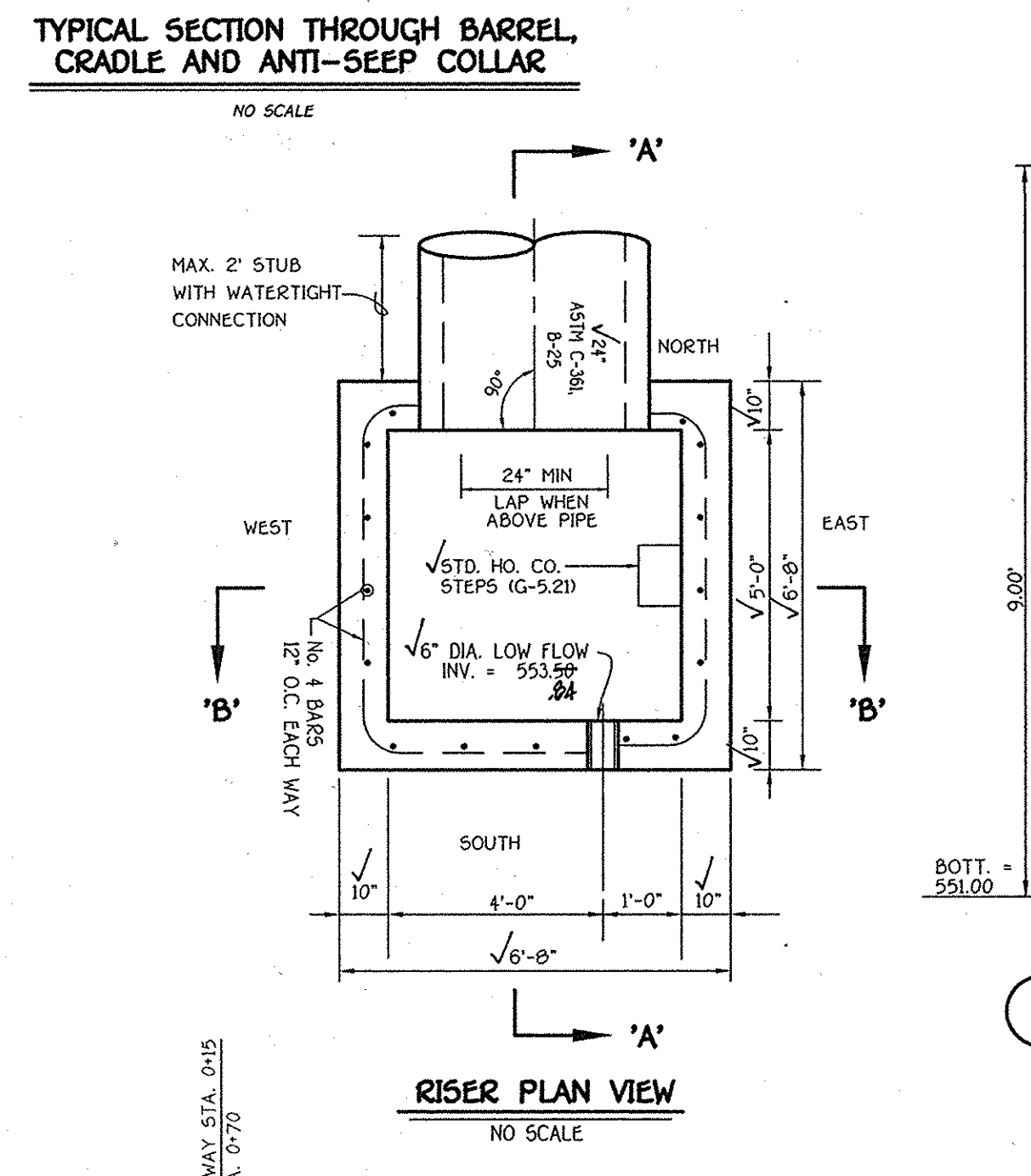
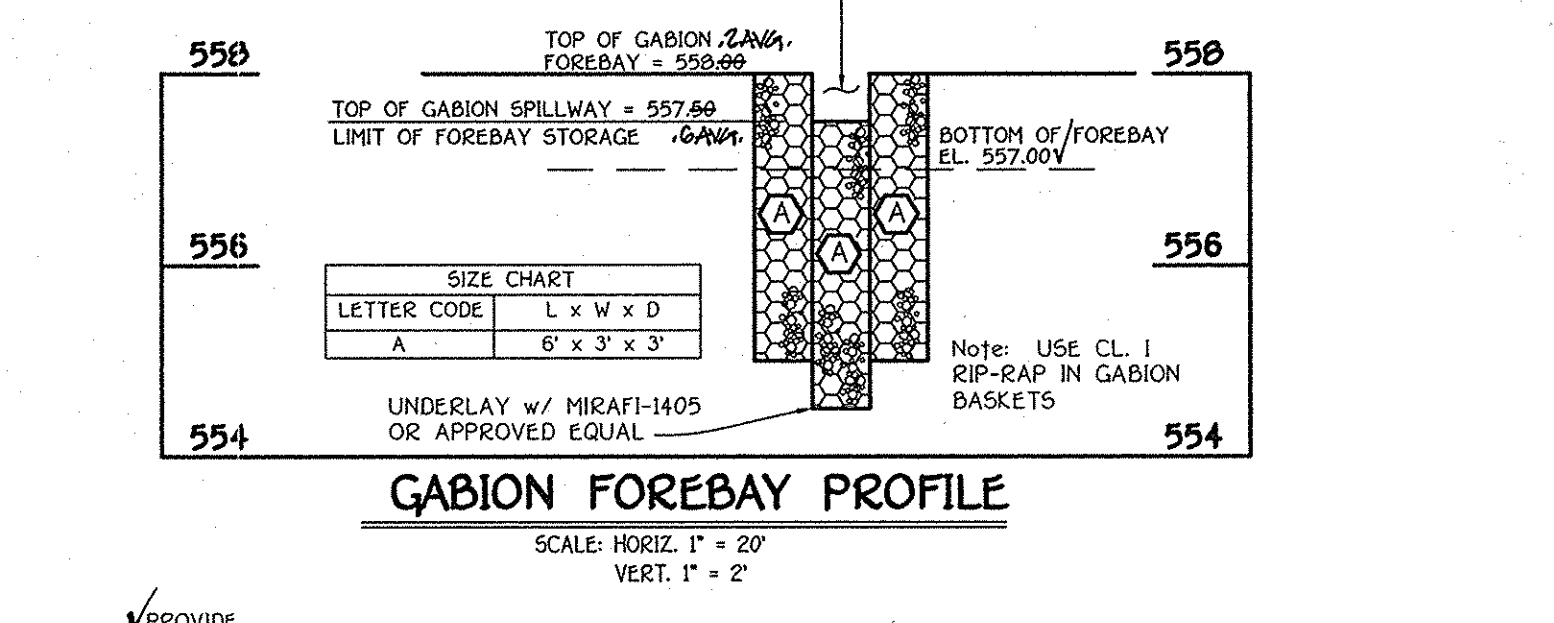
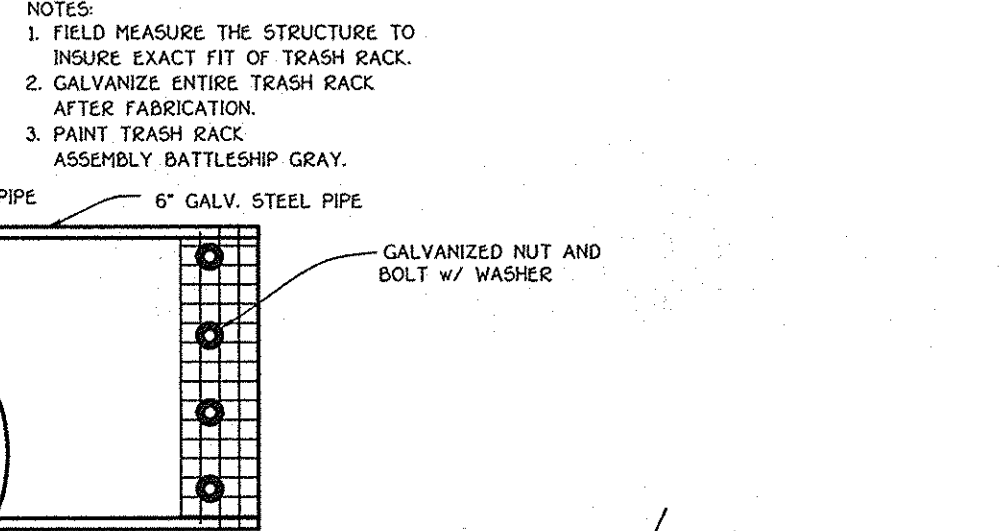
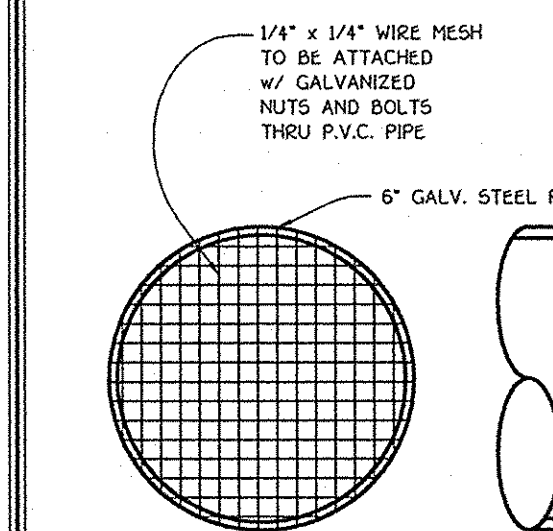
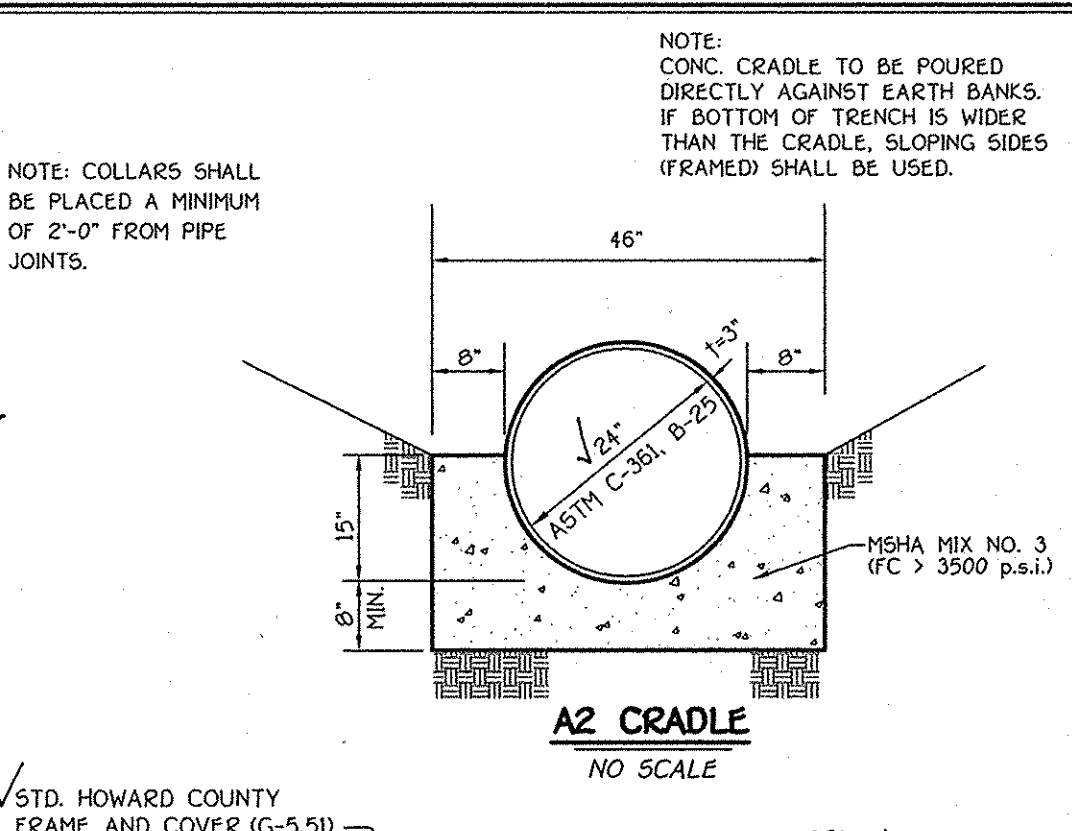
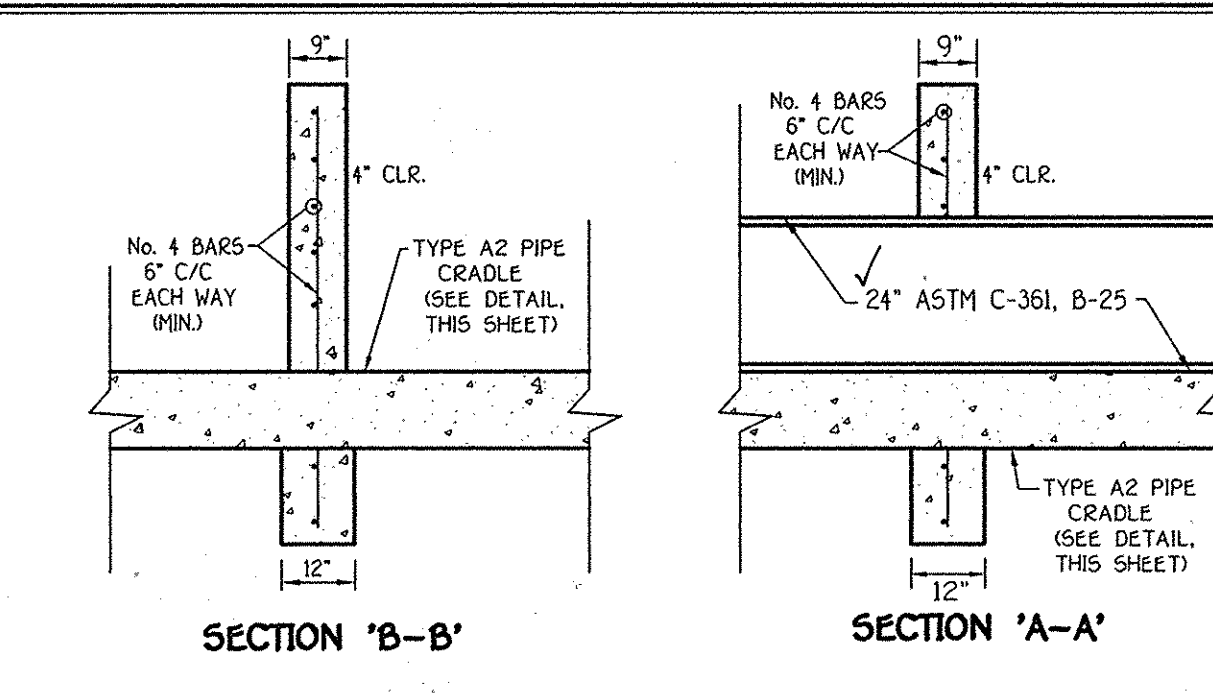
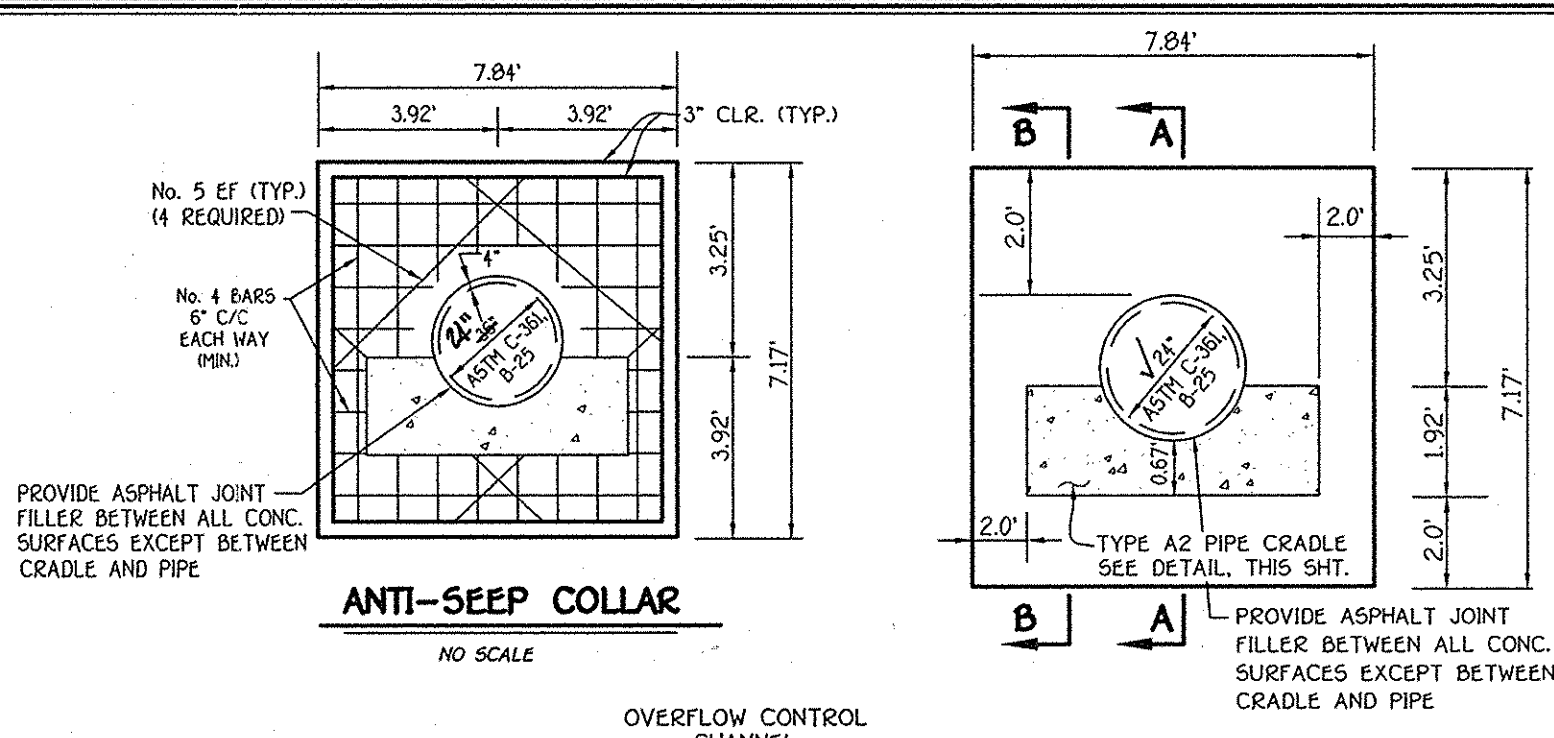
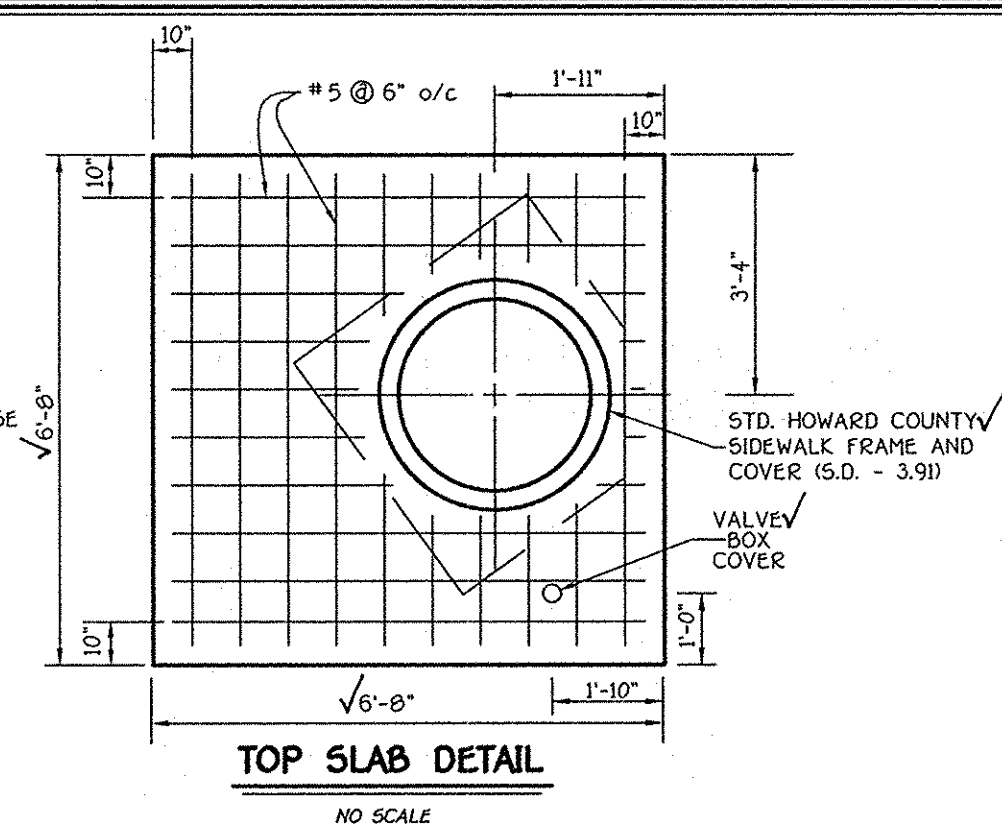
STATE OF MARYLAND
PROFESSIONAL ENGINEER
CHARLES J. SLUDER, P.E.
No. 13204
DATE: 6/18/14

STATE OF MARYLAND
PROFESSIONAL ENGINEER
CHARLES J. SLUDER, P.E.
No. 13204
DATE: 6/18/14

STATE OF MARYLAND
PROFESSIONAL ENGINEER
CHARLES J. SLUDER, P.E.
No. 13204
DATE: 6/18/14

F-07-040
AS-BUILT

- NOTES:
- CONCRETE SHALL BE MSHA MIX NO. 3 (FC > 3,500 P.S.I.)
 - REINFORCING STEEL: GRADE 60
 - FOR WALLS OF STRUCTURE SHALL UTILIZE L.F.S. SCOFIELD CO. T-9055 FORM LINERS (RANDOM SPLIT-FACE ROCK) OPTIONAL.
 - PROVIDE ROUGH SMOOTH FINISH.
 - ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6.07.03.59 OF THE MSHA STANDARDS AND SPECS.
 - ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIA. UNLESS OTHERWISE SHOWN.



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."

Kennard Warfield, Jr.
Signature of Developer
12-20-07
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 Approved The Design That Has Been Prepared And Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Within 30 Days Of Completion.

Charles J. Orav, Jr.
Signature of Engineer
12-20-07
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.

USDA Natural Resources Conservation Service
Date: 4/7/08

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

Howard Soil Conservation District
Date: 4-10-08

Approved: Department of Public Works
Date: 4/24/08

Chief Bureau of Highways
Date: 4/20/08

Approved: Department of Planning And Zoning
Date: 4/20/08

Chief, Division Of Land Development
Date: 4/20/08

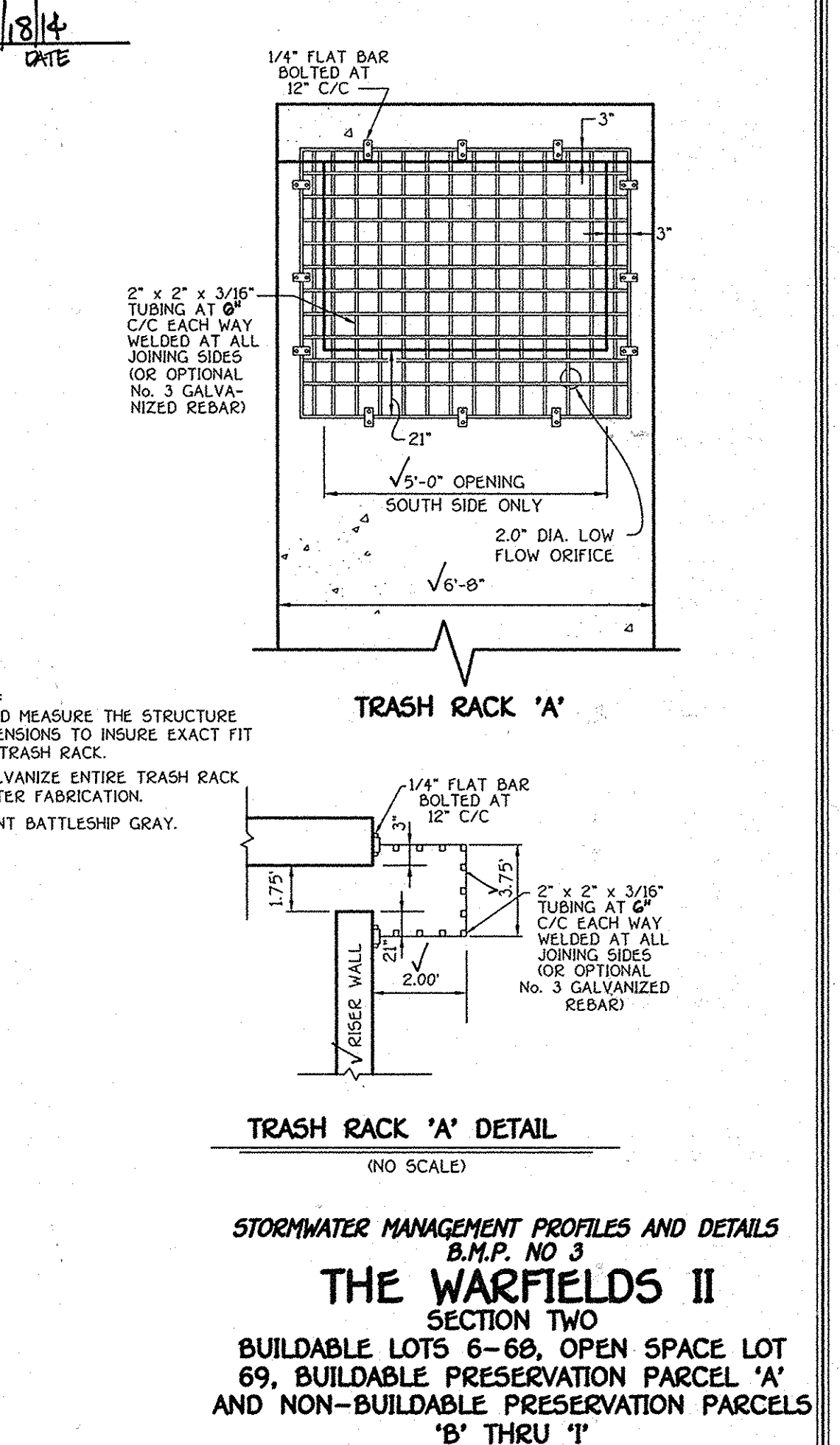
Chief, Development Engineering Division

AS-BUILT CERTIFICATION

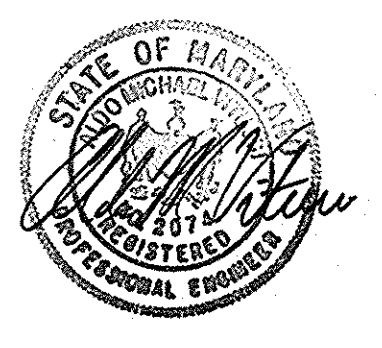
I Herby Certify That The Facility Shown On This Plan Was Constructed As Shown On The "As-Built" Plans And Meets The Approved Plans And Specifications.

Charles J. Orav, Jr.
Signature
12-20-07
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 Relieve Any Other Party From Meeting Requirements Imposed By Contract, Employment, Or Other Means, Including Meeting Commonly Accepted Industry Practices.



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
3000 EASTERN SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLIOTT CITY, MARYLAND 20622
4100 401 - 1055



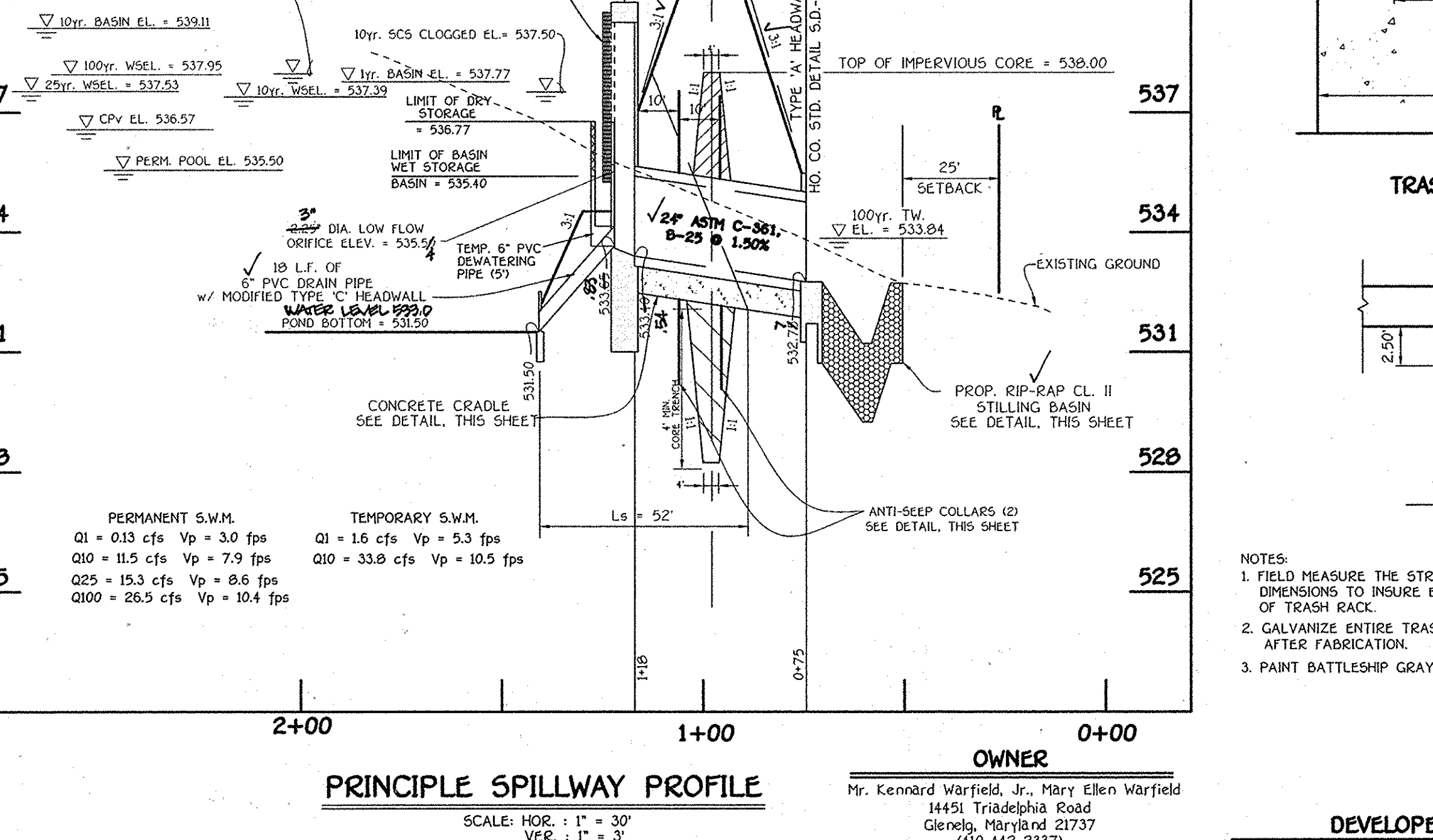
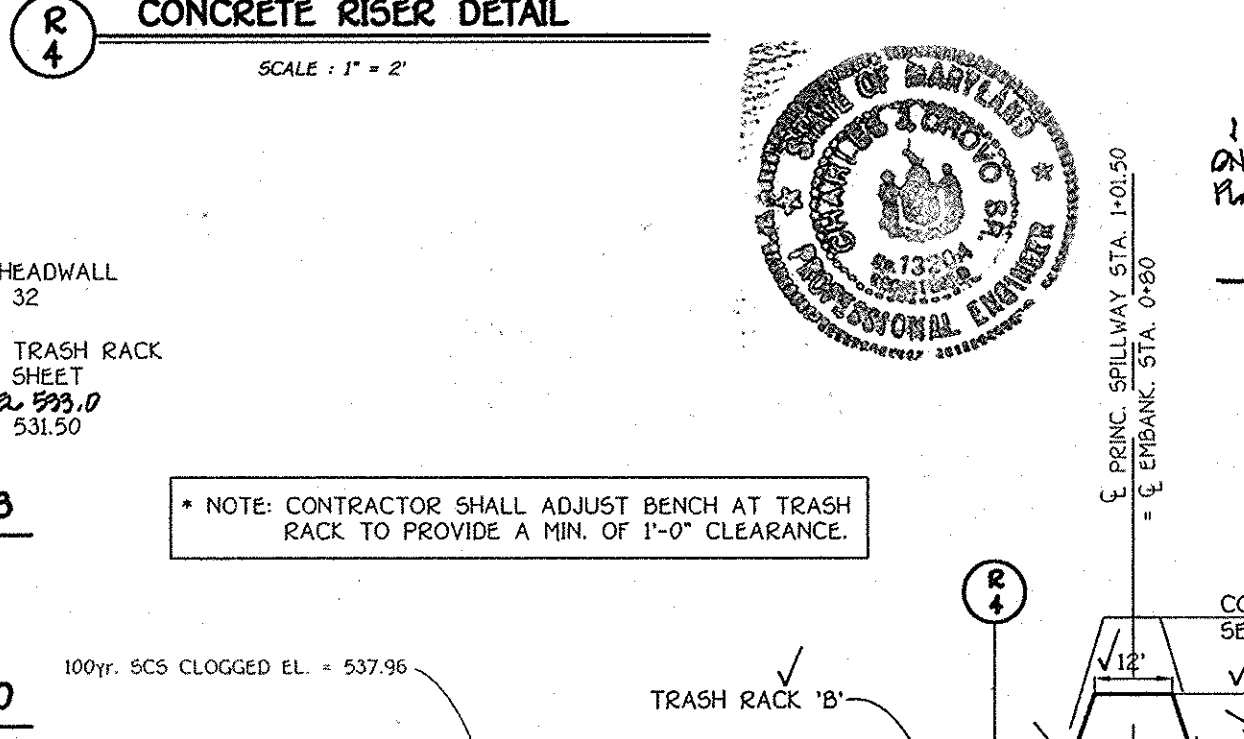
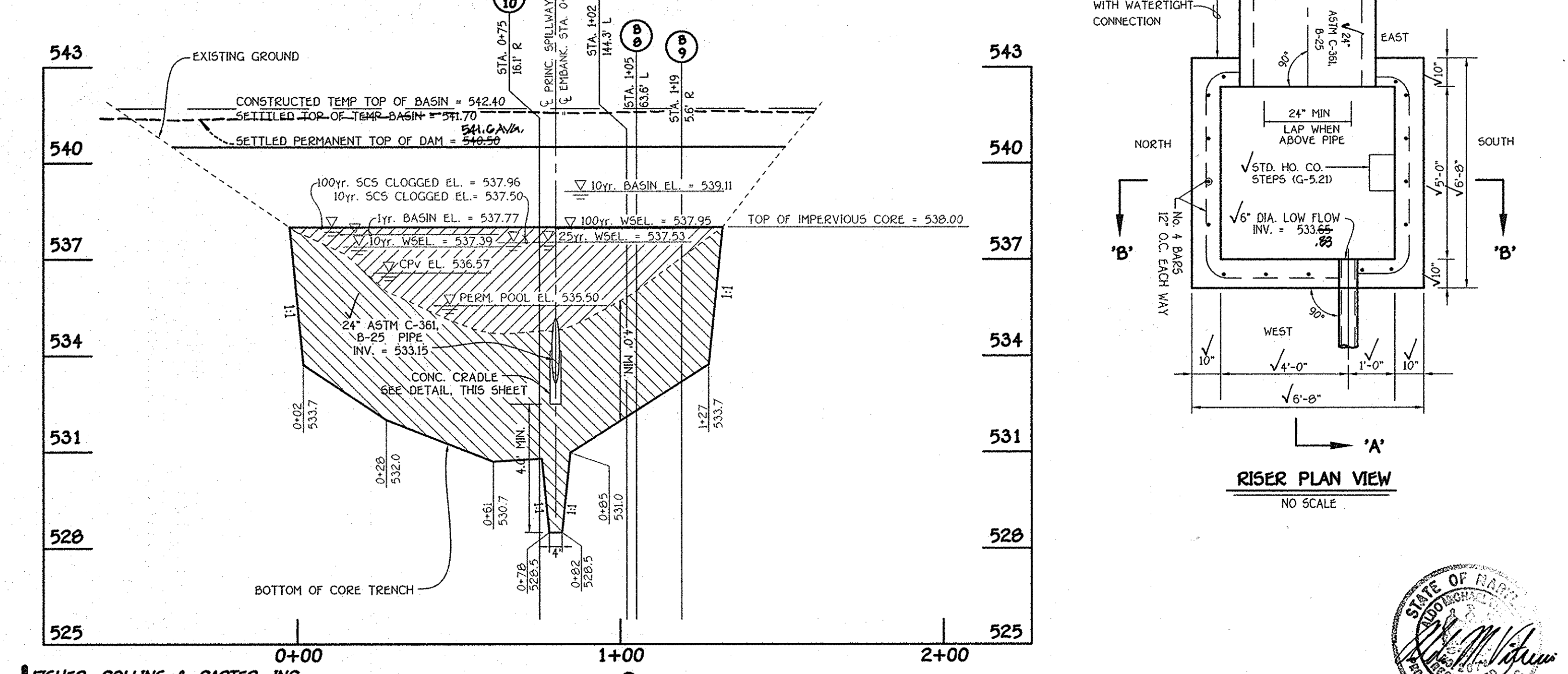
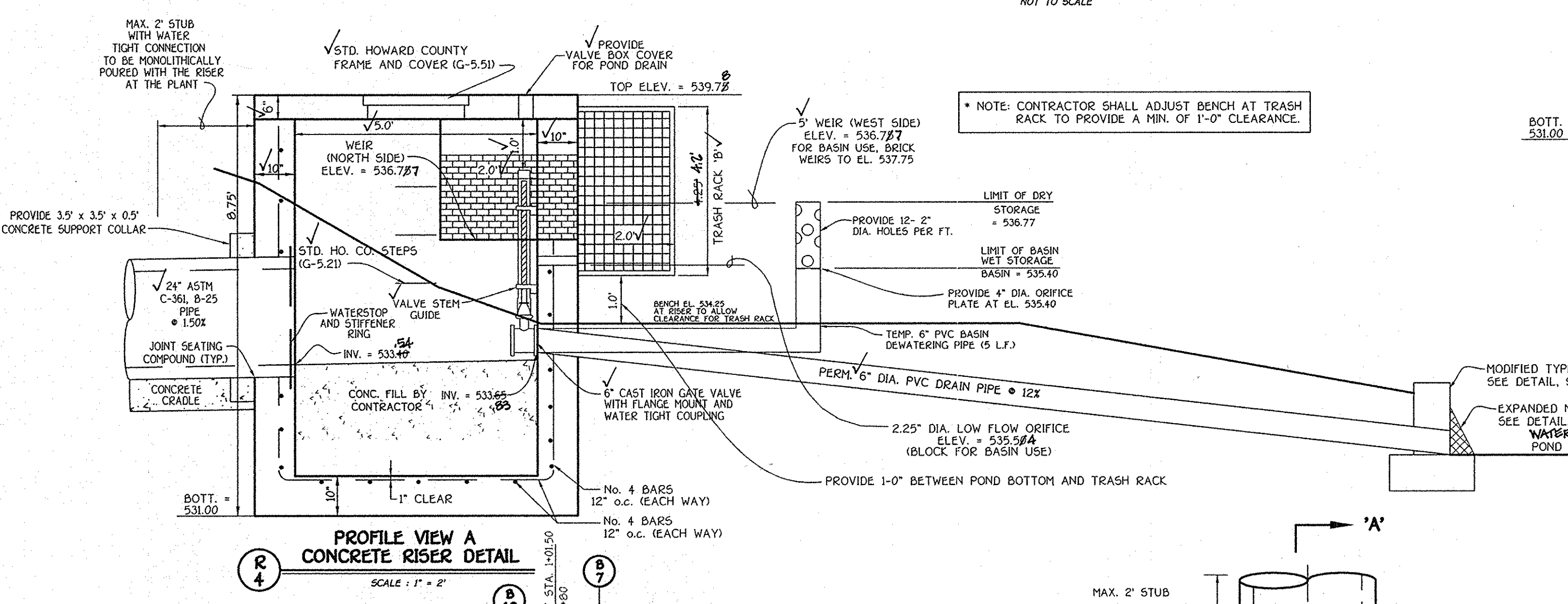
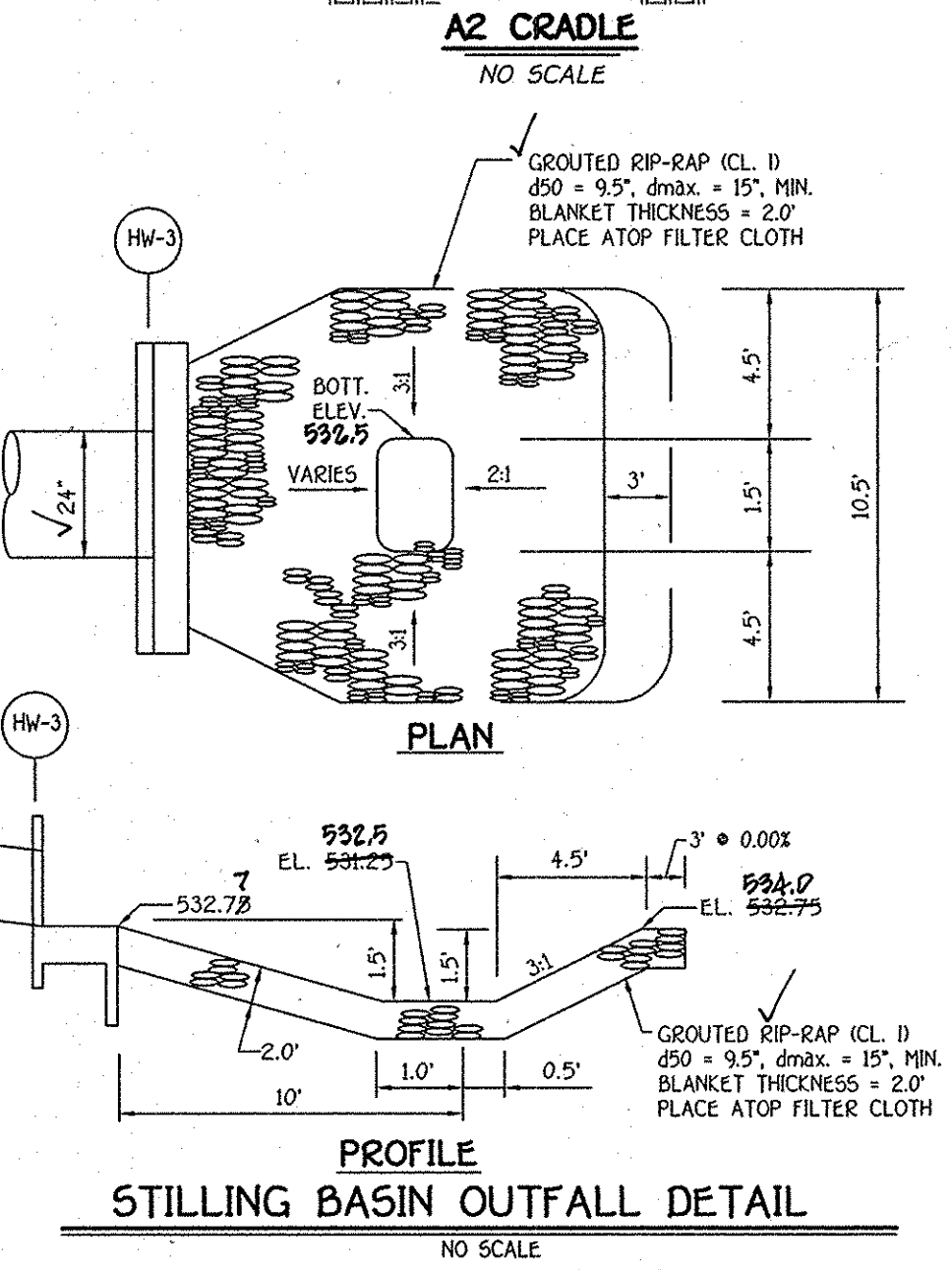
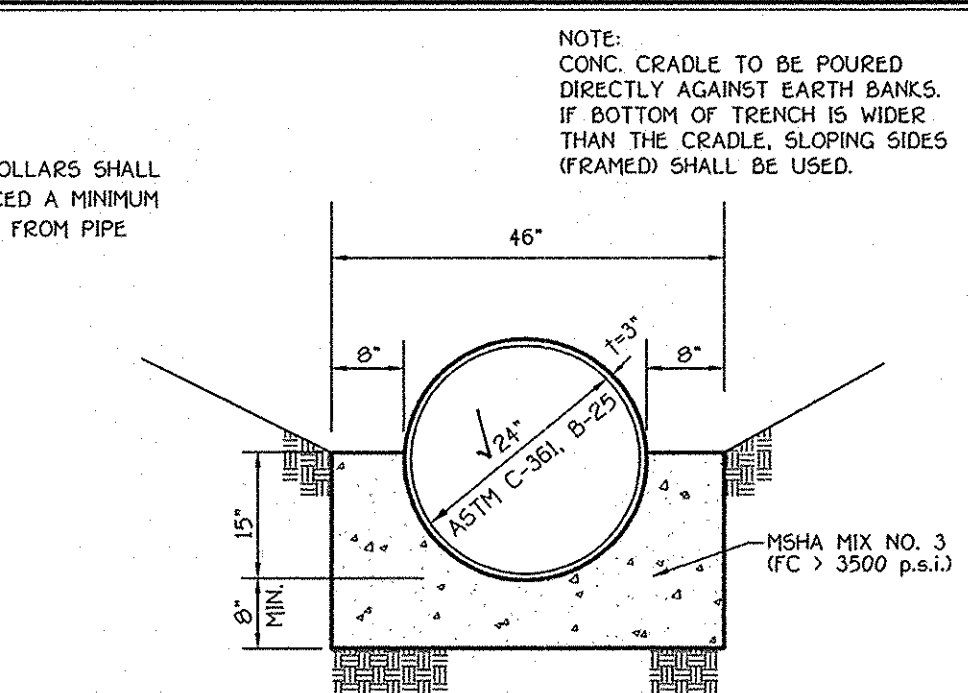
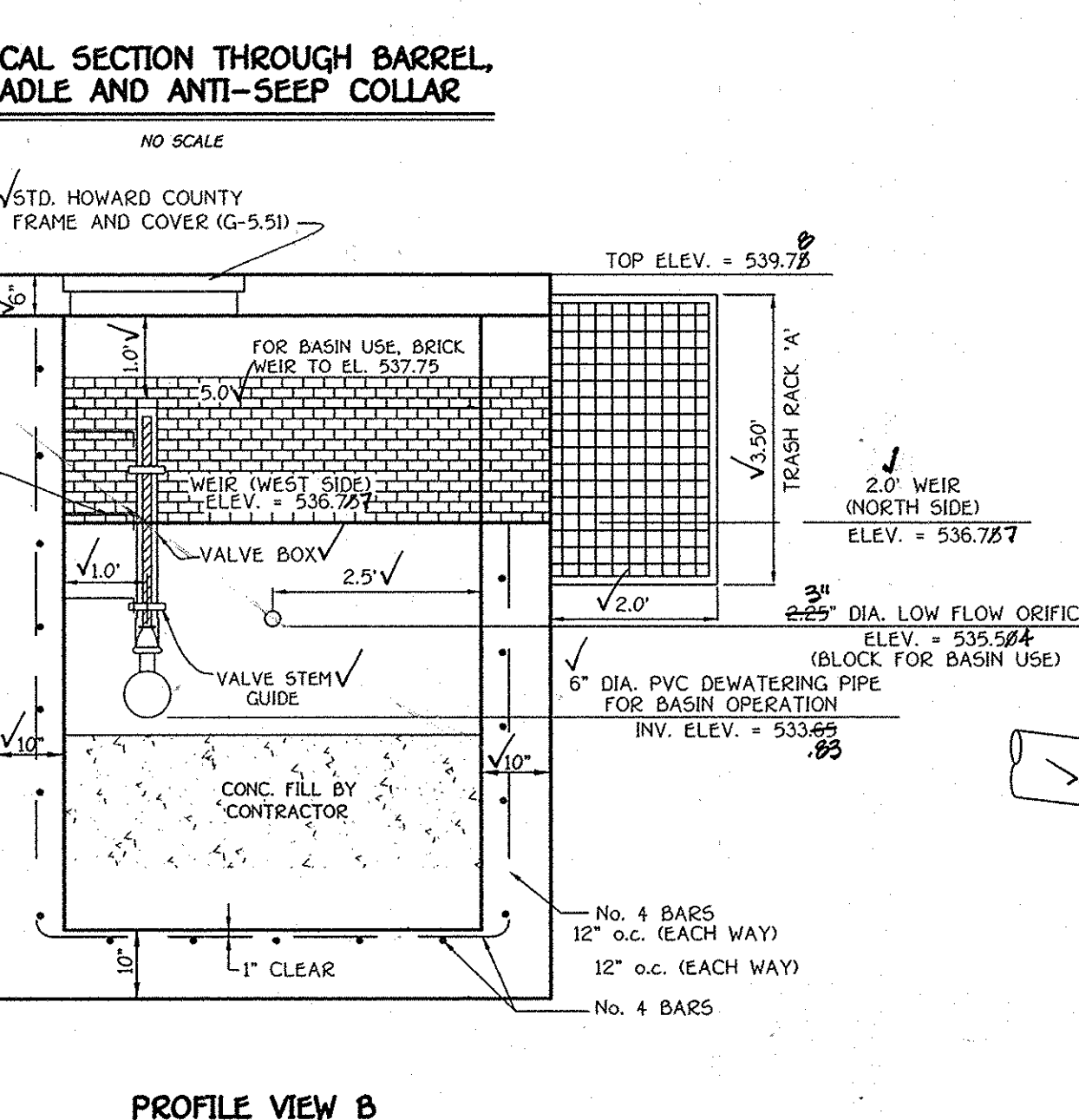
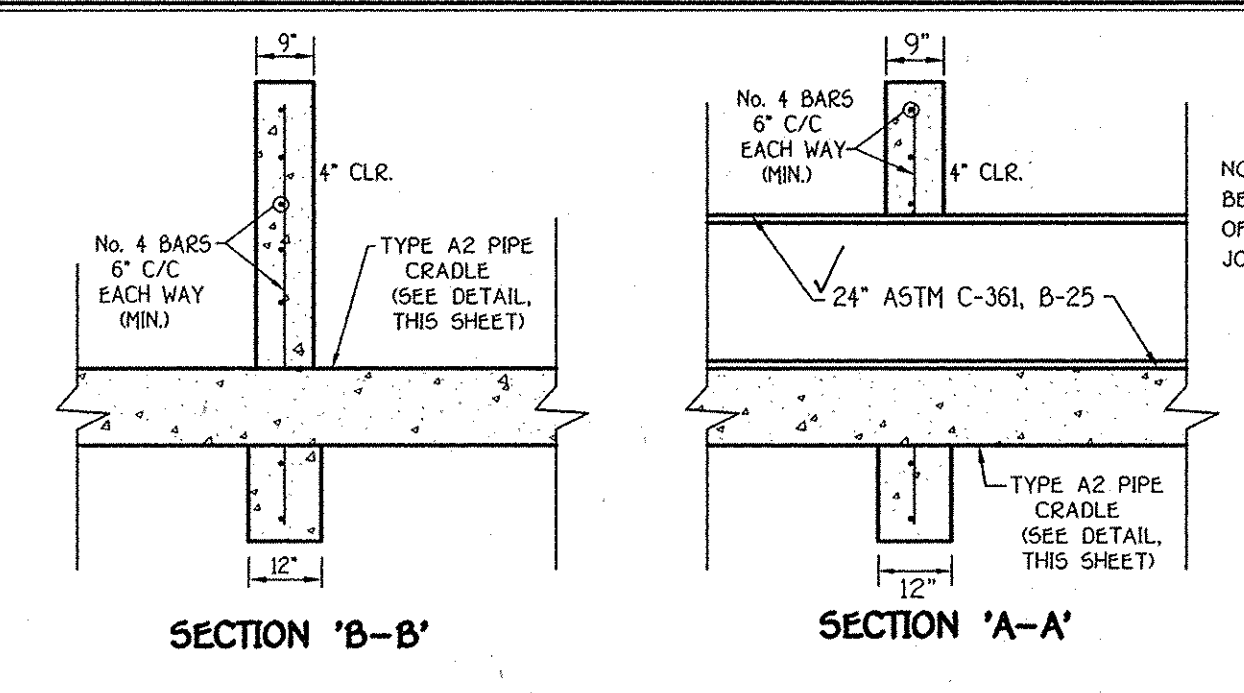
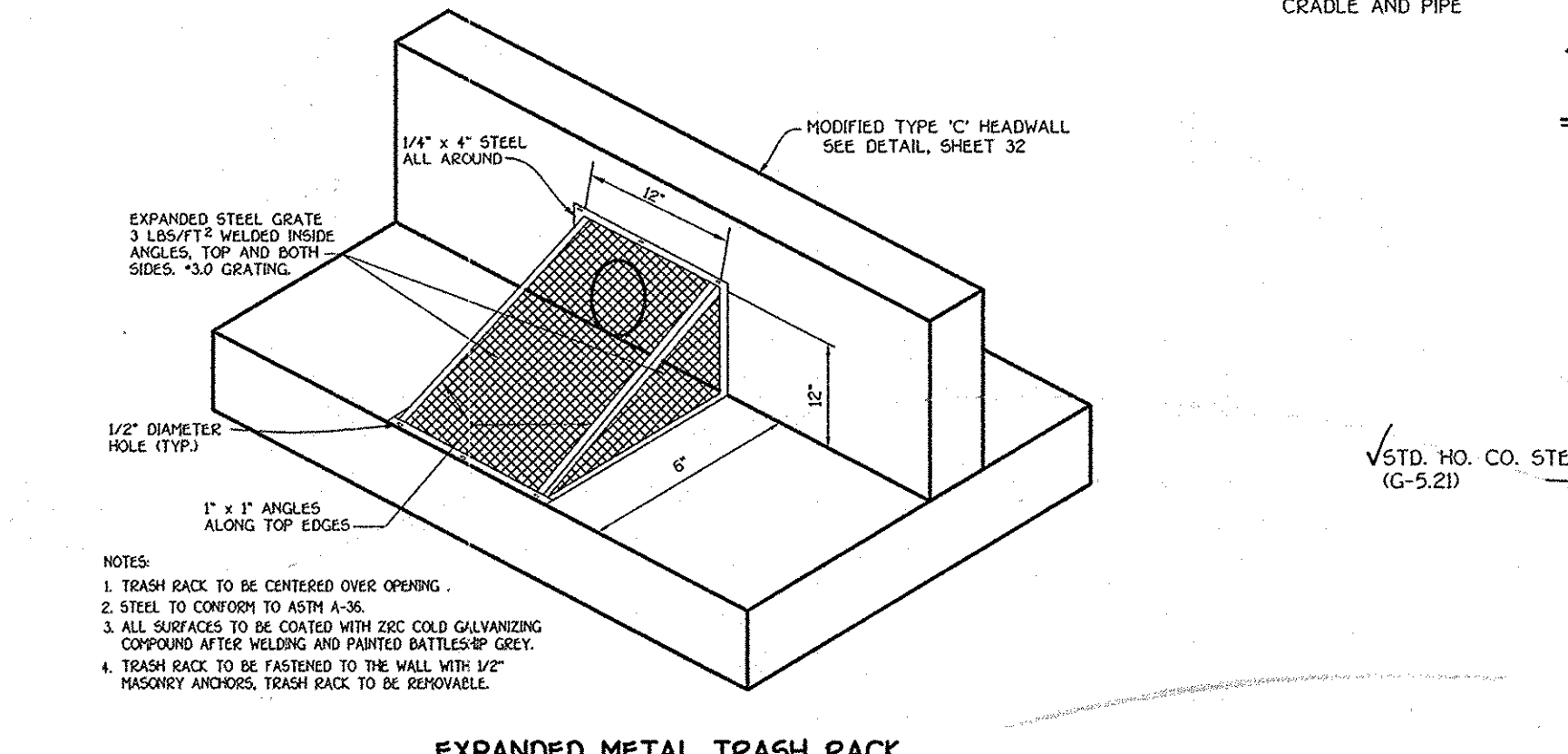
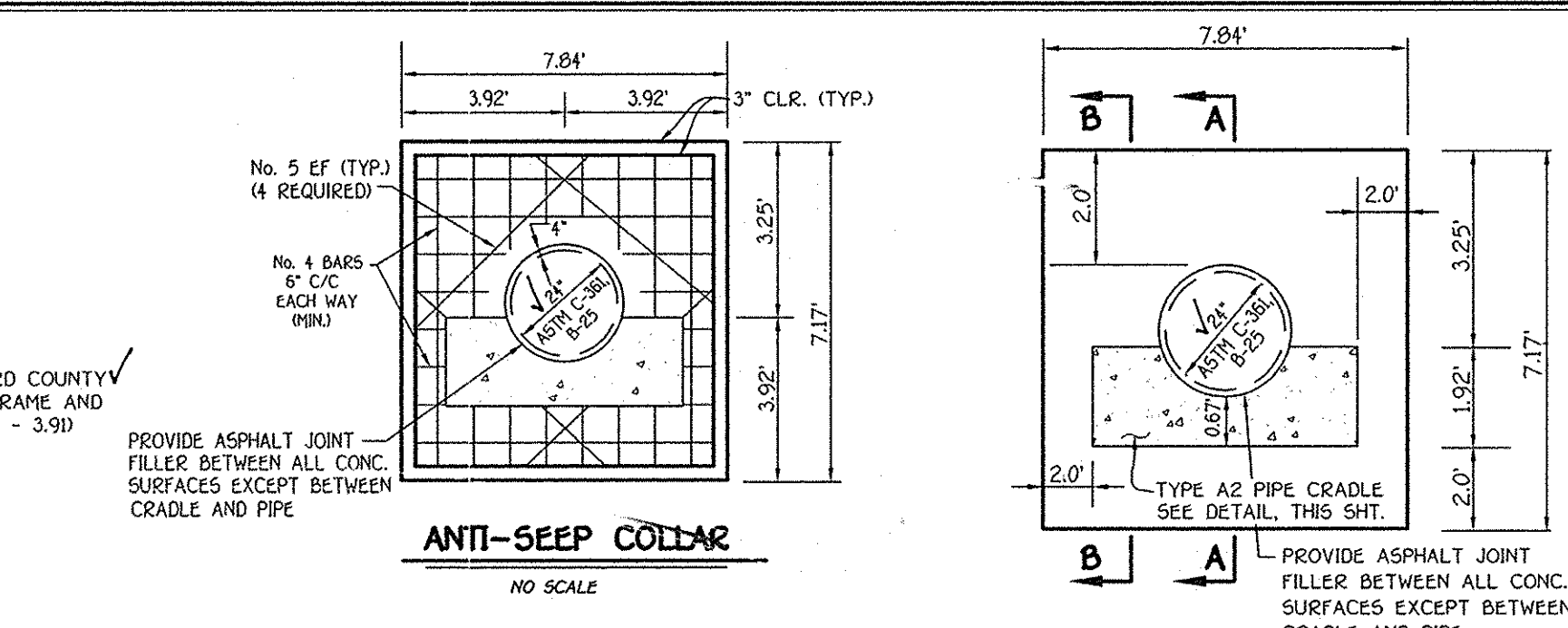
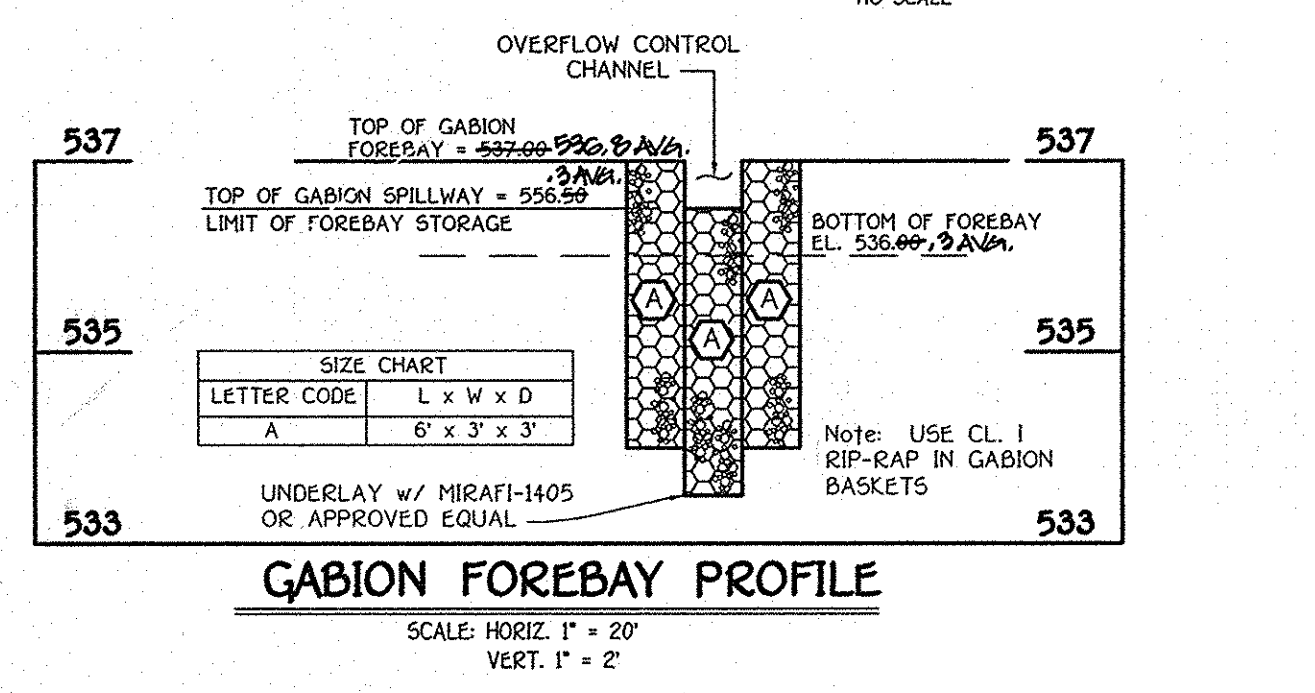
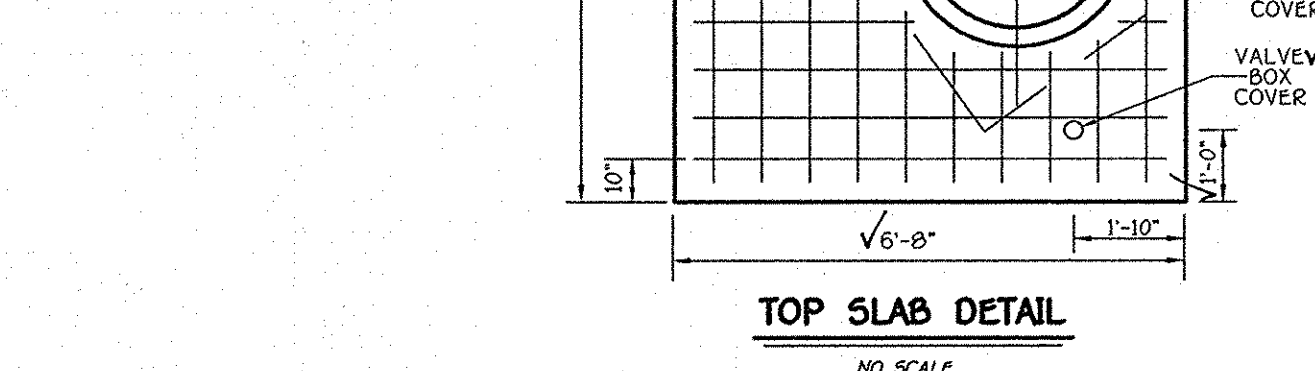
OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 30 OF 40

F-07-040
AS-BUILT

- NOTES:
1. CONCRETE SHALL BE MSHA MIX NO. 3 (FC > 3500 P.S.I.)
 2. REINFORCING STEEL: GRADE 60
 3. FOR WALLS OF STRUCTURE SHALL UTILIZE L.M. SCOFIELD CO. T-9055 FORM LINERS (RANDOM SPLIT-FACE ROCK) OPTIONAL.
 4. PROVIDE ROUGH BROOK FINISH
 5. ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6.07.03.99 OF THE MSHA STANDARDS AND SPECS.
 6. ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIA. UNLESS OTHERWISE SHOWN.



By The Developer:
Signature of Developer: *Kennard Warfield, Jr.*
Printed Name of Developer: **Kennard Warfield, Jr.**
Date: **3-18-08**

By The Engineer:
Signature: *[Seal]*
Printed Name: **[Name]**
Date: **3-17-08**

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.

USDA Natural Resources Conservation Service Date: **4/7/08**

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

Howard Soil Conservation District Date: **4-18-08**

Approved Department of Public Works
Chief Bureau Of Highways Date: **4/24/08**

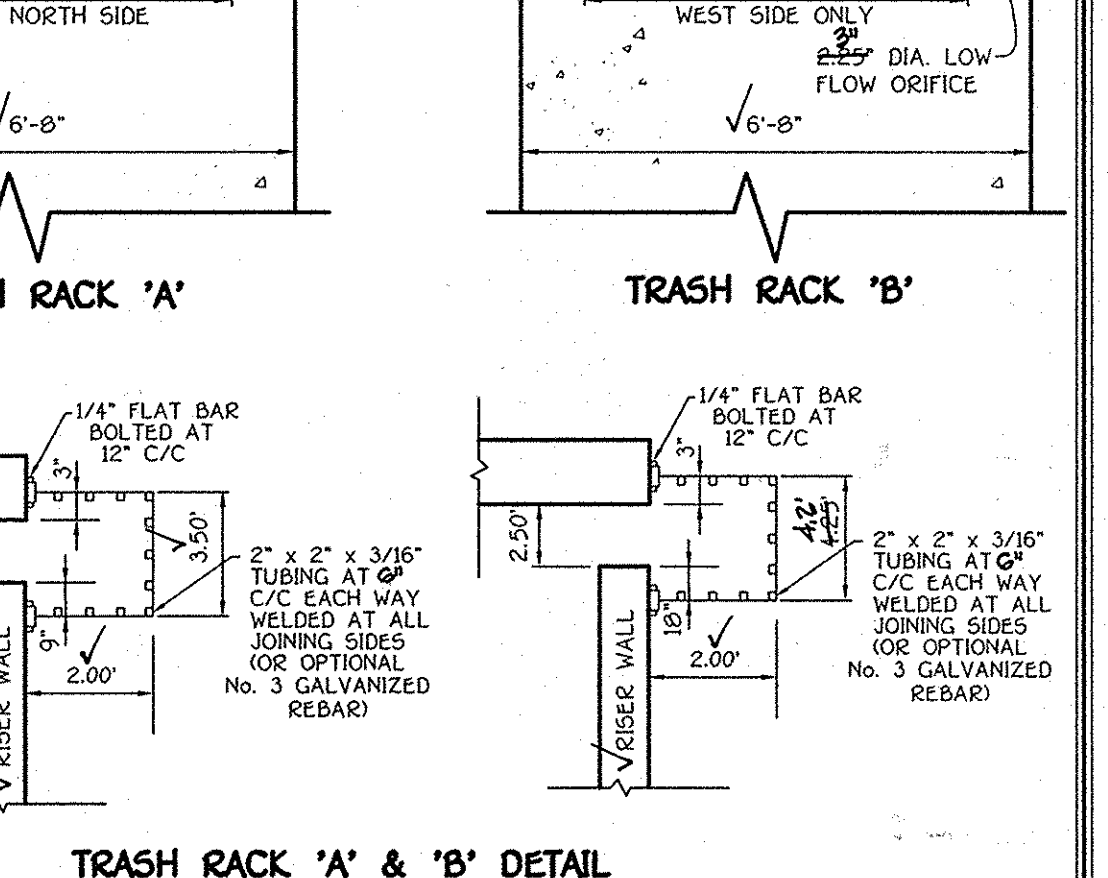
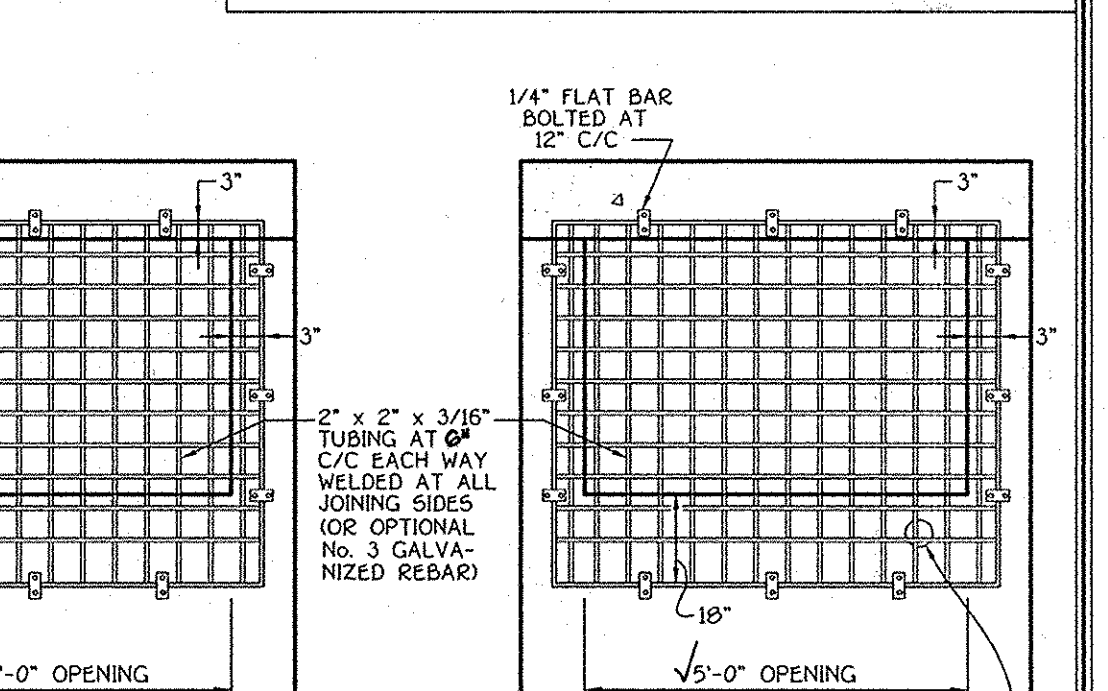
Approved Department of Planning And Zoning
Chief, Division Of Land Development Date: **4/24/08**

Chief, Development Engineering Division Date: **4/24/08**

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: *[Signature]*
Date: **6/18/14**

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.

AS-BUILT CERTIFICATION
I HERBY CERTIFY, BY MY SEAL, THAT THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEET THE APPROVED PLANS AND SPECIFICATIONS.
Signature: *[Signature]*
Date: **6/18/14**



NOTES:
1. FIELD MEASURE THE STRUCTURE DIMENSIONS TO INSURE EXACT FIT OF TRASH RACK.
2. GALVANIZE ENTIRE TRASH RACK AFTER FABRICATION.
3. PAINT BATTLESHIP GRAY.

STORMWATER MANAGEMENT PROFILES AND DETAILS
B.M.P. NO. 4
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

OWNER: Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER: Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 31 OF 40

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
410-461-2295

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
3/1/08

F-07-040
AS-BUILT

STORM WATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice HD-376. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25-foot radius around the inlet structure shall be cleared.

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

EARTH FILL

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment, and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 9-inch thick before compaction layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portion of the embankment. The principal spigot must be installed concurrently with fill placement and not excavated into the embankment.

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

When required by the reviewing agency the minimum required density shall not be less than 95% maximum dry density with a moisture content within #2 of the optimum. Each layer of fill shall be compacted as necessary to obtain the required density, and it is to be certified by the engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99 (Standard Proctor).

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

Embankment Core - The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of 4 feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

Structure Backfill

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

Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that it meets the requirements of AASHTO M-245 and M-246 with watertight coupling bands or flanges. Material shall be placed perpendicular to the pipe of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill zone) shall be of the type and quality conforming to the specified for the core of the embankment or other embankment materials.

Pipe Conduits

All pipes shall be circular in cross section.

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

- Materials - (Polymer Coated steel pipe) - Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. This pipe and its appurtenances shall conform to the requirements of AASHTO Specifications M-245 & M-246 with watertight coupling bands or flanges.

Materials - (Aluminum Coated Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-274 with watertight coupling bands or flanges. Aluminum Coated Steel Pipe, when used with flowable fill or when soil and/or water conditions warrant the need for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. An aluminum coating damaged or otherwise missing shall be replaced with cold applied bituminous coating compound. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

Materials - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-195 or M-211 with watertight coupling bands or flanges. Aluminum pipe, when used with flowable fill or when soil and/or water conditions warrant for increased durability, shall be fully bituminous coated per requirements of AASHTO Specification M-190 Type A. Aluminum surfaces that are to be in contact with concrete shall be painted with one coat of zinc chromate primer or two coats of asphalt. Hot dip galvanized bolts may be used for connections. The pH of the surrounding soils shall be between 4 and 9.

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

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

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

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

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

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

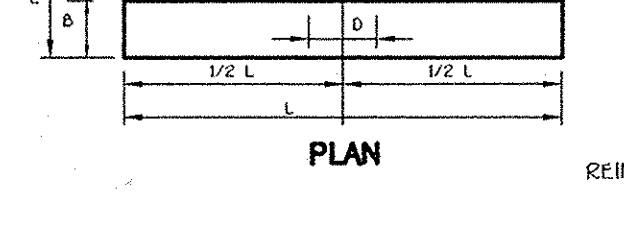
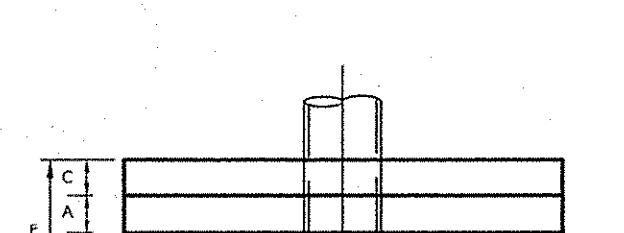
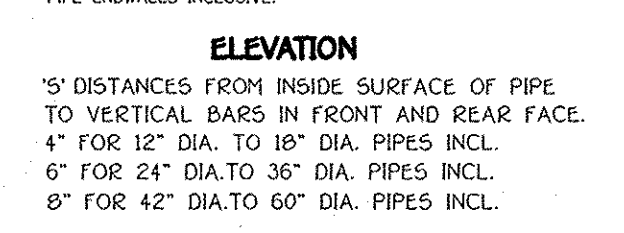
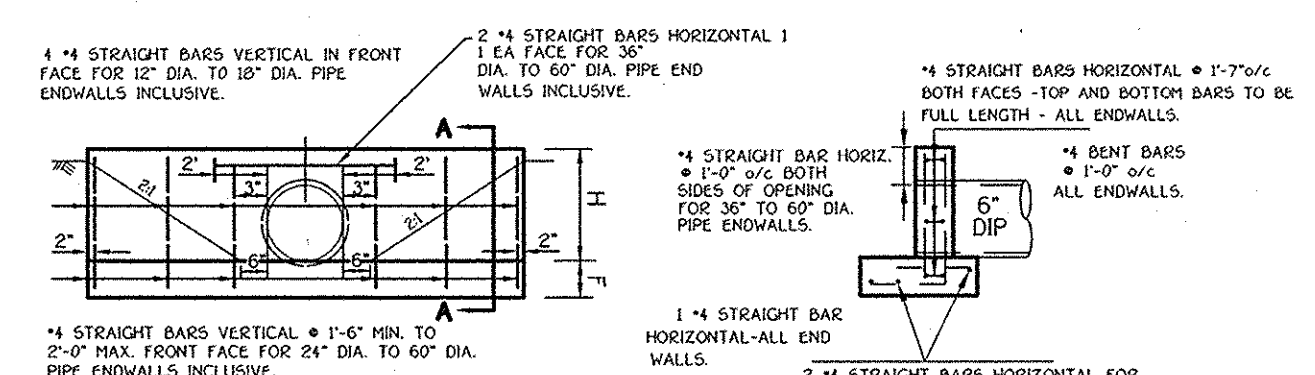
OPERATION AND MAINTENANCE SCHEDULE FOR HOMEOWNER'S ASSOCIATION OWNED AND JOINTLY MAINTAINED STORMWATER MANAGEMENT FACILITIES

ROUTINE MAINTENANCE

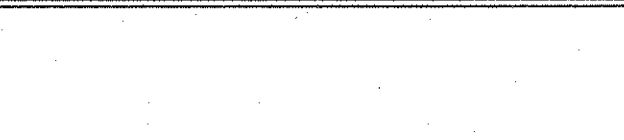
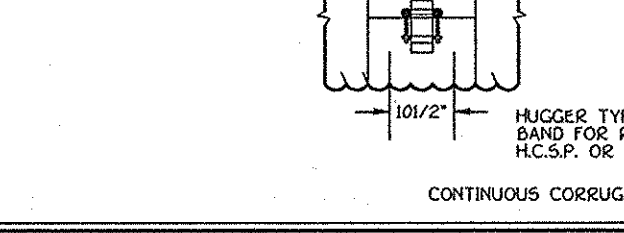
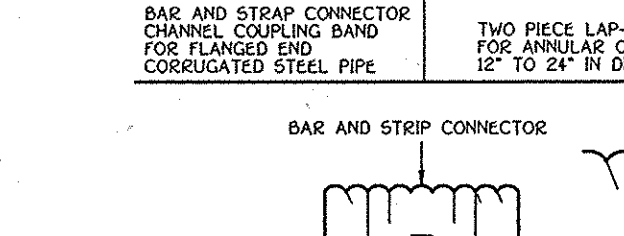
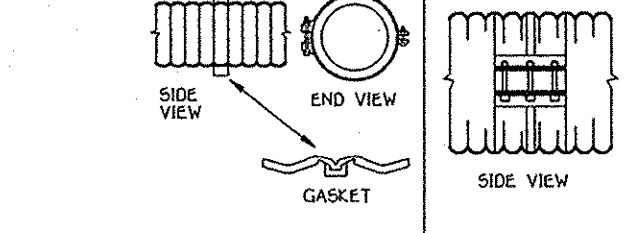
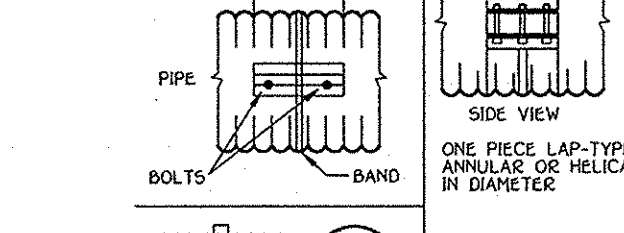
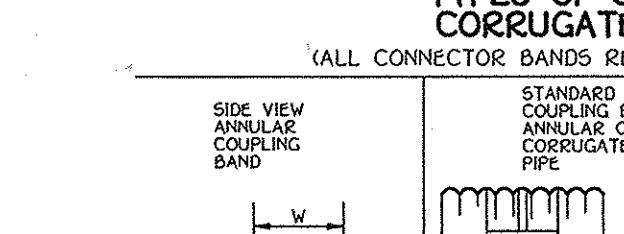
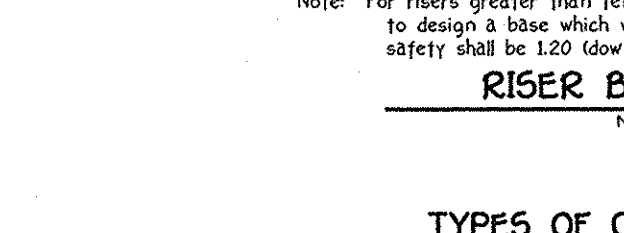
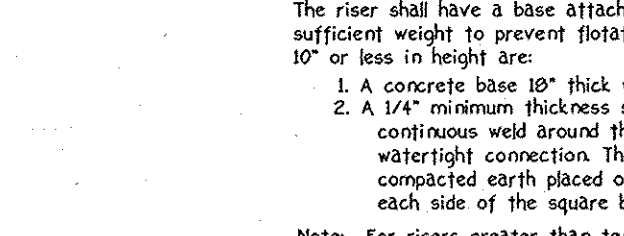
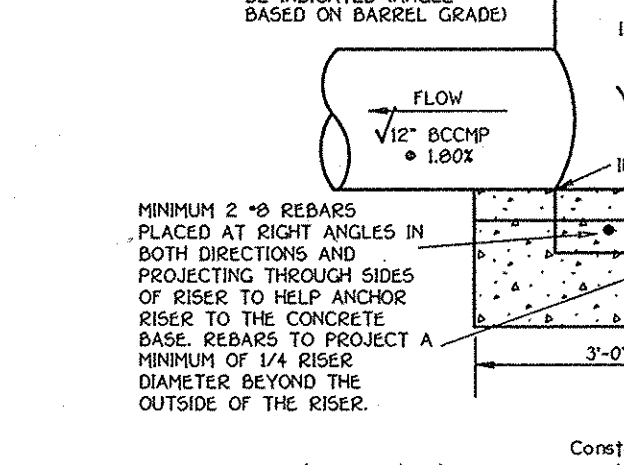
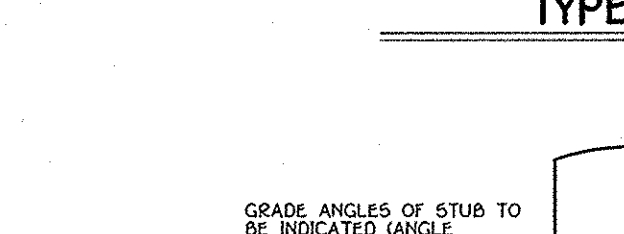
- The top and side slopes of the embankment shall be mowed a minimum of twice per year. Once in June and once in September. Other side slopes and maintenance access shall be mowed as needed.
- Debris and litter shall be removed during regular mowing operations and as needed.
- When deemed necessary for aesthetic reasons and upon the approval from the department of Public works, sediment shall be removed from the pond.

NON-ROUTINE MAINTENANCE

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



OPENINGS	D	AREA	A	B	C	E	F	H	L	VOLUME CONC.	STEEL
	6"	0.79	9"	6"	6"	1'-9"	9"	1'-6"	5'-5"	0.61	38

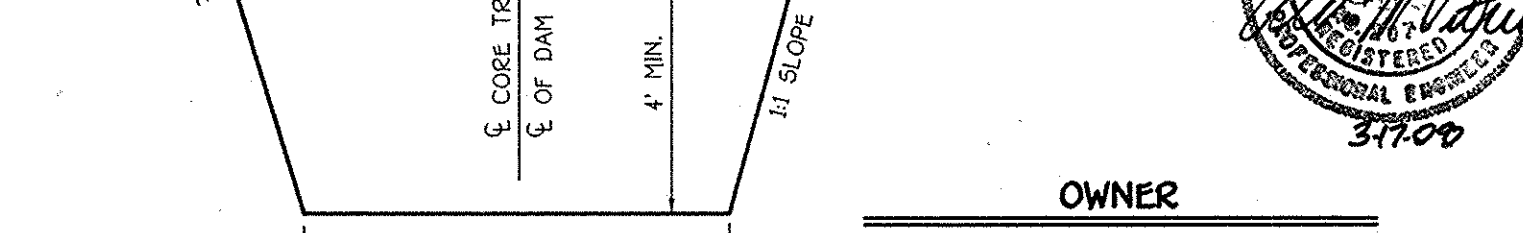
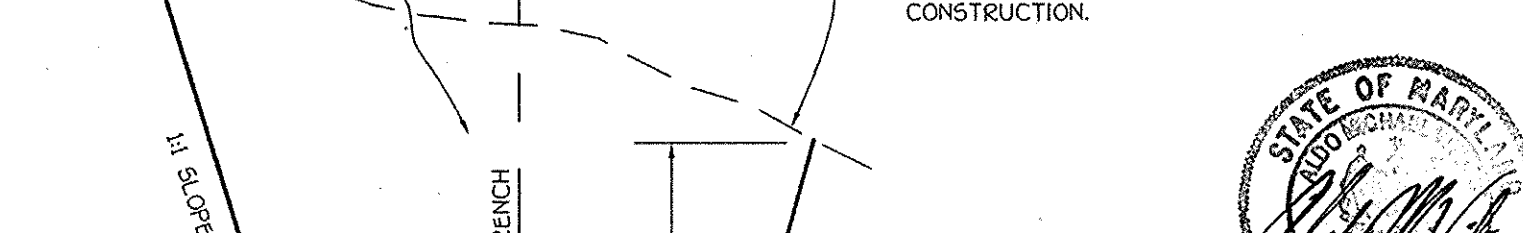
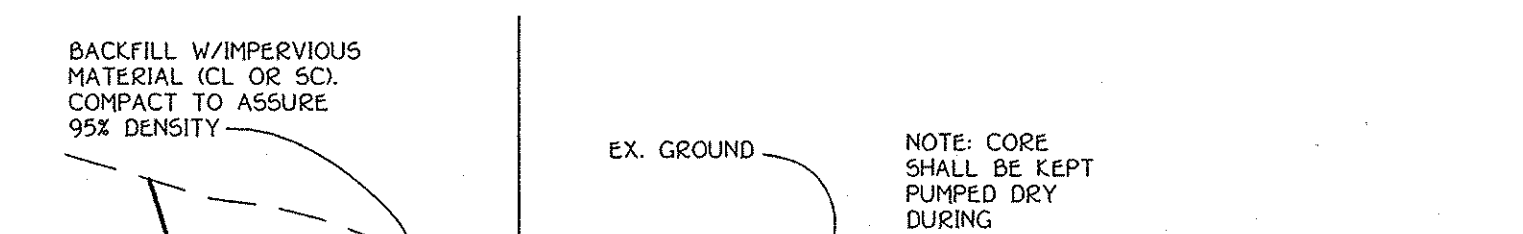
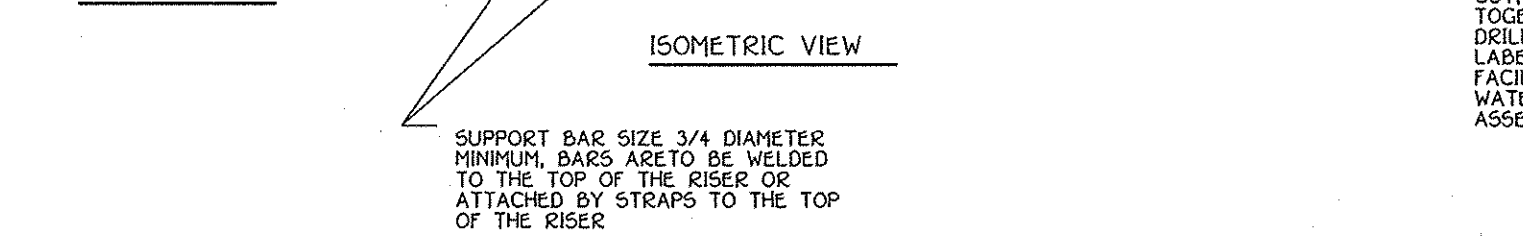
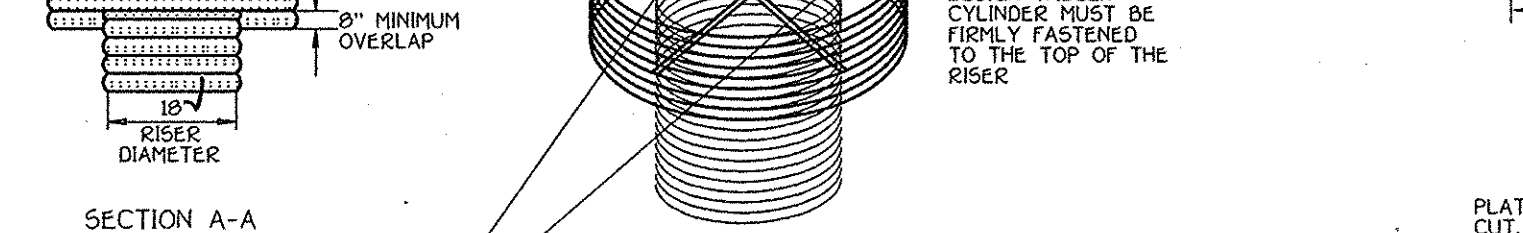
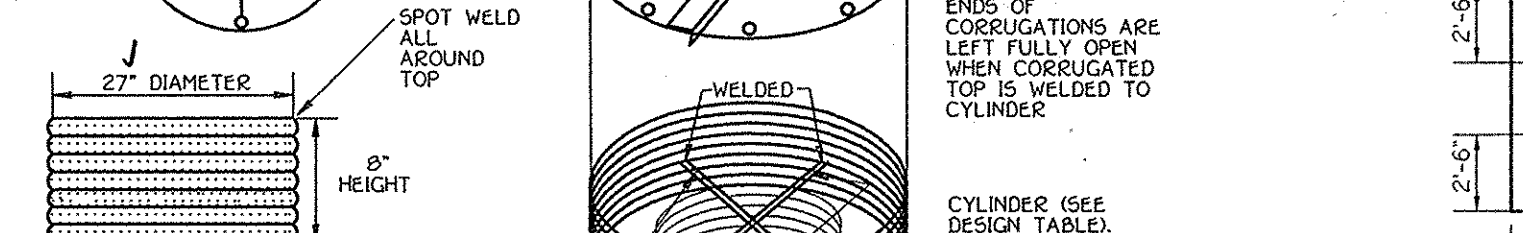
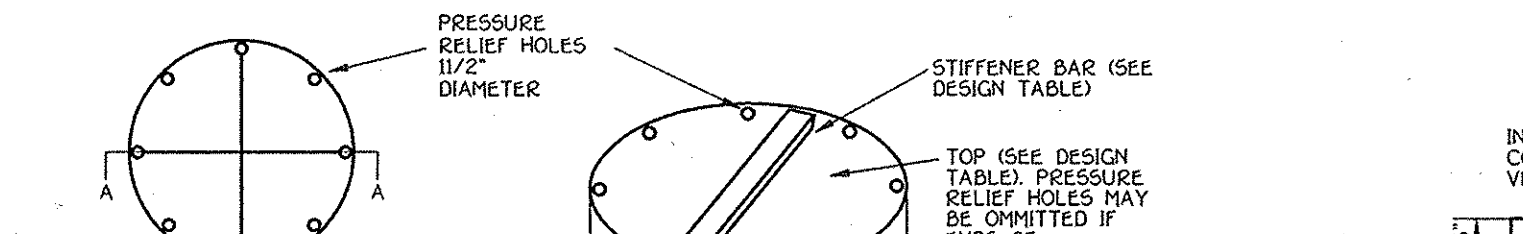
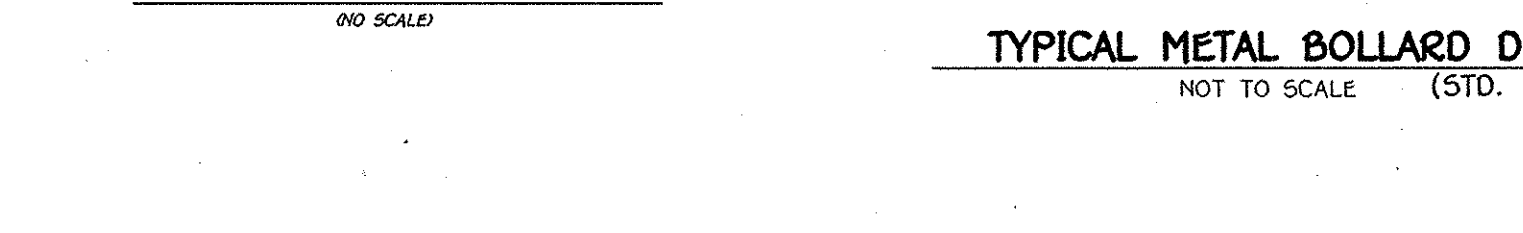
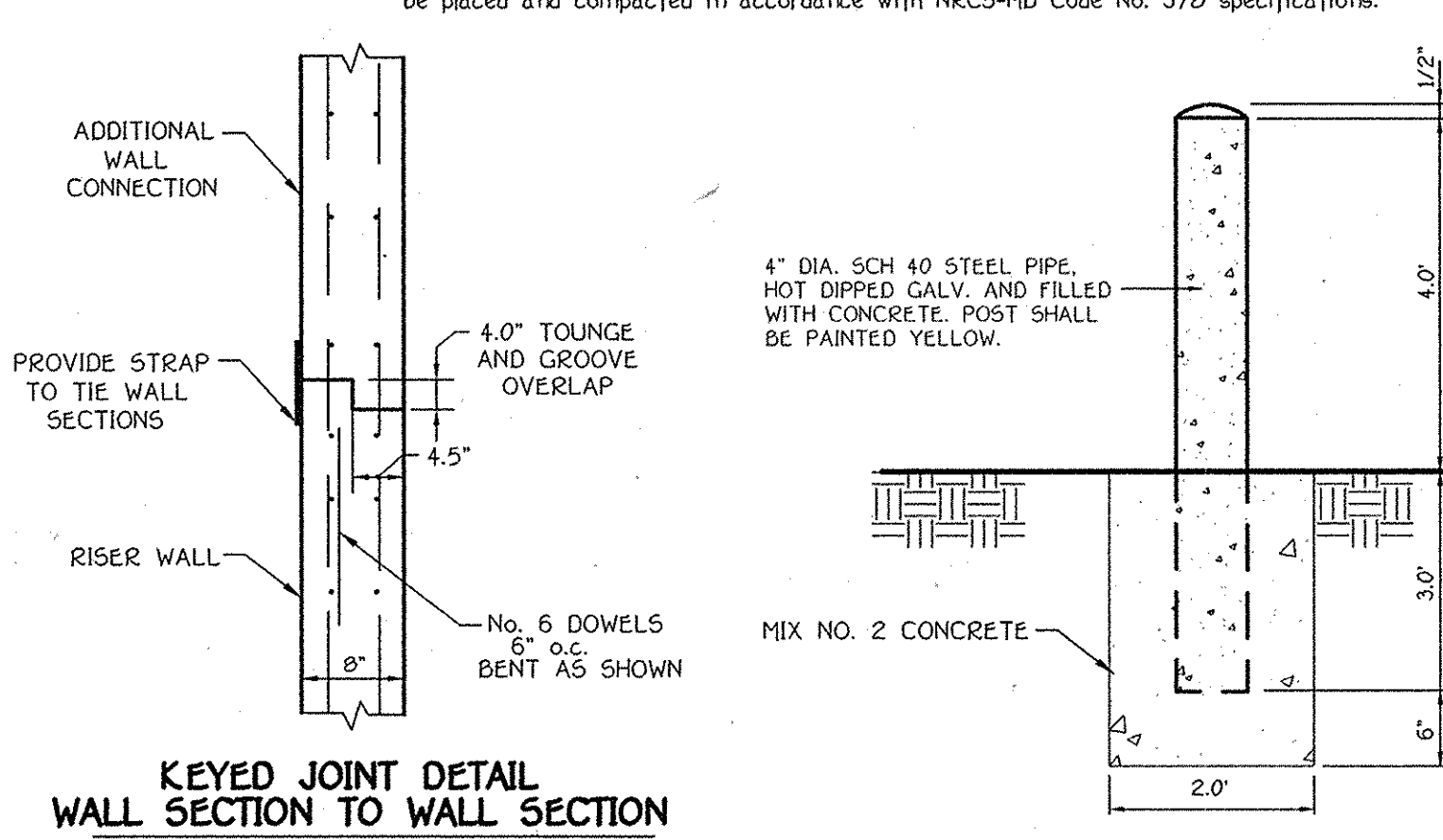


Embankment and Cut-off Trench Construction

The areas of proposed SWM pond facilities should be stripped of topsoil and any other unsuitable materials from the embankment or structure areas in accordance with Soil Conservation Guidelines. After stripping operations have been completed, the exposed subgrade materials should be proofrolled with a loaded dump truck or similar equipment in the presence of a geotechnical engineer or his representative. For areas that are not accessible to a dump truck, the exposed materials should be observed and tested by a geotechnical engineer or his representative utilizing a Dynamic Cone Penetrometer. Any excessively soft or loose materials identified by proofrolling or penetrometer testing should be excavated to suitable firm soil, and then grades re-established by backfilling with suitable soil.

A representative of the Geotechnical Engineer should be present to monitor placement and compaction of fill for the embankments and cut-off trenches. In accordance with NRCS-MD Code No. 378 Pond Standards/Specifications, soils considered suitable for the centers of embankments and cut-off trenches shall conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30% passing the #200 sieve.

It is our professional opinion that in addition to the soil materials described above a fine-grained soil, including Silt (ML) with a plasticity index of 10 or more can be utilized for the centers of the embankments and core trenches. All fill materials must be placed and compacted in accordance with NRCS-MD Code No. 378 specifications.



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 Shall Engage A Registered Professional Engineer To Supervise Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Within 30 Days Of Completion.

Signature of Developer: *Kennard Warfield, Jr.*
Printed Name of Developer: **Kennard Warfield, Jr.**
Date: **3-18-08**

By The Engineer:

I Certify That This Plan For Pond Construction, Erosion And Sediment Control Represents A Practical And Feasible 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 Reviewed The Plans And I/We Must Engage A Registered Professional Engineer To Supervise Construction And Provide The Howard Soil Conservation District With An "As-Built" Plan Within 30 Days Of Completion.

Signature of Engineer: *[Signature]*
Printed Name of Engineer: **[Name]**
Date: **3-17-08**

Approved: Department Of Public Works
Signature: *[Signature]*
Date: **4-17-08**

Approved: Department Of Planning And Zoning
Signature: *[Signature]*
Date: **4-10-08**

Approved: Chief, Division Of Land Development
Signature: *[Signature]*
Date: **4/24/08**

Approved: Chief, Department Engineering Division
Signature: *[Signature]*
Date: **4/22/08**

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: *[Signature]*
Date: **1/30/04**

AS-BUILT CERTIFICATION
I Herby Certify By My Seal That The Facilities Shown On This Plan Were Constructed As Shown On The "As-Built" Plans And Meets The Approved Plans And Specifications.
Signature: *[Signature]*
Date: **6/18/14**

CHARLES J. JOHNSON, JR., PE NO 18004

INSTALL COLLAR WITH CORRUGATIONS VERTICAL
2" MINIMUM TO JOINT TO JOINT
MINIMUM LAST TWO CORRUGATIONS ON EACH END MUST BE ANNULAR OR FLANGE
CONTINUOUS WELD THE FULL CIRCUMFERENCE OF THE COLLAR ON BOTH SIDES

CONTINUOUS WELD THE FULL CIRCUMFERENCE OF THE COLLAR ON BOTH SIDES

PLATES TO BE PRE-CUT, CLAMPED TOGETHER, PRE-DRILLED AND LABELLED TO FACILITY WATER TIGHT FIELD ASSEMBLY

USE "MASTIK" OR EQUIVALENT BETWEEN PLATE AND FRAME

COLLAR FOR FLANGE JOINT PIPE
NO SCALE

TYPICAL ANTI-SEEP COLLARS
NO SCALE

OWNER
Mr. Kenneth Warfield, Jr., Mary Ellen Warfield
1451 Triadelphia Road
Glenela, Maryland 21737
(410-442-2337)

DEVELOPER
Warfield Brothers
1451 Triadelphia Road
Glenela, Maryland 21737
(410-442-2337)

STORMWATER MANAGEMENT NOTES AND DETAILS
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, NON-BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 32 OF 40

AS-BUILT

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-1, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium stiff, sandy silt, trace organics, trace mica (ML)	1.0		I	3-4.5	1	12"	No groundwater encountered while drilling
2.5	Reddish brown, moist, stiff, clay, trace sand, trace mica (CL)	2.5		I	4-5-12	2	16"	* Moved 5.0' and installed a 4.0' In-Situ pipe
5.5	Reddish brown, moist, medium dense, silty sand, trace gravel, trace mica (SM)	5.5		UD	7-9-9	3	18"	Caved in at 5.7' at Completion
8.0	Reddish brown, moist, medium dense, silty sand, trace mica (SM)	8.0		UD	9-11-10	4	18"	Caved in at 2.2' after 24 hours
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-2, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium stiff, sandy silt, trace mica and organics (ML)	1.0		I	2-4-4	1	18"	No groundwater encountered while drilling
2.5	Reddish brown, moist, medium stiff, sandy clay, trace mica and organics (CL)	2.5		I	1-3-3	2	15"	* Moved 5.0' and installed a 4.0' In-Situ pipe
5.5	Reddish brown, moist, medium dense, silty sand, some gravel, trace mica (SM)	5.5		UD	6-10-6	3	18"	Caved in at 6.4' at Completion
8.0	Reddish brown, moist, stiff, sandy silt, trace mica (ML)	8.0		UD	5-9-9	4	14"	
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-3, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium stiff, sandy silt, trace organics, trace mica (ML)	1.0		I	2-4-4	1	13"	No groundwater encountered while drilling
2.5	Reddish brown, moist, medium stiff, sandy clay sand, trace mica, trace organics (CL)	2.5		I	2-2-6	2	18"	* Moved 5.0' and installed a 4.0' In-Situ pipe
5.5	Reddish brown, moist, medium dense, silty sand, trace rock fragments, trace mica (SM)	5.5		UD	4-6-7	3	16"	Caved in at 7.0' at Completion
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-4, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium stiff, sandy silt, trace organics and mica (ML)	1.0		I	2-2-4	1	12"	No groundwater encountered while drilling
2.5	Brown, moist, medium stiff, sandy silt, trace mica (ML-SM)	2.5		I	2-4-5	2	15"	Caved in at 4.5' at Completion
5.5	Reddish brown, moist, medium dense, silty sand, trace gravel and mica (SM)	5.5		I	8-10-9	3	13"	* Moved 5.0' and installed a 3.0' In-Situ pipe
8.0	Reddish brown, moist, medium dense, silty sand, trace mica (SM-ML)	8.0		I	4-5-7	4	14"	
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-5, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium dense, silty sand, trace gravel, mica and organics (SM)	1.0		UD	6-7-6	1	12"	No groundwater encountered while drilling
2.5	Reddish brown, moist, medium dense, silty sand, trace gravel and mica (SM)	2.5		UD	6-10-15	2	16"	* Caved in at 3.0' after 24 hours
6.0	Reddish brown, moist, stiff, sandy silt, trace mica (ML)	6.0		I	7-10-11	3	17"	* Moved 5.0' and installed a 3.0' In-Situ pipe
8.0	Reddish brown, moist, stiff, sandy silt, trace mica (ML)	8.0		UD	4-6-10	4	18"	
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-6, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium stiff, sandy silt, trace mica (ML)	1.0		I	5-5-5	1	14"	Caved in at 1.0' at Completion
2.5	Reddish brown, moist, medium stiff, sandy silty, trace mica (ML)	2.5		I	3-4-6	2	12"	No groundwater encountered while drilling
6.0	Reddish brown, moist, stiff, sandy silt, trace mica (ML)	6.0		I	7-7-10	3	18"	* Moved 5.0' and installed a 3.0' In-Situ pipe
8.0	Bottom of Test Hole at 8.0'							
10.0								Backfilled at completion
15.0								
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-7, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium stiff, sandy silt, trace mica and organics (ML)	1.0		I	2-2-2	1	10"	No groundwater encountered while drilling
2.5	Brown, moist, medium stiff, sandy silt, trace gravel, and mica (ML)	2.5		UD	3-4-8	2	14"	Caved in at 4.3' at Completion
6.0	Brown, moist, stiff, sandy silt, trace mica (ML)	6.0		UD	12-14-15	3	11"	* Moved 5.0' and installed a 4.0' In-Situ pipe
8.0	Brown, moist, stiff, sandy silt, trace mica (ML)	8.0		D	3-5-7	4	13"	
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Location: Howard County, Maryland, Boring Number: B-8, Job #: 04700A

ELEV.	SOIL DESCRIPTION	STR. DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Dark brown, moist, medium stiff, clayey silt, trace organics (ML)	1.0		I	1-3-3	1	12"	No groundwater encountered while drilling
2.5	Brown, moist, soft, sandy silt and clay (CL-ML)	2.5		I	1-2-3	2	15"	Caved in at 4.5' at Completion
5.5	Brown, moist, medium stiff to stiff, sandy silt, trace mica (ML)	5.5		I	3-3-6	3	18"	* Moved 5.0' and installed a 4.0' In-Situ pipe
10.0	Bottom of Test Hole at 10.0'							
15.0								Backfilled after 24 hours
20.0								

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: D-DISINTEGRATED, I-INTACT, U-UNDISTURBED, L-LOST. GROUND WATER DEPTH: AT COMPLETION, AFTER 24 hrs. BORING METHOD: HSA-HOLLOW STEM AUGERS, CFA-CONT. FLIGHT AUGERS, DC-DRIVING CASING, MD-MUD DRILLING, RC-ROCK CORE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hunt 4/24/05
CHIEF, DIVISION OF LAND DEVELOPMENT, RD

Walter J. ... 4/24/05
CHIEF, DEVELOPMENT ENGINEERING DIVISION, NY

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Walter J. ... 4-10-09
CHIEF, BUREAU OF HIGHWAYS, HO

AS-BUILT CERTIFICATION

THREE (3) "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.

Charles J. ... 4/18/09
CHARLES J. ... PE NO. 132024

OWNER

Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

And
Warfield Brothers
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER

Ten Oats Properties, Inc
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

SOIL BORINGS

THE WARFIELDS II SECTION TWO

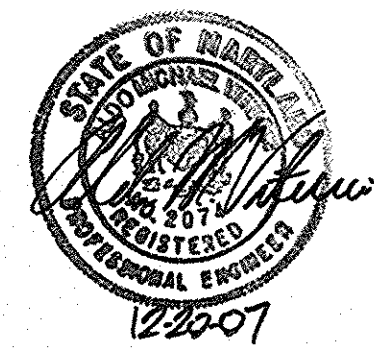
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED: RC-DEO

TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 33 OF 40

K:\Drawings\310310 Warfield Homebased\FINALS\310310 SECT-2 SHEET 33-34 BORINGS.dwg, 12/19/2007 9:58:49 AM

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
811 CENTENAL SQUARE OFFICE PARK - 30272 BALTIMORE NATIONAL PIKE
ELLETT CITY, MARYLAND 20424
410-461-2929



F-07-040
AS-BUILT

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-9, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-21-04. Date Completed: 12-21-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace organics (SM)	1.0		I	3-4-5	1	14"	No groundwater encountered while drilling
2.5	Tan and brown, moist, loose, silty sand, trace gravel and mica (SM)	2.5		VD	2-3-6	2	10"	
5.5	Tan, moist, medium dense to dense, silty sand, trace mica (SM)	5.5		VD	6-16-13	3	18"	Caved in at 5.0' after 24 hours
10.0	Bottom of Test Hole at 10.0'	10.0		D	14-25-26	4	16"	
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-10, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-21-04. Date Completed: 12-21-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace mica (SM)	1.0		I	2-2-3	1	14"	No groundwater encountered while drilling
2.5	Gray, moist, medium stiff clay, trace gravel, organic, mica (ML)	2.5		VD	2-3-3	2	10"	Caved in at 4.3' at Completion
6.0	Reddish brown, moist, medium dense silty sand, trace mica (SM)	6.0		VD	10-18-17	3	13"	Caved in at 4.0' after 24 hours
10.0	Bottom of Test Hole at 8.0'	10.0						
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-11, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-21-04. Date Completed: 12-21-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace organics, trace mica (SM)	1.0		VD	1-2-3	1	11"	No groundwater encountered while drilling
2.5	Reddish brown, moist, loose silty sand, trace organics, trace mica (SM)	2.5		VD	2-3-6	2	15"	Caved in at 4.4' after 24 hours
6.0	Reddish brown, moist, medium dense silty sand, trace mica (SM)	6.0		VD	3-4-9	3	18"	Caved in at 4.4' after 24 hours
10.0	Bottom of Test Hole at 8.0'	10.0						
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-12, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-21-04. Date Completed: 12-21-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, medium, stiff, sandy silt, trace organics, trace mica (ML)	1.0		I	1-3-4	1	12"	No groundwater encountered while drilling
2.5	Reddish brown, moist, loose silty sand, trace gravel and mica (SM)	2.5		D	2-4-4	2	10"	Caved in at 3.8' at Completion
6.0	Reddish brown, moist, medium dense silty sand, trace organics (SM)	6.0		D	4-7-9	3	10"	Caved in at 3.8' after 24 hours
10.0	Bottom of Test Hole at 8.0'	10.0						
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-13, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-21-04. Date Completed: 12-21-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace organics, trace gravel (SM)	1.0		I	1-3-2	1	14"	No groundwater encountered while drilling
2.5	Brown, moist, loose, silty sand to sandy silt, trace mica and organics (SM-ML)	2.5		VD	2-5-8	2	15"	Caved in at 4.3' at Completion
5.5	Reddish brown, moist, medium stiff silt, trace mica and organics (ML)	5.5		VD	3-7-12	3	13"	Caved in at 4.3' after 24 hours
10.0	Bottom of Test Hole at 6.0'	10.0						
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-14, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-22-04. Date Completed: 12-22-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace organics, trace gravel (SM)	1.0		VD	3-3-4	1	6"	No groundwater encountered while drilling
2.5	Brown, moist, loose, silty sand to sandy silt, trace mica and organics (SM-ML)	2.5		VD	3-4-6	2	14"	
5.5	Reddish brown, moist, medium stiff silt, trace mica and organics (ML)	5.5		VD	4-5-5	3	13"	Caved in at 6.6' at Completion
10.0	Bottom of Test Hole at 10.0'	10.0		VD	6-18-11	4	12"	Caved in at 6.5' after 24 hours
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-15, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-22-04. Date Completed: 12-22-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace mica and organics (SM)	1.0		VD	2-3-3	1	15"	No groundwater encountered while drilling
2.5	Brown, moist, medium stiff sandy silt, trace mica and organics (ML)	2.5		I	1-3-3	2	13"	Moved 5.0' and installed a 4.0' In-Situ pipe
6.0	Brown, moist, medium stiff sandy silt, trace mica and organics (ML)	6.0		I	2-3-5	3	11"	Caved in at 7.6' at Completion
10.0	Bottom of Test Hole at 10.0'	10.0		VD	2-4-4	4	17"	Caved in at 4.3' after 24 hours
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.

HILLIS - CARNES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: The Warfields II, Howard County, Maryland. Boring Number: B-16, Job #: 04700A.

Foreman: Jerry Hersh. Date Started: 12-22-04. Date Completed: 12-22-04.

ELEV.	SOIL DESCRIPTION	STRATA DEPTH	DEPTH SCALE	CON	SAMPLE BLOWS 6"	NO.	REC.	BORING & SAMPLING NOTES
0.0	SURFACE	0.0						6" Topsoil
1.0	Brown, moist, loose, silty sand, trace mica and organics (SM)	1.0		I	2-2-4	1	10"	No groundwater encountered while drilling
2.5	Brown, moist, soft, sandy silt, trace mica (ML)	2.5		I	2-2-2	2	9"	
6.0	Bottom of Test Hole at 10.0'	6.0		I	22-3-4	3	10"	Caved in at 6.7' at Completion
10.0	Bottom of Test Hole at 10.0'	10.0		VD	2-6-5	4	13"	Caved in at 4.3' after 24 hours
15.0		15.0						Backfilled after 24 hours
20.0		20.0						

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. SAMPLE CONDITIONS: UNDISTURBED. GROUND WATER DEPTH: AT COMPLETION 0.0 FT. BORING METHOD: HSA-HOLLOW STEM AUGERS.



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hamant 4/24/05 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

Mr. Damman 4/22/05 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. ... 4-10-04 DATE
 CHIEF, BUREAU OF HIGHWAYS

AS-BUILT CERTIFICATION

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

Charles J. ... 4/18/19 DATE
 CHIEF, BUREAU OF HIGHWAYS

OWNER

Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 1451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

DEVELOPER

Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

SOIL BORINGS THE WARFIELDS II SECTION TWO

BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED RC-DEO

TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 34 OF 40

K:\Drawings\33010 Warfield Homeowner\FINALS\33010 SECT 2 SHEET 34 BORINGS.dwg, 12/19/2007 9:59:21 AM

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 1072 BALTIMORE NATIONAL Pk.
 ELICOTT CITY, MARYLAND 21042
 410 481 - 2655

F-07-040 AS-BUILT

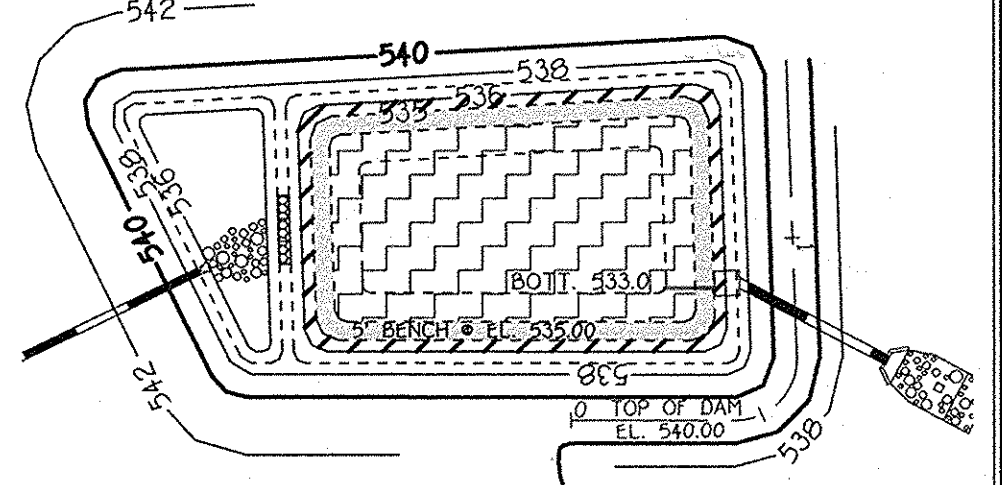
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamer 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE

W.D. Dammer 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William F. Marshall 4-18-08
 CHIEF, BUREAU OF HIGHWAYS
 DATE

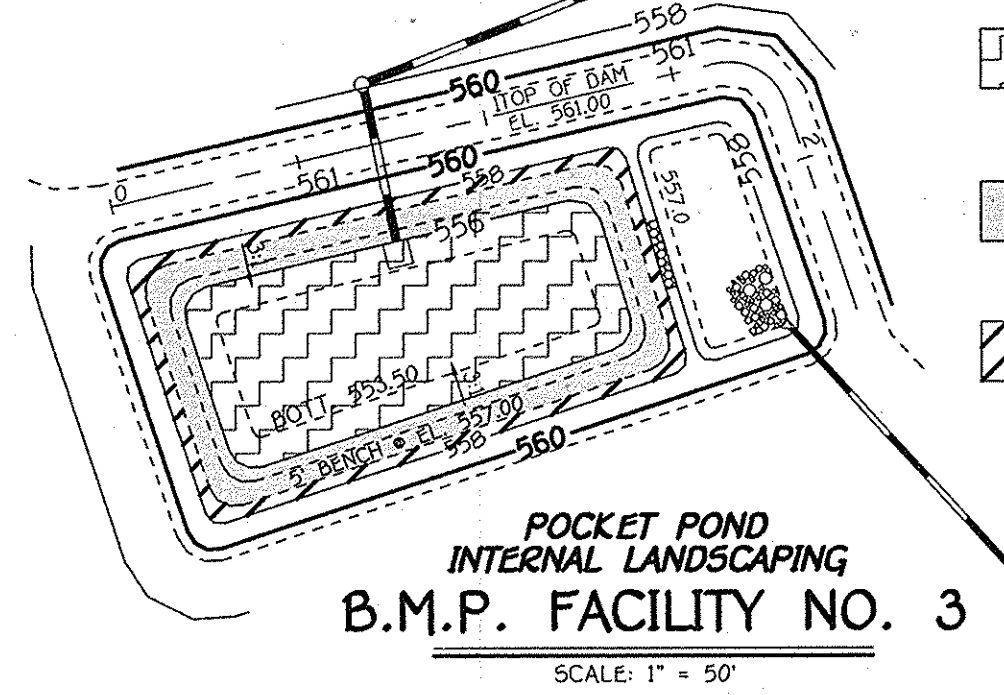


- 12' - 30' DEPTH BELOW NORMAL POOL ELEVATION
Water Lily, Deep water Duck Potamo, Sage Pond Plant, Wild Celery or Redfield Grass
- 0' - 12' ELEVATION BELOW NORMAL POOL ELEVATION
Blue Flag Iris, Duck Potamo, Flowering Bulrush, Softstalk Sedge, Lobelia, Pond Cypress or Various Asters
- 0' - 12' ELEVATION ABOVE NORMAL POOL ELEVATION
New England Aster, Marsh Aster, Marsh Marigold, Tussock Sedge, Spotted Joe Pye Weed, Forget Me Not, Inkberry, Purple Oyster Dogwood, Pin Oak, River Birch, Sycamore, Swamp White Oak, Weeping Willow or Dawn Redwood



MICRO POOL EXTENDED DETENTION POND
 INTERNAL LANDSCAPING
 B.M.P. FACILITY NO. 4
 SCALE: 1" = 50'

PLAN
 SCALE: 1" = 100'



POCKET POND
 INTERNAL LANDSCAPING
 B.M.P. FACILITY NO. 3
 SCALE: 1" = 50'

- 12' - 30' DEPTH BELOW NORMAL POOL ELEVATION
Water Lily, Deep water Duck Potamo, Sage Pond Plant, Wild Celery or Redfield Grass
- 0' - 12' ELEVATION BELOW NORMAL POOL ELEVATION
Blue Flag Iris, Duck Potamo, Flowering Bulrush, Softstalk Sedge, Lobelia, Pond Cypress or Various Asters
- 0' - 12' ELEVATION ABOVE NORMAL POOL ELEVATION
New England Aster, Marsh Aster, Marsh Marigold, Tussock Sedge, Spotted Joe Pye Weed, Forget Me Not, Inkberry, Purple Oyster Dogwood, Pin Oak, River Birch, Sycamore, Swamp White Oak, Weeping Willow or Dawn Redwood

OWNER
 Mr. Kenneth Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

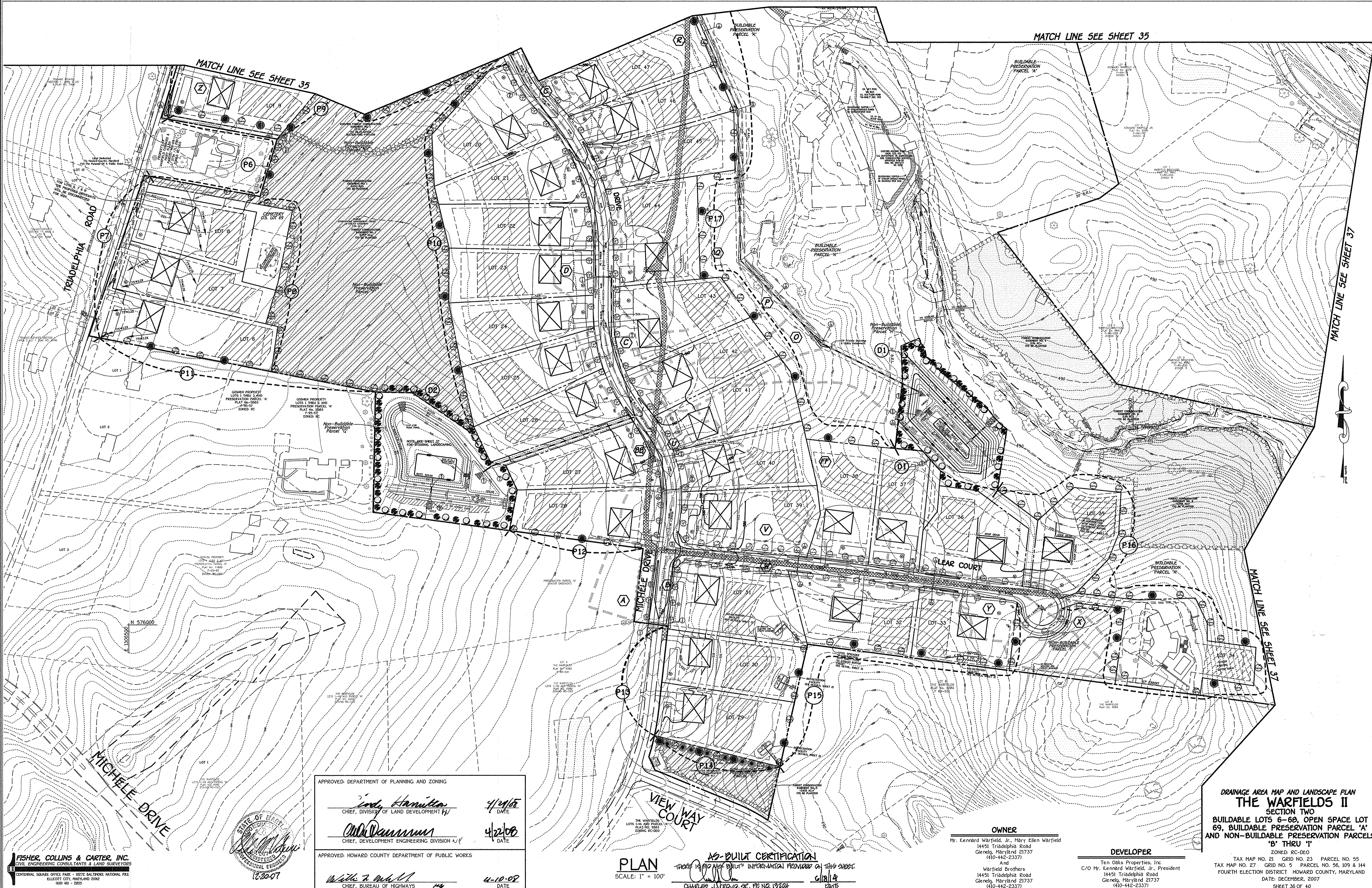
DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kenneth Warfield, Jr., President
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410-442-2337)

DRAINAGE AREA MAP AND LANDSCAPE PLAN
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-60, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 95
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 35 OF 40

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PKE
 ELLETTT CITY, MARYLAND 21042
 (410) 461-2000



AS-BUILT CERTIFICATION
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET
Charles J. O'Leary, P.E. 4/18/08
 APPROVED: J. O'Leary, P.E. NO. 18224
 DATE



MATCH LINE SEE SHEET 35

MATCH LINE SEE SHEET 35

MATCH LINE SEE SHEET 37

MATCH LINE SEE SHEET 37

K:\Drawings\300310 Warfields II\AS-BUILT\300310 SECT-2 SHEET 35-37 DA MAP AND LANDSCAPE PLAN.dwg, 12/29/2007 1:32:22 PM

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 19772 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21042
 (410) 481-2337



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Ind. Hamilton 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT IV DATE

Old Dominion 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION IV DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Walter J. ... 4-10-08
 CHIEF, BUREAU OF HIGHWAYS DATE

PLAN
 SCALE: 1" = 100'

AS-BUILT CERTIFICATION
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

Charles J. ... 6/18/14
 CHIEF, J. ... DATE

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410) 442-2337
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410) 442-2337

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelo, Maryland 21737
 (410) 442-2337

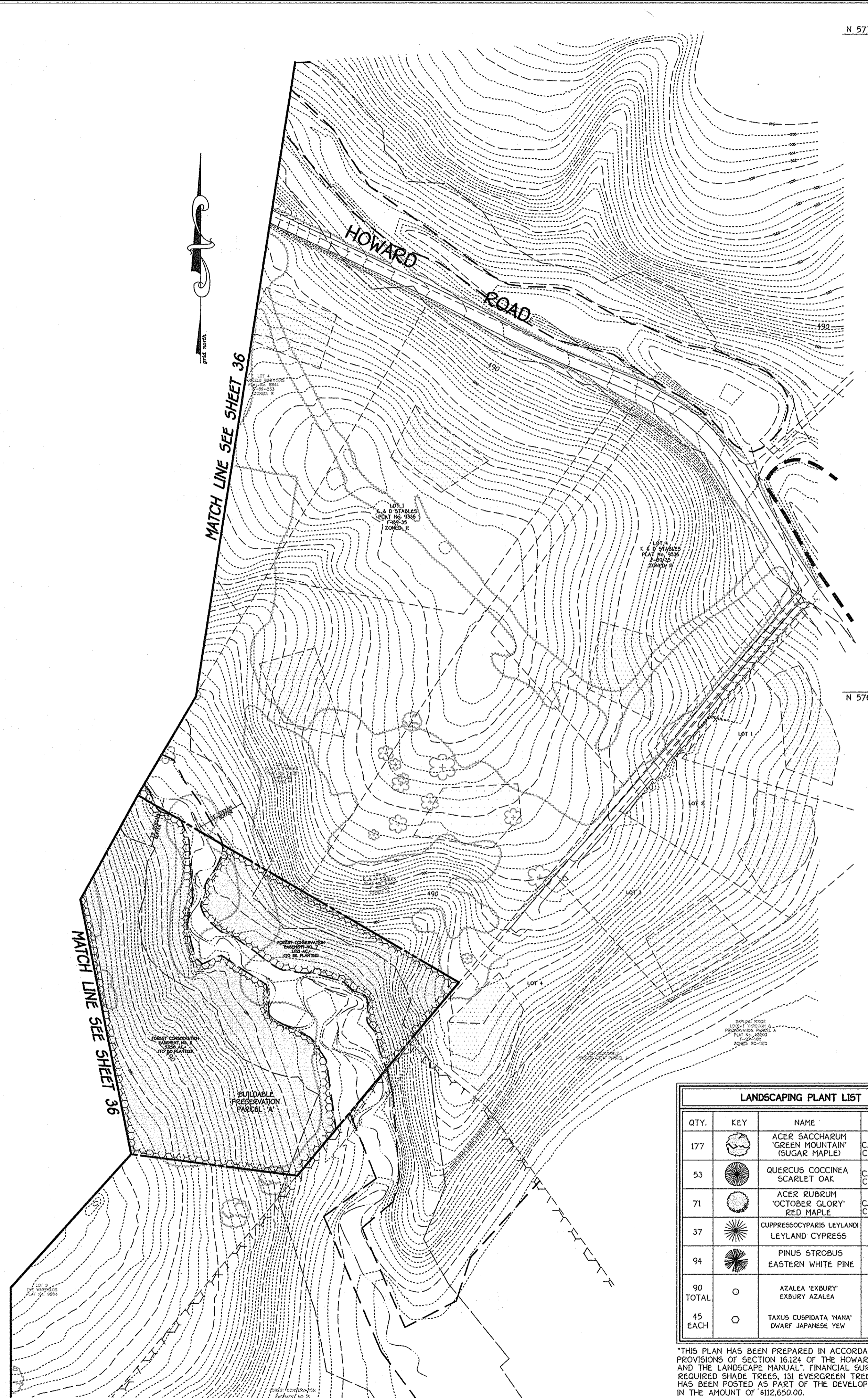
DRAINAGE AREA MAP AND LANDSCAPE PLAN
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-60, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'T'

ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 36 OF 40

F-07-040
AS-BUILT

N 577500
E 1309500

N 576500
E 1309500



SCHEDULE D - S.W.M. AREA LANDSCAPING				
LINEAR FEET OF PERIMETER	D-1: 1017'	D-2: 1209'	D-3: 763'	D-4: 913'
NUMBER OF TREES REQUIRED:				
SHADE TREES	20	24	15	18
EVERGREEN TREES	25	30	19	23
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO	NO	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO	NO	NO
NUMBER OF TREES PROVIDED:				
SHADE TREES	20	24	9	18
EVERGREEN TREES	25	30	16	23
SHRUBS	-	-	90	-

NOTE: FOR PERIMETER D-3, 6 SHADE & 3 EVERGREEN TREES HAVE BEEN SUBSTITUTED WITH 90 SHRUBS. THIS SUBSTITUTION IS PROVIDED FOR SIGHT DISTANCE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Harman
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 4/27/08

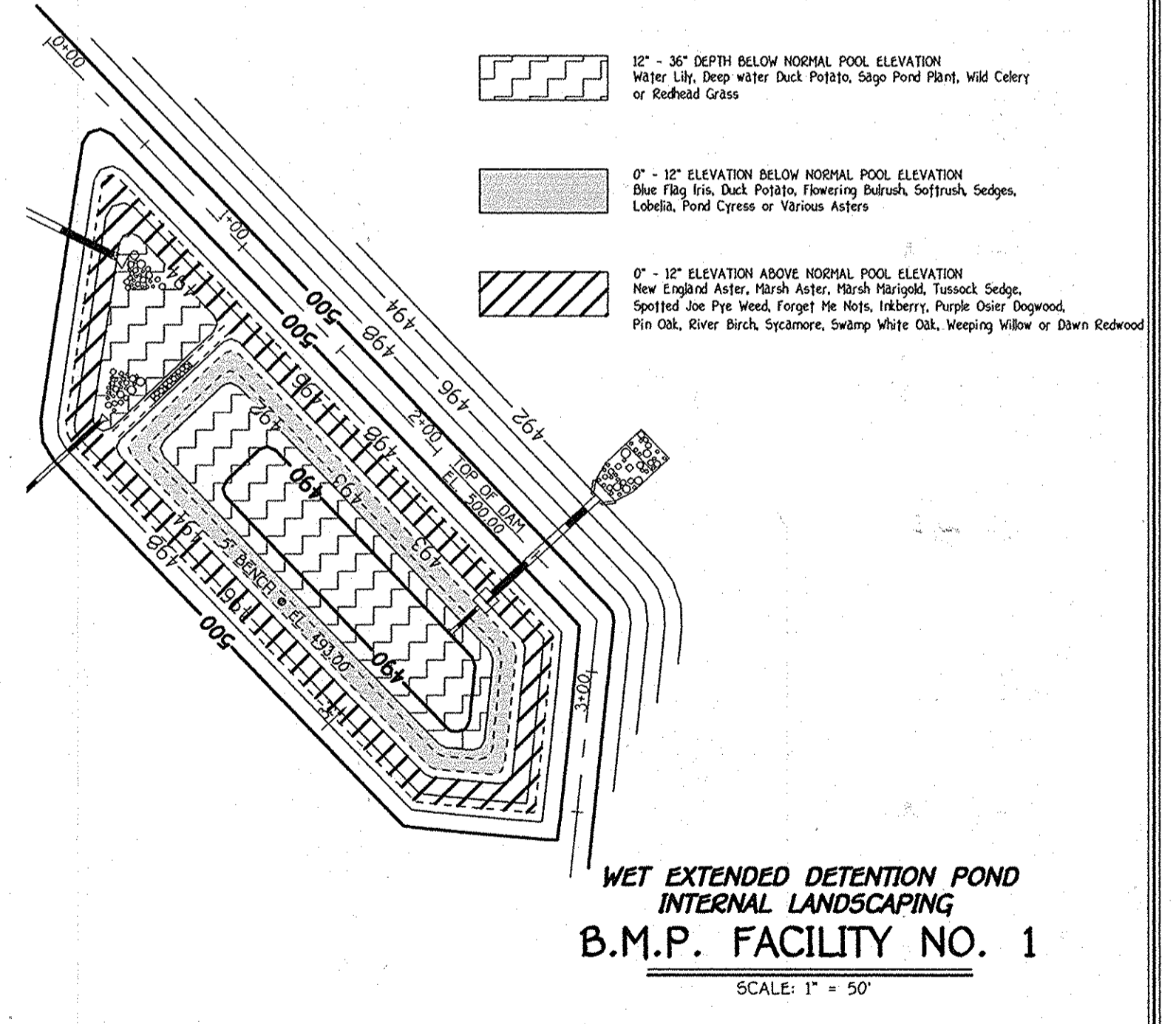
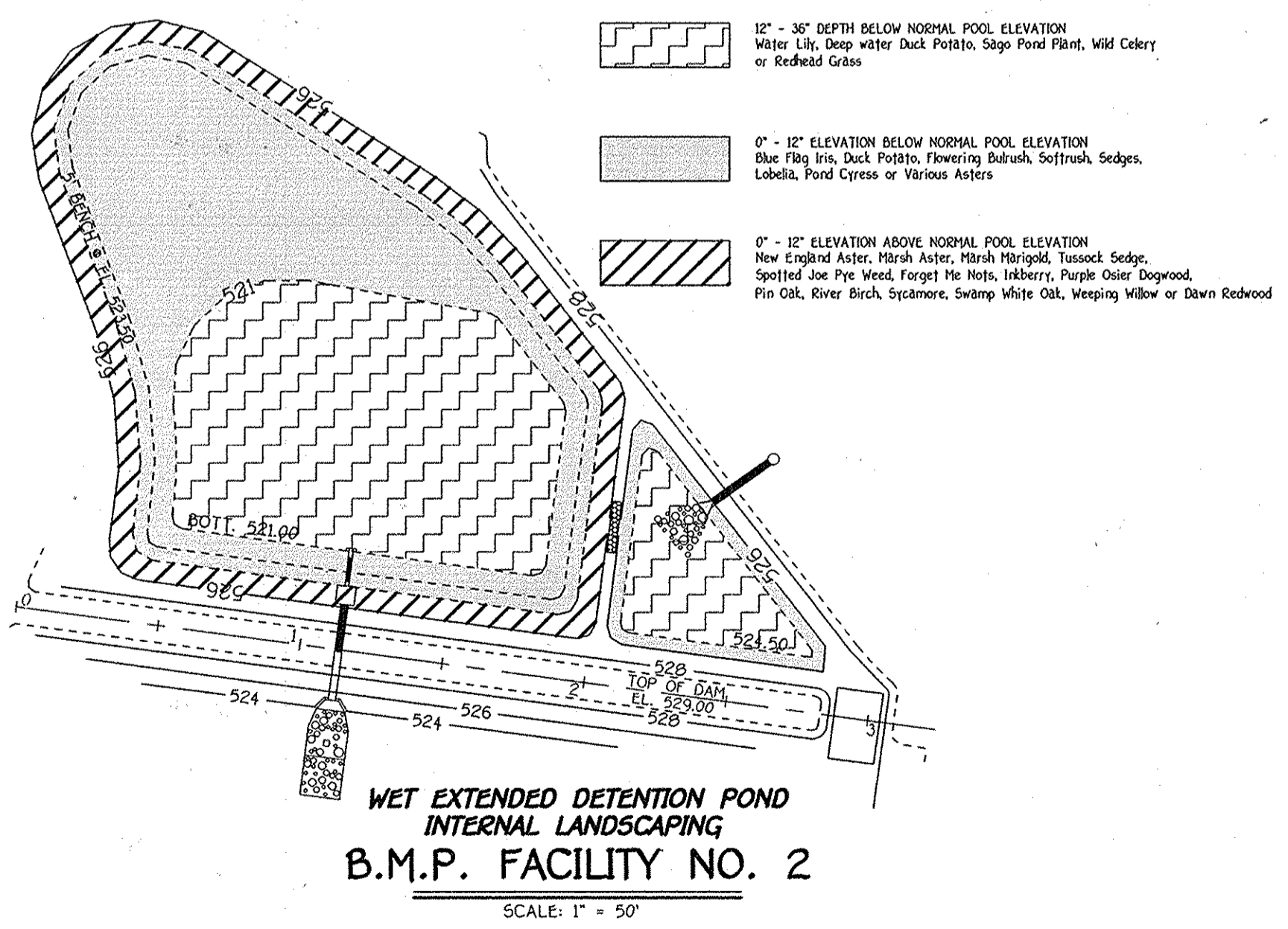
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William Z. Wabnitz
 CHIEF, BUREAU OF HIGHWAYS
 DATE: 4-10-08

SCHEDULE A - PERIMETER LANDSCAPE EDGE							
PERIMETER	CATEGORY (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 & PROVIDED	
						SHADE TREES	EVERGREEN TREES
P-1	ADJACENT TO ROAD	B	972'	NO	NO	19	24
P-2	ADJACENT TO ROAD	B	197'	NO	NO	4	5
P-3	ADJACENT TO PERIMETER	A	265'	NO	NO	4	-
P-4	ADJACENT TO PERIMETER	A	377'	NO	NO	6	-
P-5	FRONT TO ROAD	N/A	1140'	NO	NO	-	-
P-6	ADJACENT TO PERIMETER	A	705'	NO	NO	12	-
P-7	FRONT TO ROAD	N/A	685'	NO	NO	-	-
P-8	ADJACENT TO PERIMETER	A	524'	NO	NO	9	-
P-9	ADJACENT TO PERIMETER	A	786'	NO	NO	13	-
P-10	ADJACENT TO PERIMETER	A	1003'	NO	NO	17	-
P-11	ADJACENT TO PERIMETER	A	700'	NO	NO	12	-
P-12	ADJACENT TO PERIMETER	A	336'	NO	NO	6	-
P-13	FRONT TO ROAD	N/A	276'	NO	NO	-	-
P-14	ADJACENT TO ROAD	B	322'	NO	NO	6	8
P-15	ADJACENT TO PERIMETER	A	993'	NO	NO	17	-
P-16	ADJACENT TO PERIMETER	A	2022'	YES (117')	NO	32	-
P-17	ADJACENT TO PERIMETER	A	1850'	NO	NO	31	-
P-18	ADJACENT TO PERIMETER	A	448'	NO	NO	7	-
P-19	ADJACENT TO PERIMETER	A	1202'	NO	NO	20	-
P-20	ADJACENT TO PERIMETER	A	491'	NO	NO	8	-
P-21	ADJACENT TO PERIMETER	A	401'	NO	NO	7	-

DRAINAGE AREA DATA					
STRUCTURE NO.	DRAINAGE AREA	AREA	C	ZONED	X IMP.
I-1	A	1.08 AC.	0.31	RC-DEO	20%
I-2	B	0.11 AC.	0.54	RC-DEO	45%
I-3	C	1.08 AC.	0.41	RC-DEO	35%
I-4	D	1.41 AC.	0.37	RC-DEO	34%
I-5	E	1.98 AC.	0.25	RC-DEO	21%
I-6	F	2.54 AC.	0.28	RC-DEO	10%
I-7	G	1.25 AC.	0.37	RC-DEO	65%
I-8	H	0.15 AC.	0.50	RC-DEO	40%
I-9	I	0.51 AC.	0.39	RC-DEO	23%
I-10	J	1.34 AC.	0.31	RC-DEO	26%
I-11	K	1.05 AC.	0.34	RC-DEO	31%
I-12	L	0.87 AC.	0.37	RC-DEO	18%
I-13	M	0.67 AC.	0.35	RC-DEO	43%
I-14	N	0.71 AC.	0.35	RC-DEO	28%
I-15	O	0.90 AC.	0.26	RC-DEO	10%
I-16	P	0.95 AC.	0.26	RC-DEO	5%
I-17	Q	3.25 AC.	0.26	RC-DEO	7%
I-18	R	7.22 AC.	0.26	RC-DEO	13%
I-19	S	0.73 AC.	0.26	RC-DEO	0%
I-20	T	1.17 AC.	0.26	RC-DEO	10%
I-21	U	0.57 AC.	0.40	RC-DEO	28%
I-22	V	2.08 AC.	0.30	RC-DEO	38%
I-23	W	0.31 AC.	0.48	RC-DEO	38%
I-24	X	0.66 AC.	0.41	RC-DEO	26%
I-25	Y	1.25 AC.	0.34	RC-DEO	37%
I-26	Z	0.90 AC.	0.32	RC-DEO	31%
I-8A	AA	1.36 AC.	0.48	RC-DEO	36%
I-21A	BB	0.50 AC.	0.38	RC-DEO	20%
E-2	CC	2.71 AC.	0.26	RC-DEO	10%
I-26A	DD	1.00 AC.	0.30	RC-DEO	26%
I-26B	EE	1.16 AC.	0.33	RC-DEO	25%
I-27	FF	3.31 AC.	0.26	RC-DEO	4%

LANDSCAPING PLANT LIST			
QTY.	KEY	NAME	SIZE
177		ACER SACCHARUM 'GREEN MOUNTAIN' (SUGAR MAPLE)	2 1/2" - 3" CALIPER FULL CROWN, B&B
53		QUERCUS COCCINEA SCARLET OAK	2 1/2" - 3" CALIPER FULL CROWN, B&B
71		ACER RUBRUM 'OCTOBER GLORY' RED MAPLE	2 1/2" - 3" CALIPER FULL CROWN, B&B
37		CUPRESSOCYPARIS LEYLANDII LEYLAND CYPRESS	5' - 6' HT.
94		PINUS STROBUS EASTERN WHITE PINE	6' - 8' HT.
90		AZALEA 'EXBURY' EXBURY AZALEA	18"-24" SP.
45		TAXUS CUSPIDATA 'NANA' DWARF JAPANESE YEW	18"-24" SP.

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 15124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE 301 REQUIRED SHADE TREES, 131 EVERGREEN TREES & 90 SHRUBS HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$112,650.00.



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 BELLEFONTAINE CITY, MARYLAND 21034
 (410) 461-2995

PLAN
 SCALE: 1" = 100'



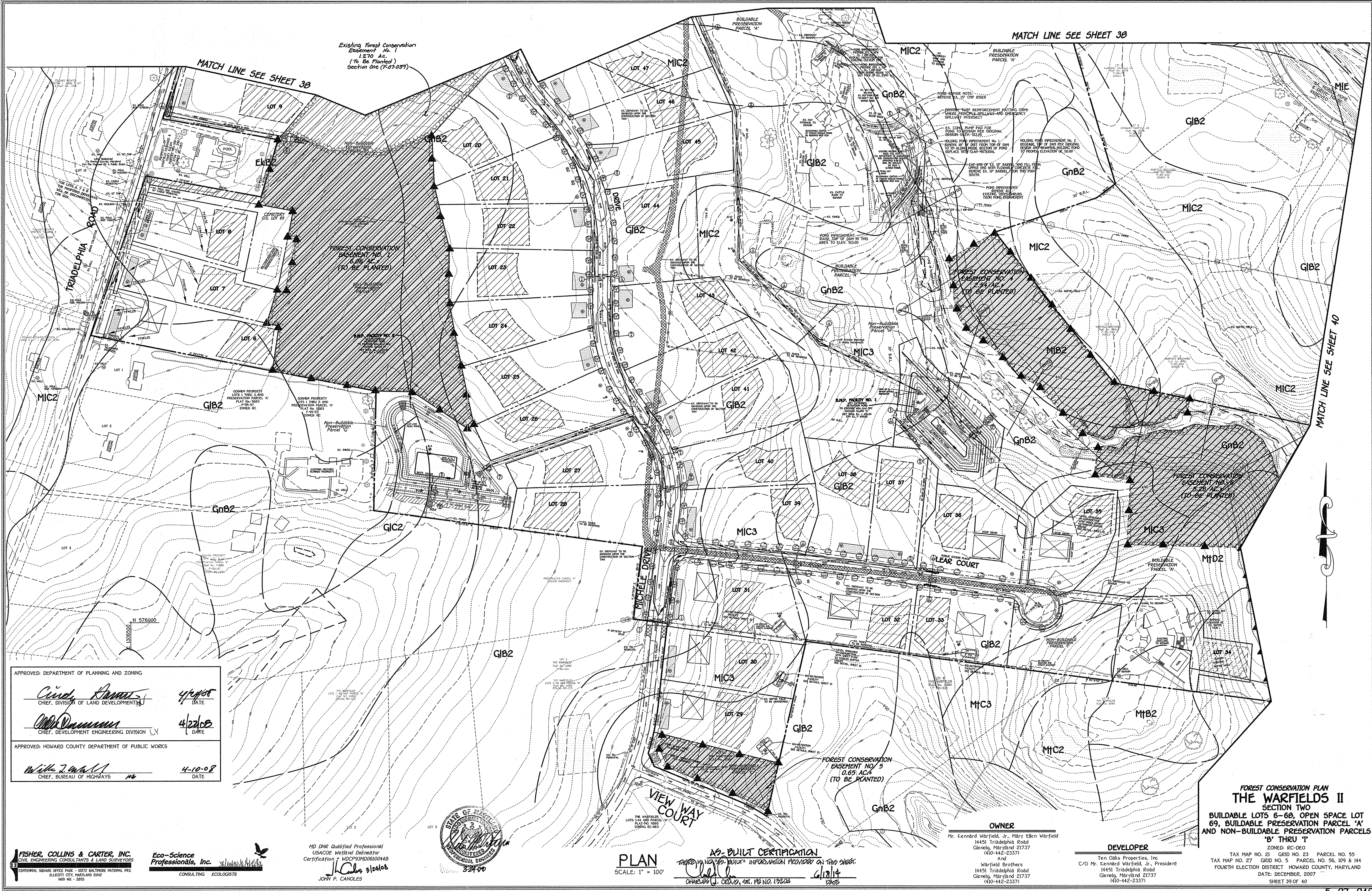
AS-BUILT CERTIFICATION
 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET.
Charles J. Grovo
 CHARLES J. GROVO, SR., PE NO. 12607

OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337
 And
 Warfield Brothers
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Triadelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337

DRAINAGE AREA MAP AND LANDSCAPE PLAN
THE WARFIELDS II
 SECTION TWO
 BUILDABLE LOTS 6-6B, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'
 ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 37 OF 40

F-07-040
 AS-BUILT



APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Annals 4/24/08
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris Dammann 4/22/08
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William J. ... 4-10-08
 CHIEF, BUREAU OF HIGHWAYS DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FEE
 ELLICOTT CITY, MARYLAND 21142
 (410) 461-2000

Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional
 USACOE Wetland Delineator
 Certification: WDCP93MD06100448
John P. Canoles 3/24/08
 JOHN P. CANOLES



PLAN
 SCALE: 1" = 100'

AS-BUILT CERTIFICATION
 THESE ARE THE AS-BUILT INFORMATION PROVIDED ON THIS SHEET.
Charles J. ... 4/14/08
 CHARLES J. ... SR. PE NO. 19204 DATE

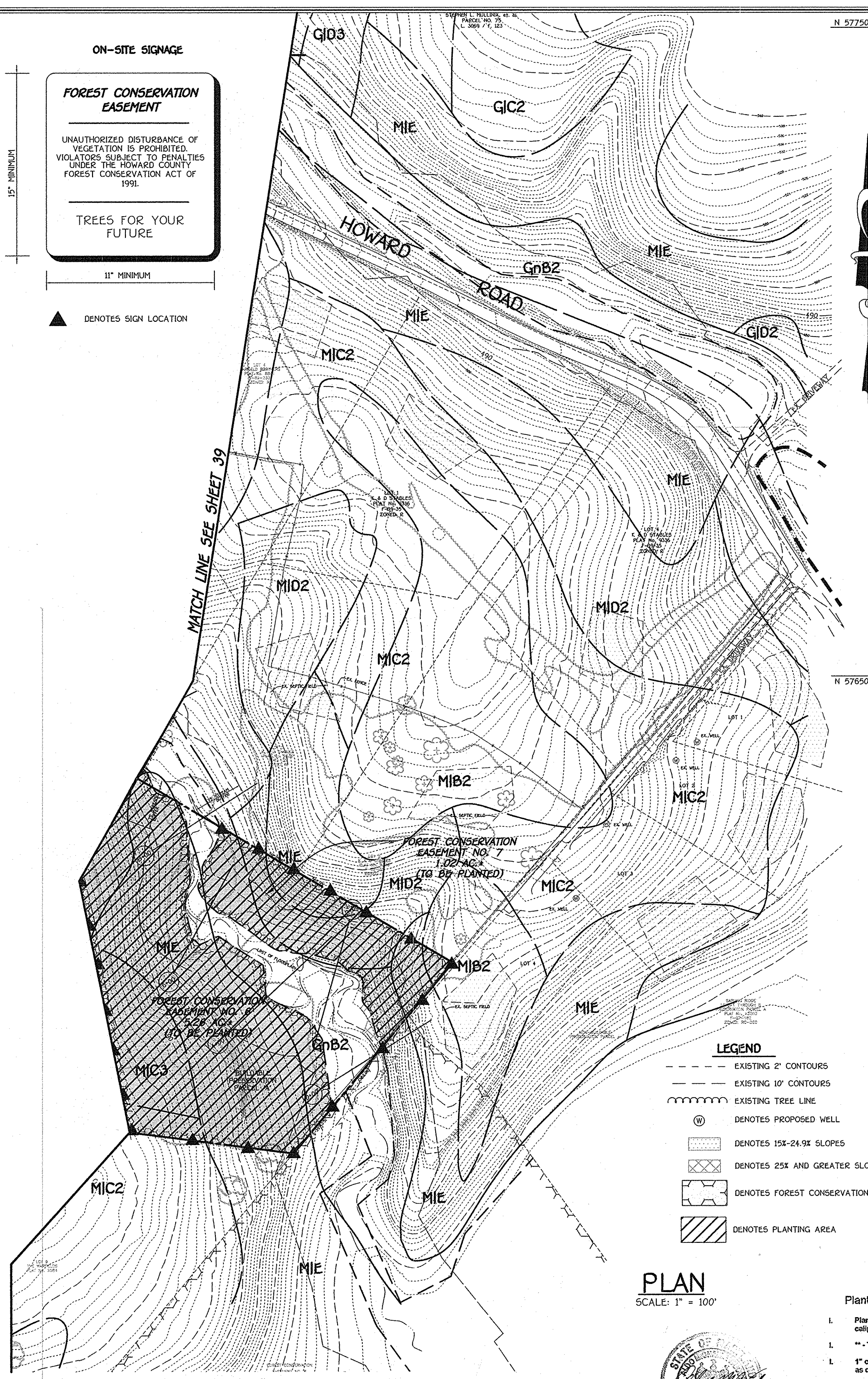
OWNER
 Mr. Kennard Warfield, Jr., Mary Ellen Warfield
 14451 Tridelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337

DEVELOPER
 Ten Oaks Properties, Inc.
 C/O Mr. Kennard Warfield, Jr., President
 14451 Tridelphia Road
 Glenelg, Maryland 21737
 (410) 442-2337

**FOREST CONSERVATION PLAN
 THE WARFIELDS II
 SECTION TWO**
 BUILDABLE LOTS 6-68, OPEN SPACE LOT
 69, BUILDABLE PRESERVATION PARCEL 'A'
 AND NON-BUILDABLE PRESERVATION PARCELS
 'B' THRU 'I'

ZONED: RC-DEO
 TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
 TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DATE: DECEMBER, 2007
 SHEET 39 OF 40

F-07-040
AS-BUILT



ON-SITE SIGNAGE

FOREST CONSERVATION EASEMENT

UNAUTHORIZED DISTURBANCE OF VEGETATION IS PROHIBITED. VIOLATORS SUBJECT TO PENALTIES UNDER THE HOWARD COUNTY FOREST CONSERVATION ACT OF 1991.

TREES FOR YOUR FUTURE

1" MINIMUM

15" MINIMUM

▲ DENOTES SIGN LOCATION

Planting/Soil Specifications

1. Installation of bare-root plant stock shall take place between March 15 - April 20. b&b/container stock March 15 - May 30 or September 15 - November 15. Fall planting of b&b stock is not recommended.
2. Disturbed areas shall be seeded and stabilized as per general construction plan for project. Planting areas not impacted by site grading shall have no additional topsoil installed.
3. Bare-root plants shall be installed so that the top of root mass is level with the top of existing grade. Roots shall be dipped in an anti-desiccant gel prior to planting. Backfill in the planting pits shall consist of 3 parts existing soil to 1 part pine fines or equivalent.
4. Fertilizer shall consist of Agriform 22-0-2, or equivalent, applied as per manufacturer's specifications, for woody plants. Herbaceous plants shall be fertilized with Osmocote 0-0-12.
5. Plant material shall be transported to the site in a tarp or covered truck. Plants shall be kept moist prior to planting.
6. All non-organic debris associated with the planting operation shall be removed from the site by the contractor.

Sequence of Construction

1. Sediment control shall be installed in accordance with general construction plan for site.
2. Plants shall be installed as per Plant Schedule and the Planting/Soil Specifications for the project.
3. Upon completion of the planting, signage shall be installed as shown.
4. Plantings shall be maintained and guaranteed in accordance with the Maintenance and Guarantee requirements for project.

Maintenance of Plantings

1. Maintenance of plantings shall last for a period of 2 years.
2. Plantings must receive 2 gallons of water, either through precipitation or watering, weekly during the 1st growing season, as needed. During second growing season, once a month during May-September, if needed.
3. Invasive exotics and noxious weeds will be removed, as required, from planting areas mechanically and/or with limited herbicide application (see groundcover note where appropriate). Old field successional species will be retained.
4. Plants will be examined a minimum two times during the growing season for serious plant pests and diseases. Serious problems will be treated with the appropriate agent.
5. Dead branches will be pruned from plantings.

Guarantee Requirements

1. A 75 percent survival rate of forestation plantings will be required at the end of 2 growing seasons. All plant material below the 75 percent threshold will be replaced at the beginning of the next growing season. Wild trees arising from natural regeneration may be counted up to 50 percent towards the total survival number if they are healthy, native species at least 12 inches tall.

Surety for Forestation

The forest conservation requirements per section 16.1200 of the Howard County Code and the Forest Conservation Manual for this subdivision will be fulfilled by the on-site afforestation of 17.05 (16.32 - 1.27) acres in Forest Conservation Easement. The forest conservation surety amount required is \$371,349.00 and will be provided with the developer's agreement. The total forest conservation obligation provided for both Section One and this Section Two is 16.32 ac. Under Section One (07-039), surety was posted for 1.27 ac. of on-site afforestation.

Planting Notes

When possible, plants shall be installed within 24 hours of delivery. If installation cannot be performed within this time frame, plant stock shall be watered and protected from desiccation.

Application of herbicide, Round-up or equivalent, may be used to reduce plant competition from old field successional growth at the time of installation. Mowing, re-application of herbicide, or a combination thereof, may be used to control unwanted, competing vegetation.

Planting shall be installed within one year or two growing seasons of subdivision approval. Plantings shall be installed in accordance with the time schedule included in Note 1 of the planting/seeding specifications.

FOREST CONSERVATION WORKSHEET

BASIC SITE DATA		ACRES
GROSS SITE ACREAGE (07-039 and 07-040)		140.2
AREA WITHIN 100 YEAR FLOODPLAIN		---
* PRESERVATION PARCELS W/NO CHANGE IN USE *		49.09
NET TRACT AREA		91.11
FOREST CONSERVATION THRESHOLD (PERCENTAGE)	25%	22.75
AFFORESTATION THRESHOLD (PERCENTAGE)	20%	18.22
EXISTING FOREST ON NTA		0.0
BREAK-EVEN POINT		---
FOREST TO BE CLEARED OR RETAINED OUTSIDE FCE		---
FOREST TO BE RETAINED IN FCE		---
AFFORESTATION CALCULATIONS		
NO FOREST CLEARING	18.22 REQUIRED	
	18.32 PROVIDED	
FOREST CLEARING	---	
REFORESTATION CALCULATIONS		
CLEARING ABOVE THRESHOLD	---	
CLEARING BELOW THRESHOLD	---	
* CONSIST OF:		
PRESERVATION PARCEL 'A' - 39.057 AC.		
PRESERVATION PARCEL 'C' - 0.91 AC.		
PRESERVATION PARCEL 'D' - 0.792 AC.		
PRESERVATION PARCEL 'E' - 0.774 AC.		
PRESERVATION PARCEL 'F' - 7.569 AC.		
TOTAL - 49.09 AC.		

PLANTING SCHEDULE

Qty	Species	Size	Spacing	Total FCA Units
15	Acer rubrum - Red maple	1" cal.	15' o.c.	
20	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
10	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
20	Quercus alba - White oak **	1" cal.	15' o.c.	
65	Total 1" caliper trees x 3.5 units/tree FCA unit credit			227.5
250	Acer rubrum - Red maple	2-3' whip	11' o.c.	
50	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
350	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
100	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
300	Platanus occidentalis - Sycamore Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
400	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
300	Quercus alba - White oak	2-3' whip	11' o.c.	
100	Ulmus rubra - Slippery Elm Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
150	prunifolium - Blackhaw **	2-3' whip	11' o.c.	
2008	Total whip plantings x 2 units/tree = FCA unit credit			4016
Total Unit Credit				4243.5

Qty	Species	Size	Spacing	Total FCA Units
10	Acer rubrum - Red maple	1" cal.	15' o.c.	
20	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
15	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
16	Quercus alba - White oak **	1" cal.	15' o.c.	
60	Total 1" caliper trees x 3.5 units/tree FCA unit credit			210
25	Acer rubrum - Red maple	2-3' whip	11' o.c.	
10	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
50	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
10	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
30	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
30	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
25	Quercus alba - White oak	2-3' whip	11' o.c.	
10	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
20	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
210	Total whip plantings x 2 units/tree = FCA unit credit			420
Total Unit Credit				630

Qty	Species	Size	Spacing	Total FCA Units
5	Acer rubrum - Red maple	1" cal.	15' o.c.	
10	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
5	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
10	Quercus alba - White oak **	1" cal.	15' o.c.	
30	Total 1" caliper trees x 3.5 units/tree FCA unit credit			105
25	Acer rubrum - Red maple	2-3' whip	11' o.c.	
5	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
30	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
15	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
20	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
15	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
20	Quercus alba - White oak	2-3' whip	11' o.c.	
10	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
20	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
160	Total whip plantings x 2 units/tree = FCA unit credit			320
Total Unit Credit				425

Qty	Species	Size	Spacing	Total FCA Units
15	Acer rubrum - Red maple	1" cal.	15' o.c.	
15	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
10	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
10	Quercus alba - White oak **	1" cal.	15' o.c.	
50	Total 1" caliper trees x 3.5 units/tree FCA unit credit			175
125	Acer rubrum - Red maple	2-3' whip	11' o.c.	
50	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
50	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
100	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
100	Platanus occidentalis - Sycamore Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
100	serotina - Black cherry **	2-3' whip	11' o.c.	
100	Quercus alba - White oak	2-3' whip	11' o.c.	
100	Ulmus rubra - Slippery Elm Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
77	prunifolium - Blackhaw **	2-3' whip	11' o.c.	
802	Total whip plantings x 2 units/tree = FCA unit credit			1604
Total Unit Credit				1779

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Simenton 4/21/08
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

W.D. Dammann 4/22/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Willie R. Whitall 4-10-07
CHIEF, BUREAU OF HIGHWAYS DATE

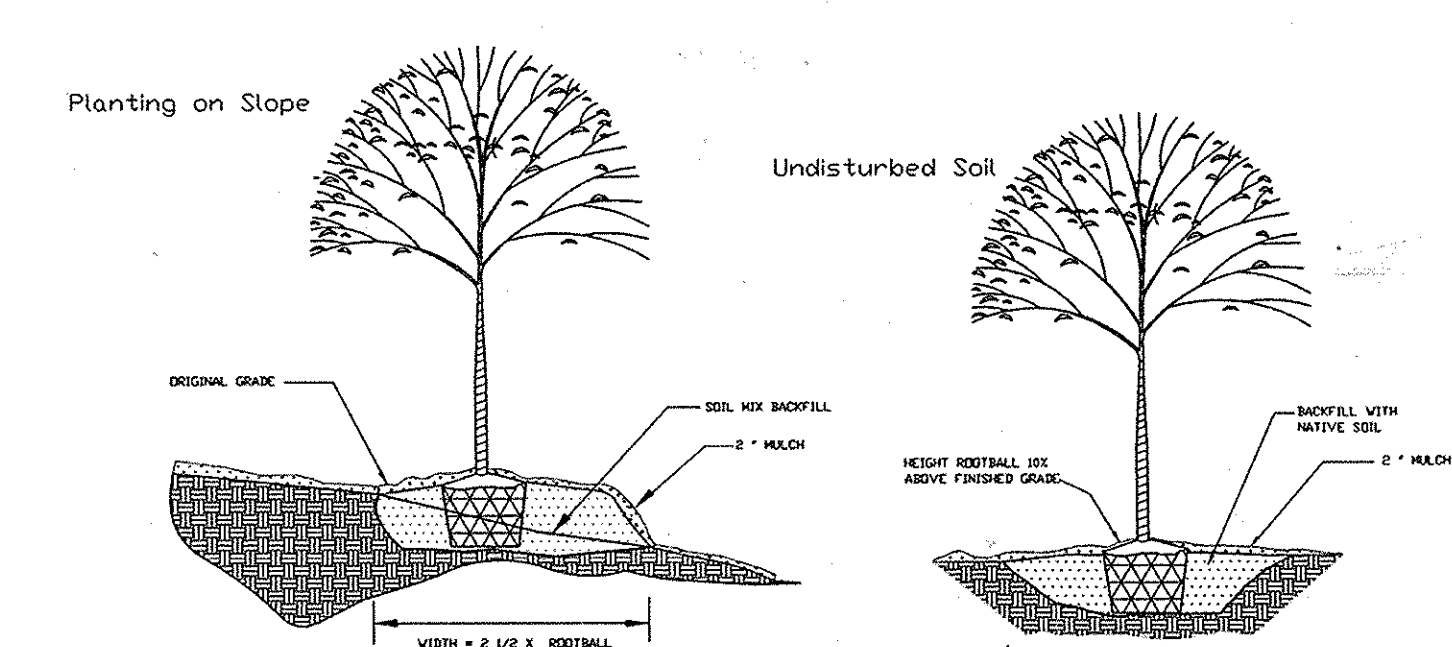
Qty	Species	Size	Spacing	Total FCA Units
5	Acer rubrum - Red maple	1" cal.	15' o.c.	
10	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
10	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
5	Quercus alba - White oak **	1" cal.	15' o.c.	
30	Total 1" caliper trees x 3.5 units/tree FCA unit credit			105
25	Acer rubrum - Red maple	2-3' whip	11' o.c.	
15	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
30	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
20	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
30	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
25	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
15	Quercus alba - White oak	2-3' whip	11' o.c.	
5	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
10	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
175	Total whip plantings x 2 units/tree = FCA unit credit			350
Total Unit Credit				455

Qty	Species	Size	Spacing	Total FCA Units
5	Acer rubrum - Red maple	1" cal.	15' o.c.	
15	Liriodendron tulipifera - Tulip poplar **	1" cal.	15' o.c.	
15	Platanus occidentalis - Sycamore	1" cal.	15' o.c.	
5	Quercus alba - White oak **	1" cal.	15' o.c.	
40	Total 1" caliper trees x 3.5 units/tree FCA unit credit			140
300	Acer rubrum - Red maple	2-3' whip	11' o.c.	
50	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
400	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
200	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
75	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
300	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
200	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
50	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
1750	Total whip plantings x 2 units/tree = FCA unit credit			3500
Total Unit Credit				3640

Qty	Species	Size	Spacing	Total FCA Units
50	Acer rubrum - Red maple	2-3' whip	11' o.c.	
10	Diospyros virginiana - Persimmon **	2-3' whip	11' o.c.	
75	Liriodendron tulipifera - Tulip poplar **	2-3' whip	11' o.c.	
35	Nyssa sylvatica - Black gum	2-3' whip	11' o.c.	
35	Platanus occidentalis - Sycamore	2-3' whip	11' o.c.	
75	Prunus serotina - Black cherry **	2-3' whip	11' o.c.	
35	Quercus alba - White oak	2-3' whip	11' o.c.	
10	Ulmus rubra - Slippery Elm	2-3' whip	11' o.c.	
25	Viburnum prunifolium - Blackhaw **	2-3' whip	11' o.c.	
350	Total whip plantings x 2 units/tree = FCA unit credit			700
Total Unit Credit				700

FCP NOTES

1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT, NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT AREAS, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
3. FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
4. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
5. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.
6. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
7. TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION, THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 15 FEET OF THE PROPOSED LIMITS OF DISTURBANCE.
8. PERMANENT SIGNAGE SHALL BE PLACED 50' - 100' APART ALONG BOUNDARIES OF ALL AREAS INCLUDED IN FOREST CONSERVATION EASEMENTS.



- Planting Notes:**
1. Planting density based on 700 planting units per acre. 2" caliper trees = 7 planting units, 1" caliper trees = 3.5 planting units, whips with shelter = 2 planting units.
 1. ** - Those species should not be planted within the wetland limits.
 1. 1" caliper trees should be staggered along the outer perimeter of the planting area to serve as demarcation of the boundary. The trees should be no closer than 15 feet spacing.
 1. Planting shall be made in a curvilinear fashion along contour. The planting should avoid a grid appearance but should be spaced to facilitate maintenance.
 1. Mulch/erosion/heavy brush removal/control may be required prior to installation of plantings.
- All whips are required to be installed with tree shelters per Howard County FCA requirements.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELKOTT CITY, MARYLAND 21042
410-461-2055

Eco-Science Professionals, Inc.
CONSULTING ECOLOGISTS

MD DNR Qualified Professional
USACOE Wetland Delimited
Certification # WDCP93MD06100418
J. Canoles 3/24/08
JOHN P. CANOLES



AS-BUILT CERTIFICATION

THIS IS NO AS-BUILT INFORMATION PROVIDED ON THIS SHEET.

Charles J. Cravo, Jr. PE No. 192204
DATE: 6/18/14

OWNER
Mr. Kennard Warfield, Jr., Mary Ellen Warfield
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

DEVELOPER
Ten Oaks Properties, Inc.
C/O Mr. Kennard Warfield, Jr., President
14451 Triadelphia Road
Glenelg, Maryland 21737
(410-442-2337)

FOREST CONSERVATION PLAN
THE WARFIELDS II
SECTION TWO
BUILDABLE LOTS 6-68, OPEN SPACE LOT 69, BUILDABLE PRESERVATION PARCEL 'A' AND NON-BUILDABLE PRESERVATION PARCELS 'B' THRU 'I'

ZONED: RC-DEO
TAX MAP NO. 21 GRID NO. 23 PARCEL NO. 55
TAX MAP NO. 27 GRID NO. 5 PARCEL NO. 56, 109 & 144
FOURTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
DATE: DECEMBER, 2007
SHEET 40 OF 40