

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
x362.2	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CROPPED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	1' SOILS
---	1' SOILS
---	CROCKABLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DITCH
---	NON-ROOFTOP DISCONNECTION (N-2)
---	DRYWELL (M-5)-TYPICAL
---	EM RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SCALE EASEMENT
---	EXISTING FOREST TO BE REMOVED
---	--- DENOTES EXISTING TREES TO BE REMOVED

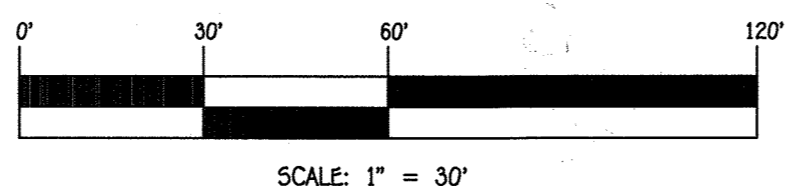
APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 12/8/2015
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development
 12-21-15
 DATE

Chief, Development Engineering Division
 12-11-15
 DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 (410) 461-2895

REVISIONS		
NO.	DESCRIPTION	DATE
1	REVISE TITLE BLOCK	9/23/17



OWNERS

KENNETH ECKER LISA MARCELLINO - ECKER 9120 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	MICHAEL R MARCELLINO 9131 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	BONNY A MARCELLINO THOMAS M MARCELLINO 9141 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422
---	---	--

DEVELOPER

LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422

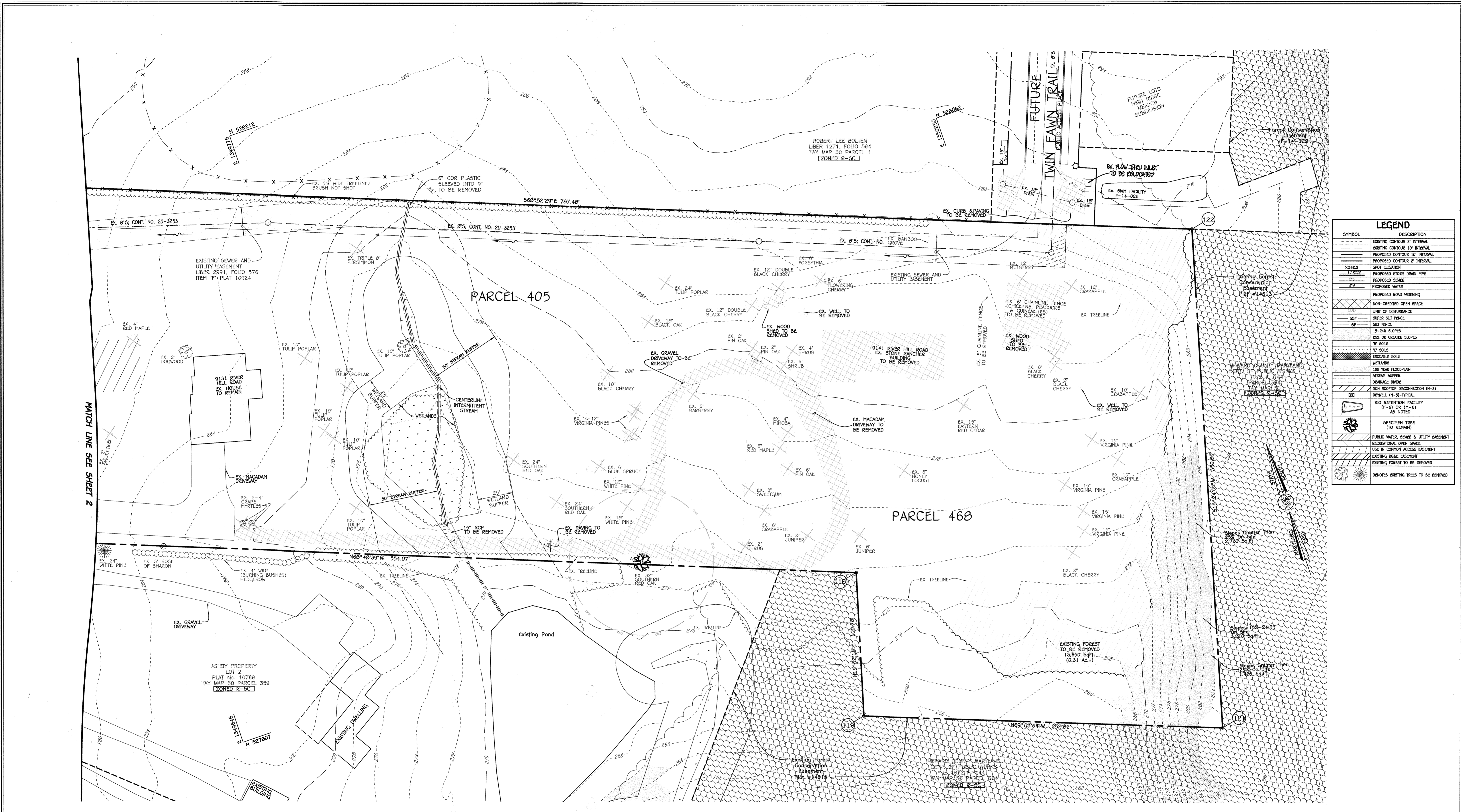
AS-BUILT CERTIFICATION
 Note: There is no "AS BUILT" information provided on this sheet.
 CHARLES J. ORDOZ, P.E. NO. 19224
 3/7/20
 Date



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
 FRANK JOHN MANLANGAN II
 11/5/15
 DATE

EXISTING CONDITIONS AND DEMOLITION PLAN
FOX WOOD MANOR
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4849-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 2 OF 24 F-15-053

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



LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
X 362.2	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CREATED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	1% SOILS
---	1% SOILS
---	DESIRABLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SCALE ASCENT
---	EXISTING FOREST TO BE REMOVED
---	DEMOTES EXISTING TREES TO BE REMOVED

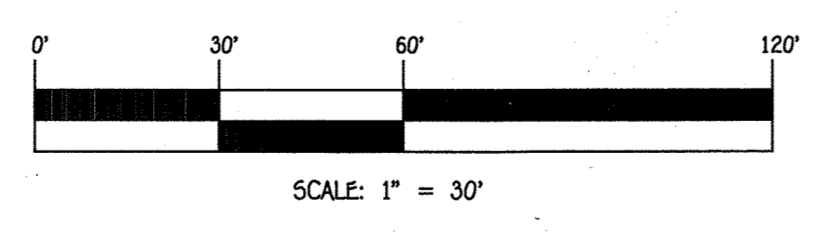
APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 DATE: 12/8/2015

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development
 DATE: 12-21-15

Chief, Development Engineering Division
 DATE: 12-21-15

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 481-2255

REVISIONS		
NO.	DESCRIPTION	DATE
1	SHOW EXISTING INLET TO BE RELOCATED	12/21/15
2	REVISE TITLE BLOCK	6/29/17



AS-BUILT CERTIFICATION
 Note: There is no "AS BUILT" information provided on this sheet.
 DATE: 3/7/20



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
 DATE: 11/5/15

OWNERS
 KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1701
 (443)-367-0422

MICHAEL R MARCELLINO
 9131 RIVER HILL RD
 LAUREL, MARYLAND 20723-1701
 (443)-367-0422

BONNY A MARCELLINO
 THOMAS M MARCELLINO
 9141 RIVER HILL RD
 LAUREL, MARYLAND 20723-1701
 (443)-367-0422

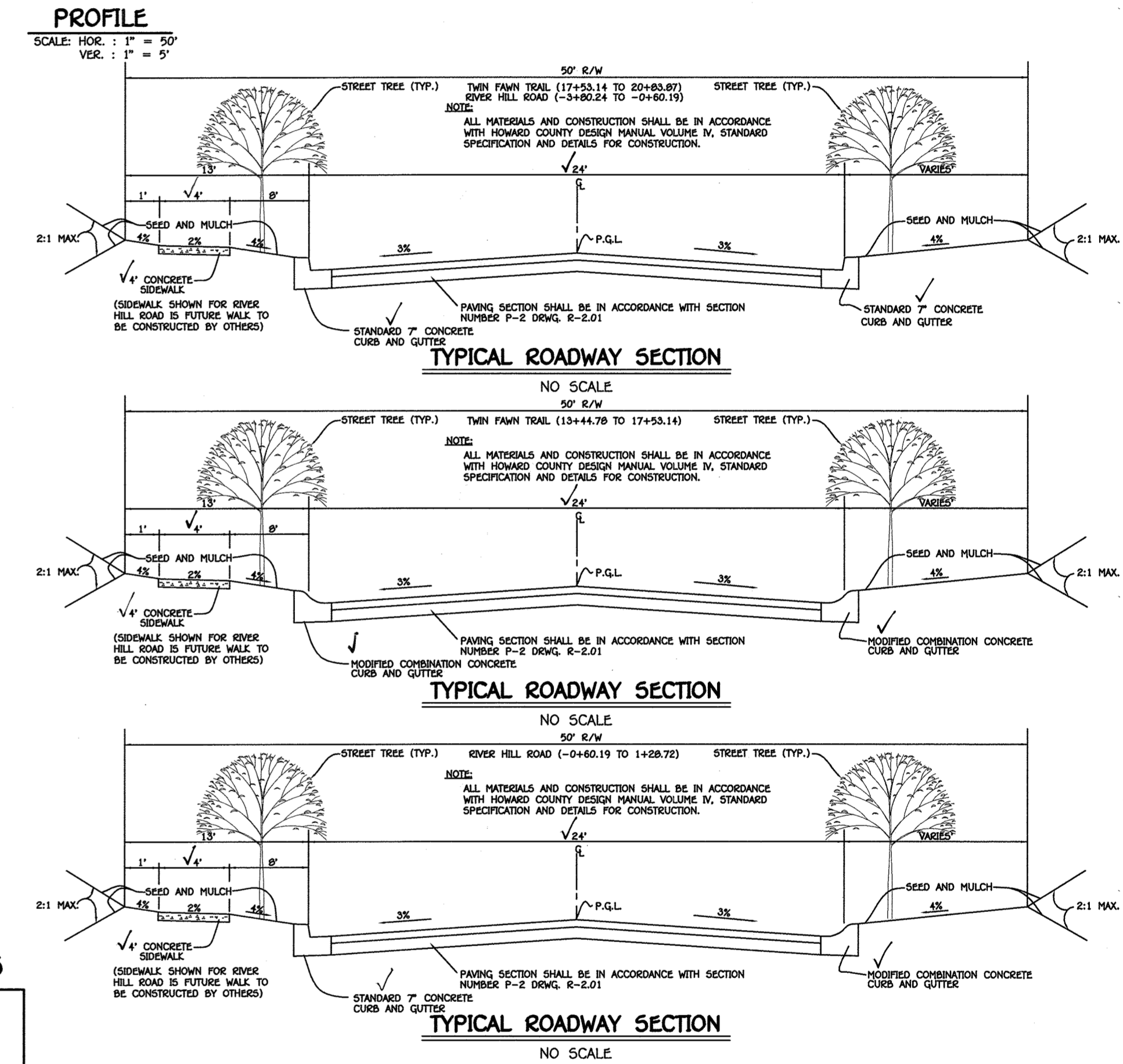
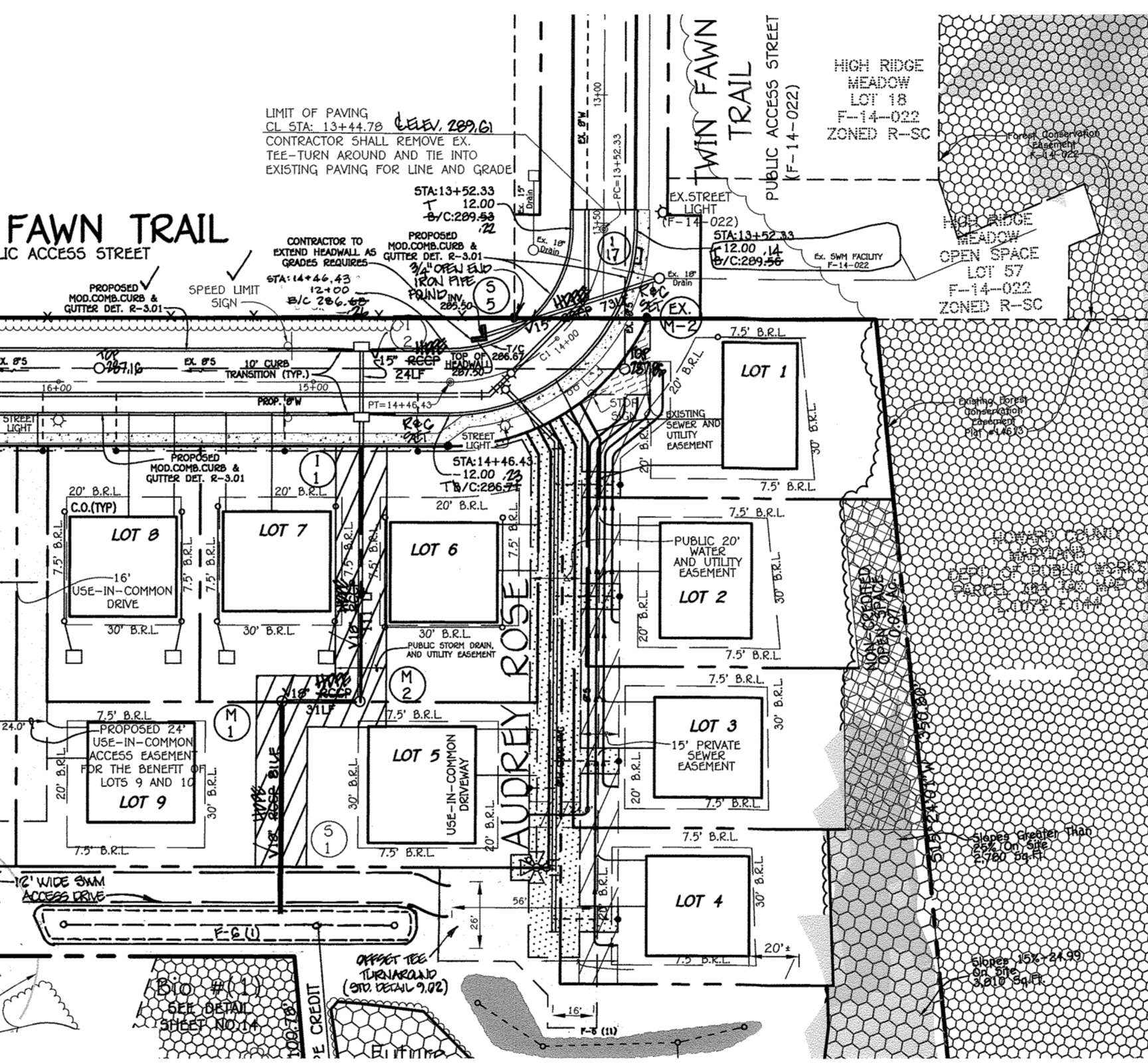
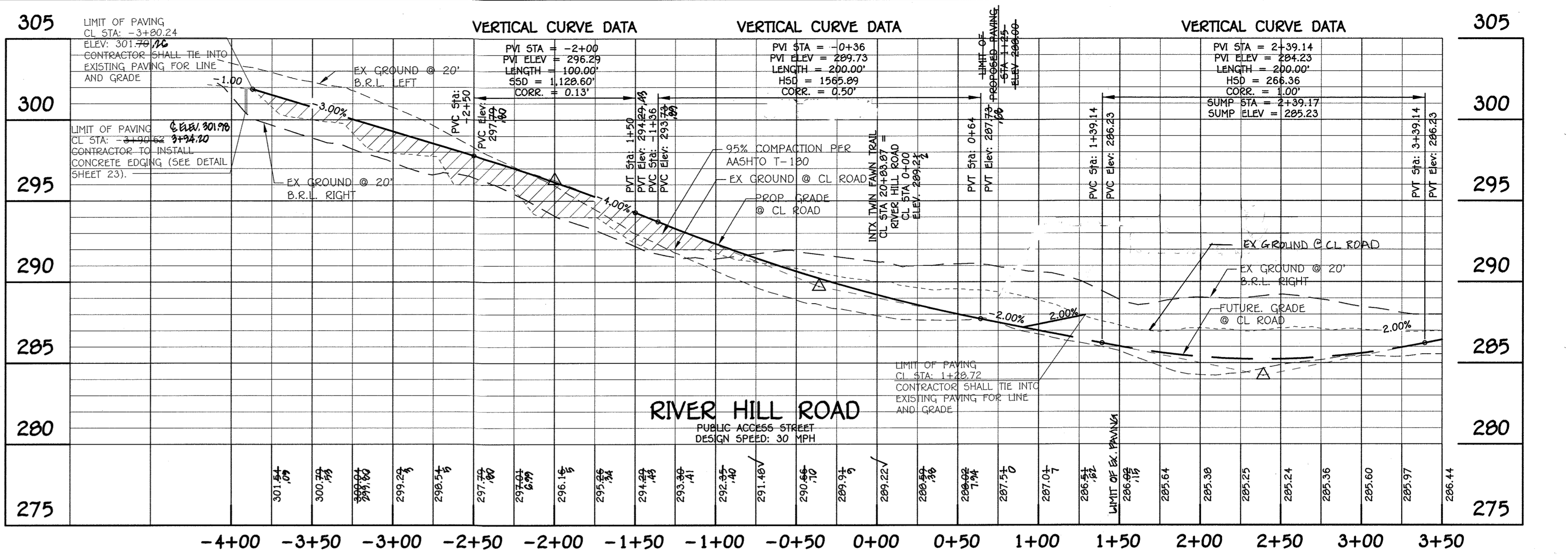
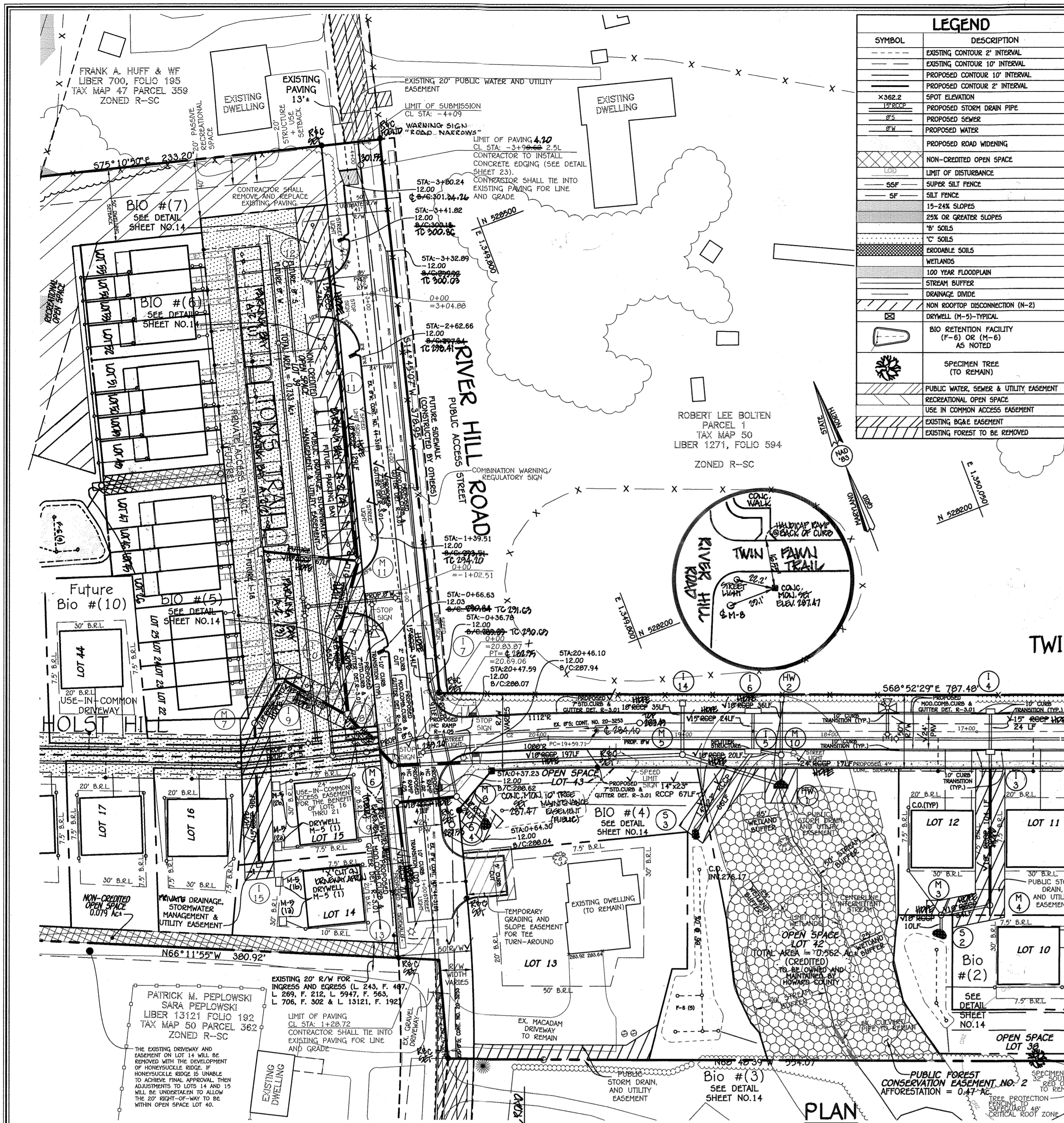
DEVELOPER
 LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422

EXISTING CONDITIONS AND DEMOLITION PLAN
FOX WOOD MANOR
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 22, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 90, 92, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: 50P-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4049-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 3 OF 24 F-15-053

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



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.

3/7/20
Date
CHARLES J. O'NEAL, P.E. NO. 19204

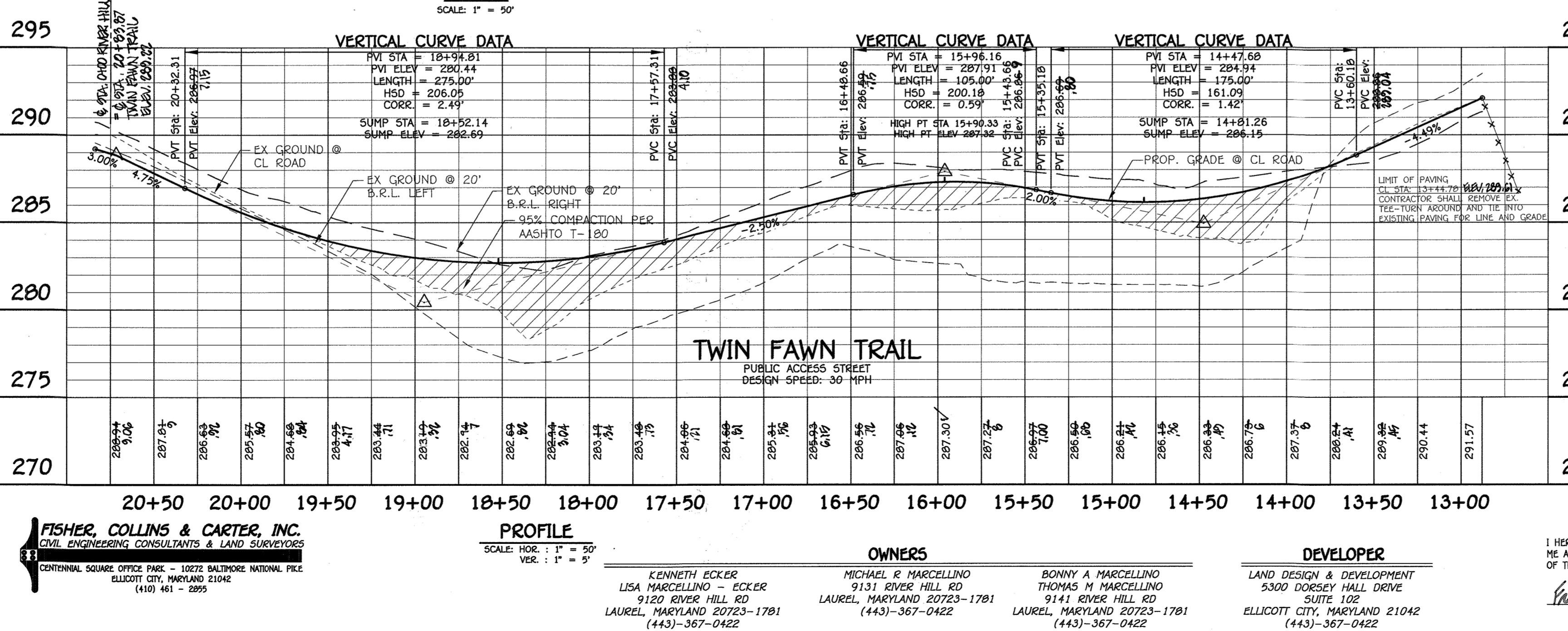
REVISIONS

NO.	DESCRIPTION	DATE
1	ADD INLET 1-17, RAMP CURB DETAILS & SUMP SMM FACILITY NO. 1	10/21/16
2	RENAME TITLE BLOCK, LOT LINES & LOT NUMBERS	02/03/17

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways
12/8/2015
DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development
12/21/15
DATE

Chief, Development Engineering Division
12-11-15
DATE



ROADWAY INFORMATION CHART

ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	STATION LIMITS	PAVING SECTION
TWIN FAWN TRAIL	PUBLIC ACCESS STREET	30 M.P.H.	R-5C	13+44.70 TO 17+53.14	P-2
TWIN FAWN TRAIL	PUBLIC ACCESS STREET	30 M.P.H.	R-5C	17+53.14 TO 20+83.87	P-2
RIVER HILL ROAD	PUBLIC ACCESS STREET	30 M.P.H.	R-5C	+3+80.24 TO -0+60.19	P-2
RIVER HILL ROAD	PUBLIC ACCESS STREET	30 M.P.H.	R-5C	-0+60.19 TO +1+28.72	P-2

NOTES:

- FOR BIORETENTION FACILITY DETAILS- SEE SHEET NO.14
- FOR ROAD GEOMETRY AND SIGNAGE PLAN AND DETAILS - SEE SHEET NO.23

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/11/17.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/11/17.

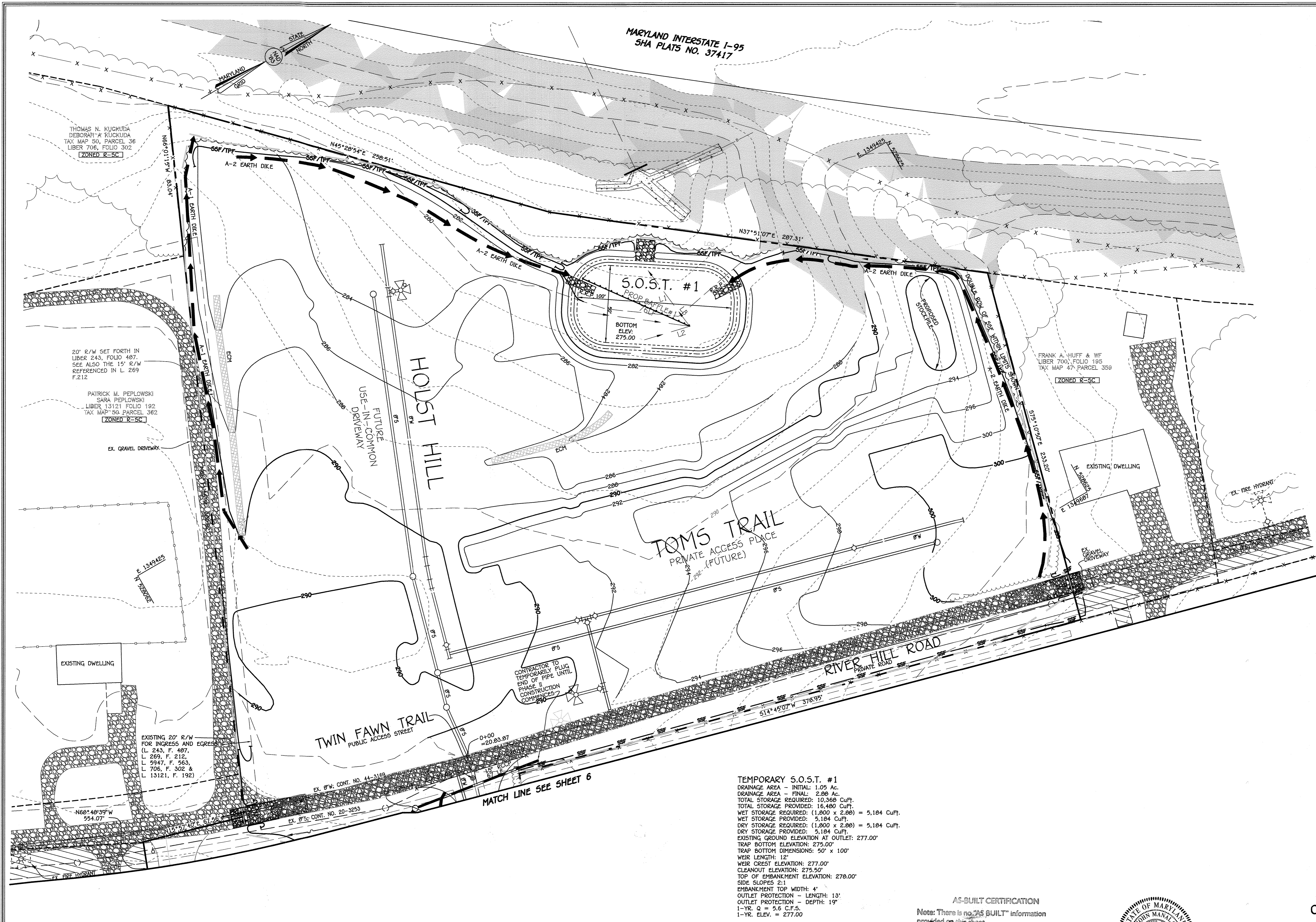
ROAD PLAN, PROFILES AND DETAILS
FOX WOOD MANOR
LOTS 1 THRU 6, 8, 10 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 30, 39, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, 5P-14-003, CONTRACT #24-4849-0

ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 4 OF 24
F-15-053

AS-BUILT



ENGINEER'S CERTIFICATE
 I Herby 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: *Frank John Manalansan II* Date: 11/5/15

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: *John R. Rautava* Date: 11/5/15

Approved: This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.
 District Howard Soil Conservation Dist. Date: 12/1/15

NO.	REVISIONS	DATE
1	REVISION TITLE BLOCK	12/01/15

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
+	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CREATED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	1' SOILS
---	12" SOILS
---	ERODIBLE SOILS
---	MELIANS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	DRINKING WATER TYPICAL
---	NO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	RECREATIONAL OPEN SPACE
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SOLE EASEMENT
---	EXISTING FOREST TO BE REMOVED

SEDIMENT CONTROL LEGEND

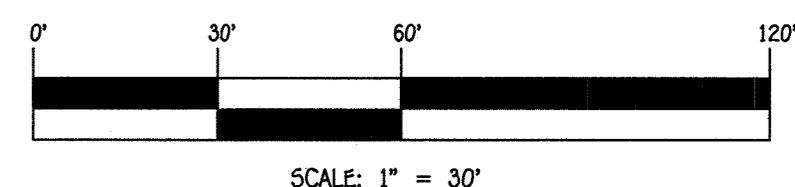
---	SUPER-SILT FENCE
---	SILT FENCE
---	SILT FENCE AND TREE PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE
---	EARTH DIKE

LOD LIMIT OF DISTURBANCE

REVERSE Q FILTERING DEVICE

NOTE: SEE SHEETS 9+10 FOR SEDIMENT CONTROL DETAILS.

NOTE: EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS, ETC... SHALL BE REPAIRED IMMEDIATELY.



TEMPORARY S.O.S.T. #1
 DRAINAGE AREA - INITIAL: 1.05 AC.
 DRAINAGE AREA - FINAL: 2.00 AC.
 TOTAL STORAGE REQUIRED: 10,368 CUFT.
 TOTAL STORAGE PROVIDED: 16,480 CUFT.
 WET STORAGE REQUIRED: (1,800 x 2.00) = 3,600 CUFT.
 WET STORAGE PROVIDED: 5,184 CUFT.
 DRY STORAGE REQUIRED: (1,800 x 2.00) = 3,600 CUFT.
 DRY STORAGE PROVIDED: 5,184 CUFT.
 EXISTING GROUND ELEVATION AT OUTLET: 277.00'
 TRAP BOTTOM ELEVATION: 275.00'
 TRAP BOTTOM DIMENSIONS: 50' x 100'
 WEIR LENGTH: 12'
 WEIR CREST ELEVATION: 277.00'
 CLEANOUT ELEVATION: 275.50'
 TOP OF EMBANKMENT ELEVATION: 278.00'
 SIDE SLOPES 2:1
 EMBANKMENT TOP WIDTH: 4'
 OUTLET PROTECTION - LENGTH: 13'
 OUTLET PROTECTION - DEPTH: 19"
 1-YR. Q = 5.6 C.F.S.
 1-YR. ELEV. = 277.00'

BAFFLE DESIGN #1
 TRAP BOTTOM DIMENSIONS: 50' x 100'
 MINIMUM FLOW LENGTH INFORMATION

REQUIRED FLOW LENGTH TO OUTFLOW: 34' x 2 = 68'
 BAFFLE LENGTH = 76 LF
 FLOW LENGTH PROVIDED = L1 + L3 = 66'+45' = 111'
 FLOW LENGTH PROVIDED = L2 + L3 = 30'+45' = 75'

AS-BUILT CERTIFICATION
 Note: There is no "AS BUILT" information provided on this sheet.
 Signature: *Charles J. Crabb, P.E.* Date: 3/7/16
 CHARLES J. CRABB, P.E. NO. 19204

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
 Signature: *Frank John Manalansan II* Date: 11/5/15
 FRANK JOHN MANALANSAN II

PHASE I GRADING AND SEDIMENT AND EROSION CONTROL PLAN
FOX WOOD MANOR
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 22, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 30, 32, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4049-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 460
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 5 OF 24 F-15-053

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Signature: *Melvin...* DATE: 12/8/2015
 Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Signature: *...* DATE: 12-21-15
 Chief, Division of Land Development

Signature: *...* DATE: 12-11-15
 Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21046
 (410) 461-2895

NO.	REVISIONS	DATE

OWNERS

KENNETH ECKER LISA MARCELLINO - ECKER 9120 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	MICHAEL R MARCELLINO 9131 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	BONNY A MARCELLINO THOMAS M MARCELLINO 9141 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422
---	---	--

DEVELOPER

LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELICOTT CITY, MARYLAND 21042
 (443)-367-0422

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



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: *Frank John Manklanski II* Date: 11/5/15

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: *John R. Robertson* Date: 11/5/15

Approved: This development is approved for erosion and sediment control by the Howard Soil Conservation District.
 District Howard Soil Conservation Dist. Date: 12/15/15

NO.	DESCRIPTION	DATE
1	ADD 1-17 INLET AND TREE MAINTENANCE EASEMENT	12/21/16
2	RENAME TITLE BLOCK	6/29/17

LEGEND

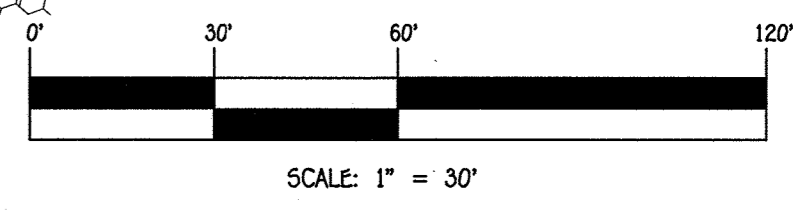
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
•	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CREATED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	1" SOILS
---	2" SOILS
---	ESODABLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STORM BUFFER
---	DRAINAGE DITCH
---	NON ROOFTOP DISCONNECTION (N-2)
---	DRYWELL (N-2)-TYPICAL
---	BIO RETENTION FACILITY (F-1) OR (F-2) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING ROAD EASEMENT
---	EXISTING FOREST TO BE REMOVED

SEDIMENT CONTROL LEGEND

---	SUPER-SILT FENCE
---	SILT FENCE
---	SILT FENCE AND PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE
---	EARTH DIKE
---	LIMIT OF DISTURBANCE
---	REVERSE G FILTERING DEVICE

NOTE: SEE SHEETS 9+10 FOR SEDIMENT CONTROL DETAILS.

NOTE: EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS, ETC., SHALL BE REPAIRED IMMEDIATELY.



APPROVED: DEPARTMENT OF PUBLIC WORKS
Michael J. McManis 12/8/2015
 Chief, Bureau of Highways DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
John R. Robertson 12-21-15
 Chief, Division of Land Development DATE

John R. Robertson 12-11-15
 Chief, Development Engineering Division DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21046
 (410) 461-2995

TEMPORARY S.O.S.T. #2
 DRAINAGE AREA - INITIAL: 3.71 AC.
 DRAINAGE AREA - FINAL: 2.46 AC.
 TOTAL STORAGE REQUIRED: 13,396 CUFT.
 TOTAL STORAGE PROVIDED: 19,879 CUFT.
 WET STORAGE REQUIRED: (1,800 x 3.71) = 6,678 CUFT.
 WET STORAGE PROVIDED: 3,248 CUFT.
 DRY STORAGE REQUIRED: (1,800 x 3.71) = 6,678 CUFT.
 DRY STORAGE PROVIDED: 6,678 CUFT.
 EXISTING GROUND ELEVATION AT OUTLET: 275.00'
 TRAP BOTTOM ELEVATION: 272.50'
 TRAP BOTTOM DIMENSIONS: 40' x 82'
 WEIR LENGTH: 20'
 WEIR CREST ELEVATION: 275.00'
 CLEANOUT ELEVATION: 272.15'
 TOP OF EMBANKMENT ELEVATION: 276.30'
 SIDE SLOPES 2:1
 EMBANKMENT TOP WIDTH: 4'
 OUTLET PROTECTION - LENGTH: 15'
 OUTLET PROTECTION - DEPTH: 19"
 1 YR. Q = 0.23 CFS
 1 YR. ELEV. = 275.30'

BAFFLE DESIGN #2
 TRAP BOTTOM DIMENSIONS: 34' x 76'
 MINIMUM FLOW LENGTH INFORMATION
 REQUIRED FLOW LENGTH TO OUTFLOW: 34' X 2 = 68'
 BAFFLE LENGTH = 61 LF
 FLOW LENGTH PROVIDED = L1 + L3 = 52' + 32' = 84'

OWNERS
 KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1791
 (443)-367-0422

MICHAEL R MARCELLINO
 9131 RIVER HILL RD
 LAUREL, MARYLAND 20723-1791
 (443)-367-0422

BONNY A MARCELLINO
 THOMAS H MARCELLINO
 9141 RIVER HILL RD
 LAUREL, MARYLAND 20723-1791
 (443)-367-0422

DEVELOPER
 LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422



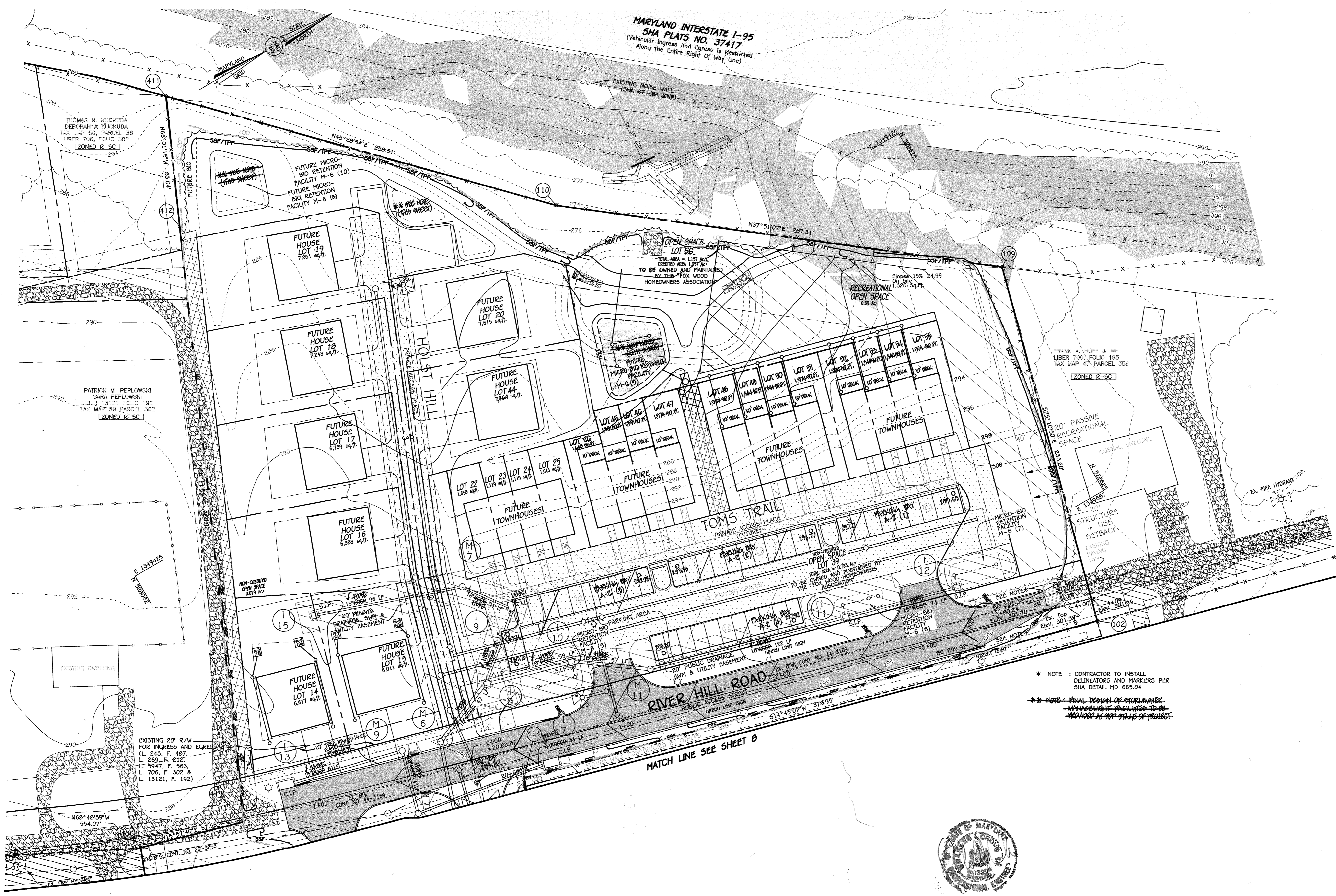
AS-BUILT CERTIFICATION
 I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and specifications.
 CHARLES J. ORANDO, No. 142,192,222 Date: 3/7/20



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
 FRANK JOHN MANKLANSKI II 11/5/15
 DATE

**PHASE I
 GRADING AND SEDIMENT CONTROL PLAN
 FOX WOOD MANOR**
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 30, 32, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4049-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 6 OF 24 F-15-053

AS-BUILT



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: *John R. Roberts* Date: 11/5/15

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 deemed necessary.
 Signature of Developer: *John R. Roberts* Date: 11/5/15

Approved: This development is approved for erosion and sediment control by the Howard Soil Conservation District.
 District: Howard Soil Conservation Dist. Date: 12/1/15

NO.	REVISIONS	DESCRIPTION	DATE
1	REVISE GMM FACILITY & ADD TREE MAINTENANCE EASEMENT		12/2/15
2	REVISE TITLE BLOCK, LOT LINES, LOT NUMBERS, MICRO-BIO RETENTION FACILITY		6/23/17

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
X.362.2	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CROTTED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	'B' SOILS
---	'C' SOILS
---	ERODIBLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	DEWELL (N-5)-TYPICAL
---	BIO RETENTION FACILITY (P-6) OR (M-6) AS NOTED
---	SPECIEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SCALE EASEMENT
---	EXISTING FOREST TO BE REMOVED

SEDIMENT CONTROL LEGEND

---	SUPER-SILT FENCE
---	SILT FENCE
---	SILT FENCE AND TREE PROTECTION FENCE
---	STABILIZED CONSTRUCTION ENTRANCE
---	EARTH DIKE
---	LIMIT OF DISTURBANCE
---	REVERSE Q FILTERING DEVICE

NOTE: SEE SHEETS 9+10 FOR SEDIMENT CONTROL DETAILS.

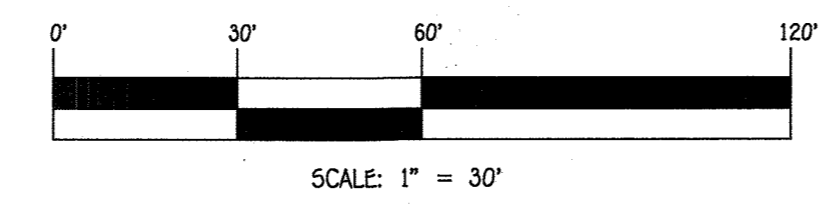
NOTE: EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS, ETC... SHALL BE REPAIRED IMMEDIATELY.

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 DATE: 12/2/15

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development
 DATE: 12-21-15

Chief, Development Engineering Division
 DATE: 12-11-15

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



OWNERS
 KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
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 (443)-367-0422

MICHAEL R MARCELLINO
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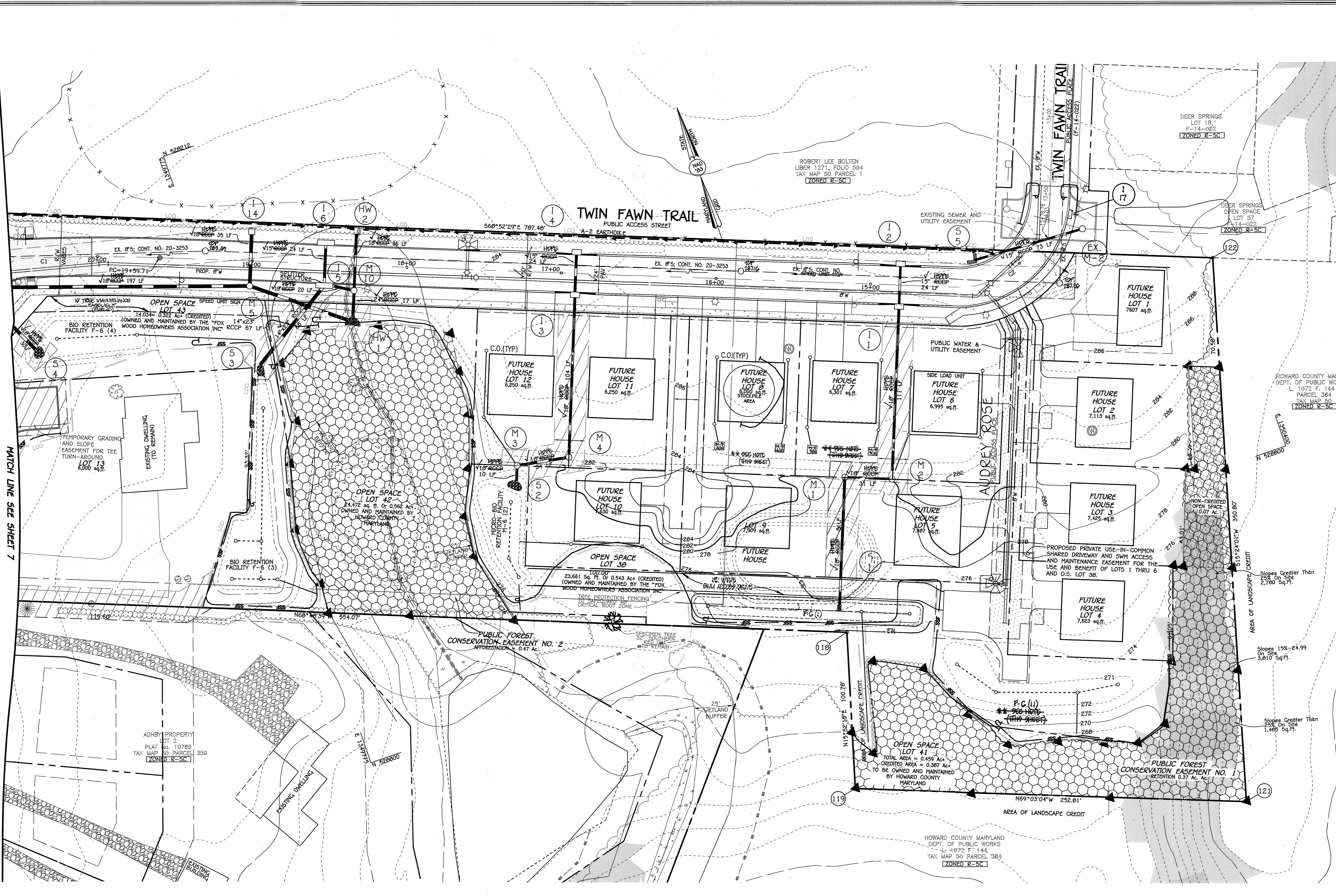
DEVELOPER
 LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422

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 U. CROD, P.E. NO. 19924
 Date: 3/1/20

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
 FRANK JOHN MANUANGSI II
 DATE: 11/5/15

PHASE II GRADING AND SEDIMENT CONTROL PLAN FOX WOOD MANOR
 LOTS 1 THRU G, B THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4849-0
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 7 OF 24, F-15-053

A9-BUILT



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: *Frank John Manalangan II* 11/5/15 Date

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 may be deemed necessary."
 Signature of Developer: *Robert Lee Bolten* 11/5/15 Date

Approved: This Development is Approved For Erosion and Sediment Control By The Howard Soil Conservation District.
 District: Howard Soil Conservation District. Date: 11/5/15

NO.	DESCRIPTION	DATE
1	REV. SWM FACILITY NO. 1 AND SWM MAINTENANCE EASEMENT & EJECTMENT	10/21/15
2	REVISE TITLE BLOCK	02/07/17

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
X3&E.2	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	PROPOSED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	1" SOILS
---	2" SOILS
---	3" SOILS
---	4" SOILS
---	5" SOILS
---	6" SOILS
---	7" SOILS
---	8" SOILS
---	9" SOILS
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---	99" SOILS
---	100" SOILS

SEDIMENT CONTROL LEGEND

---	SUPER-SILT FENCE
---	SILT FENCE
---	SILT FENCE AND TREE PROTECTION FENCE
S.C.E.	STABILIZED CONSTRUCTION ENTRANCE
TYPE A-2	EARTH DIKE
---	LIMIT OF DISTURBANCE
---	REVERSE Q FILTERING DEVICE

NOTE: SEE SHEETS 9+10 FOR SEDIMENT CONTROL DETAILS.

NOTE: EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS, ETC... SHALL BE REPAIRED IMMEDIATELY.

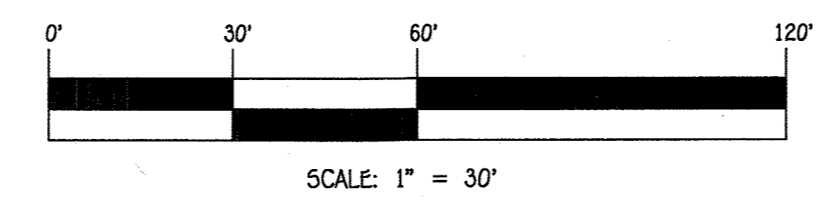
*NOTE: FINAL DESIGN OF SEDIMENT MANAGEMENT FACILITIES TO BE PROVIDED AT THE STATE OF PROJECT

APPROVED: DEPARTMENT OF PUBLIC WORKS
Michael J. McNeill 12/8/2015
 Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Neil J. DeLone 12-24-15
 Chief, Division of Land Development

Chris Edm 12-11-15
 Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21046
 (410) 461-2255



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: *Frank John Manalangan II* 12/20/15
 Date: 12/20/15



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
 Signature: *Frank John Manalangan II* 11/5/15
 Date: 11/5/15

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**PHASE II
 GRADING AND SEDIMENT CONTROL PLAN
 FOX WOOD MANOR**
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 30, 31, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4849-D
 ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 8 OF 24 F-15-053

AS-BUILT

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

PERMANENT SEEDING NOTES (B-4-5)

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING & MULCHING

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

- A. SOIL PREPARATION
1. TEMPORARY STABILIZATION
a. SEEDING PREPARATION CONSISTS OF LOOSING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT...

- A. SEED MIXTURES
1. GENERAL USE
a. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2...

DEFINITION
THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

PURPOSE
TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES
TO THE SURFACE OF ALL PERMETER CONTROL, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

- A. SEEDING
1. SPECIFICATIONS
a. ALL SEED MUST MEET THE REQUIREMENT OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY...

- 2. APPLICATION
a. SEED SEEDING THIS INCLUDES USE OF CONVENTIONAL, DROP OR BROADCAST SPREADERS.
b. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES SPECIFIED ON PERMANENT SEEDING TABLE B.1.

DEFINITION
A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

PURPOSE
To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

CONDITIONS WHERE PRACTICE APPLIES
Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

- A. SEEDING
1. SPECIFICATIONS
a. ALL SEED MUST MEET THE REQUIREMENT OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY...

- 2. APPLICATION
a. SEED SEEDING THIS INCLUDES USE OF CONVENTIONAL, DROP OR BROADCAST SPREADERS.
b. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES SPECIFIED ON PERMANENT SEEDING TABLE B.1.

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.

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 Prior To Beginning Construction."

Approved: This development is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.

B. TOPSOILING

- 1. TOPSOIL TO BE PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS 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 UNDESIRABLE SOIL PROPERTIES...

C. SOIL AMENDMENTS (FERTILIZER & LIME SPECIFICATIONS)

- 1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATES AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSES MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY.

B. MULCHING

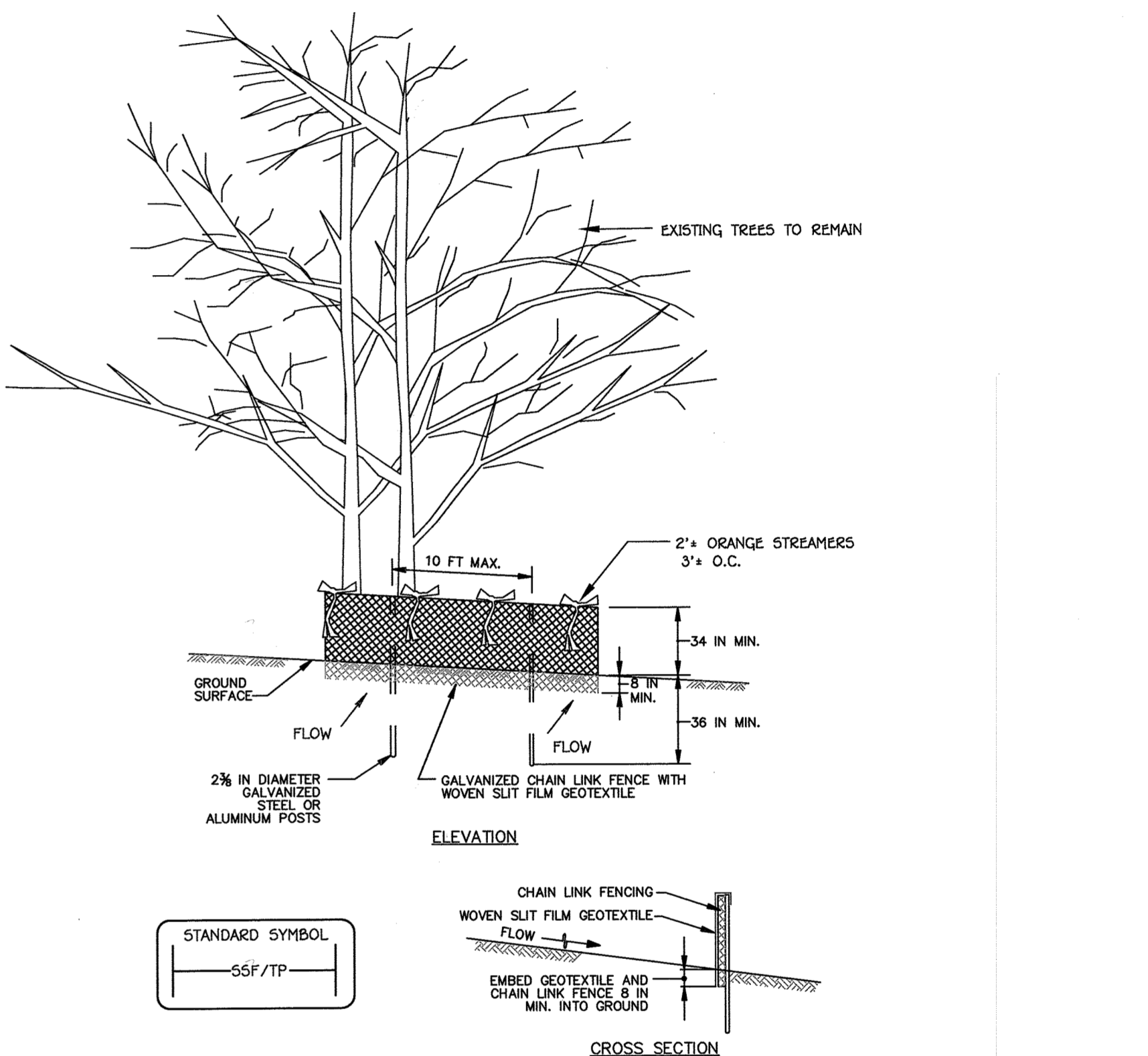
- 1. MULCH MATERIALS (IN ORDER OF PREFERENCE)
a. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF MOODUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOLLY, COKED, DECAIDED, OR EXCESSIVELY DUSTY.

SEQUENCE OF CONSTRUCTION - PHASE I

- 1. OBTAIN A GRADING PERMIT. (2 WEEKS)
2. NOTIFY MISS UTILITIES AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-597-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.

SEQUENCE OF CONSTRUCTION - PHASE II

- 1. BEGIN INSTALLATION OF REMAINING STORM DRAIN SYSTEM FROM 1-4 TO 1-3 TO M-4 TO M-3 TO 5-2. INSTALL 1-5 TO 5-3 AND REMOVE THE TEMPORARY 18" FLEXIBLE PIPE. INSTALL PIPE FROM 1-5 TO M-10 WITH FLOW SPLITTER DEVICE IN 1-5. INSTALL STORM DRAIN FROM 1-13 TO 1-12 TO 1-11 TO 1-10 TO 1-9 TO 1-8. CONNECT STORM DRAIN FROM 1-9 TO M-7 TO 1-8. CONSTRUCT 1-8 TO M-6 TO M-5. CONSTRUCT 1-14 TO M-5 TO 1-13. LOCATED AT THE EXISTING HW-1. CONSTRUCT 1-14 TO M-9 TO M-8. CONSTRUCT 1-7 TO M-8 TO 5-4.



DUST CONTROL

- DEFINITION
CONTROLLING DUST BLENDING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.
PURPOSE
TO PREVENT BLENDING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS AND IMPROVE TRAFFIC SAFETY.

B. SOD: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

- 1. GENERAL SPECIFICATIONS
a. CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. 500 LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
b. SOD MUST BE MINIMUM CUT AT A UNIFORM SOIL THICKNESS TO 3/4 INCH PLUS OR MINUS 1/4 INCH AT THE TIME OF CUTTING.

PERMANENT SEEDING SUMMARY

Table with columns: HARDINESS ZONE (FROM FIGURE B.3), SEEDING DEPTH (IN.), FERTILIZER RATE (10-20-20), LIME RATE (TONS/AC). Rows include Tall Fescue and Ryegrass mixtures.

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
a) 3 CALENDAR DAYS AS TO THE SURFACE OF ALL PERMETER DITCHES, SWALES, DITCHES, PERMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1).

TABLE B.1 TEMPORARY SEEDING FOR SITE STABILIZATION

Table with columns: PLANT SPECIES, SEEDING RATE (LB./AC., LB./1000 FT.2), SEEDING DEPTH (INCHES), RECOMMENDED SEEDING DATES BY PLANT HARDINESS ZONE (5b AND 6a, 6b, 7a AND 7b).

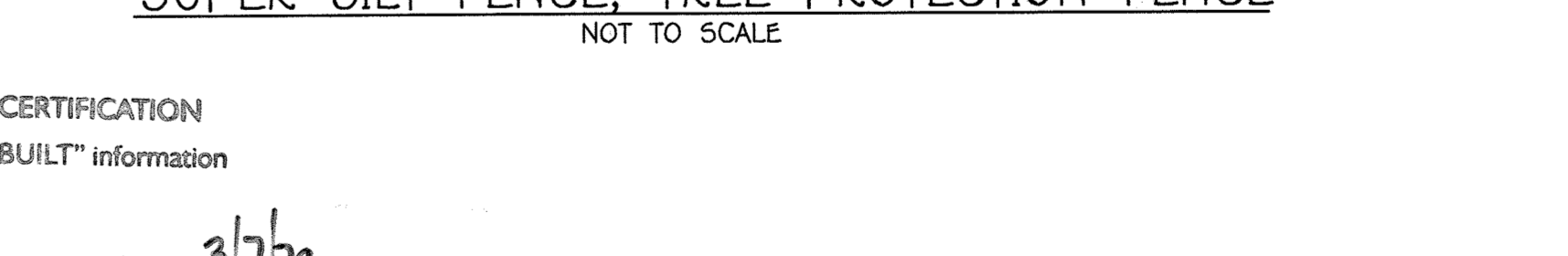
TEMPORARY SEEDING NOTES (B-4-4)

- TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.
PURPOSE
TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.
CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHOSE GRASSING COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS, FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CSD) PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1099).
2) ALL VEGETATION AND STRUCTURE PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL, EROSION AND SEDIMENT CONTROL.

SUPER SILT FENCE, TREE PROTECTION FENCE



AS-BUILT CERTIFICATION

Notes: There is no "AS-BUILT" information provided on this sheet.
Signature: Charles J. Crow, P.E. No. 19204
Date: 3/7/20

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A SOIL CONSERVATION ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE 7/14/17.
Signature: Frank John Malanusan II
Date: 11/5/15

SEDIMENT & EROSION CONTROL NOTES AND DETAILS

FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 56 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4849-D
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 9 OF 24 F-15-053

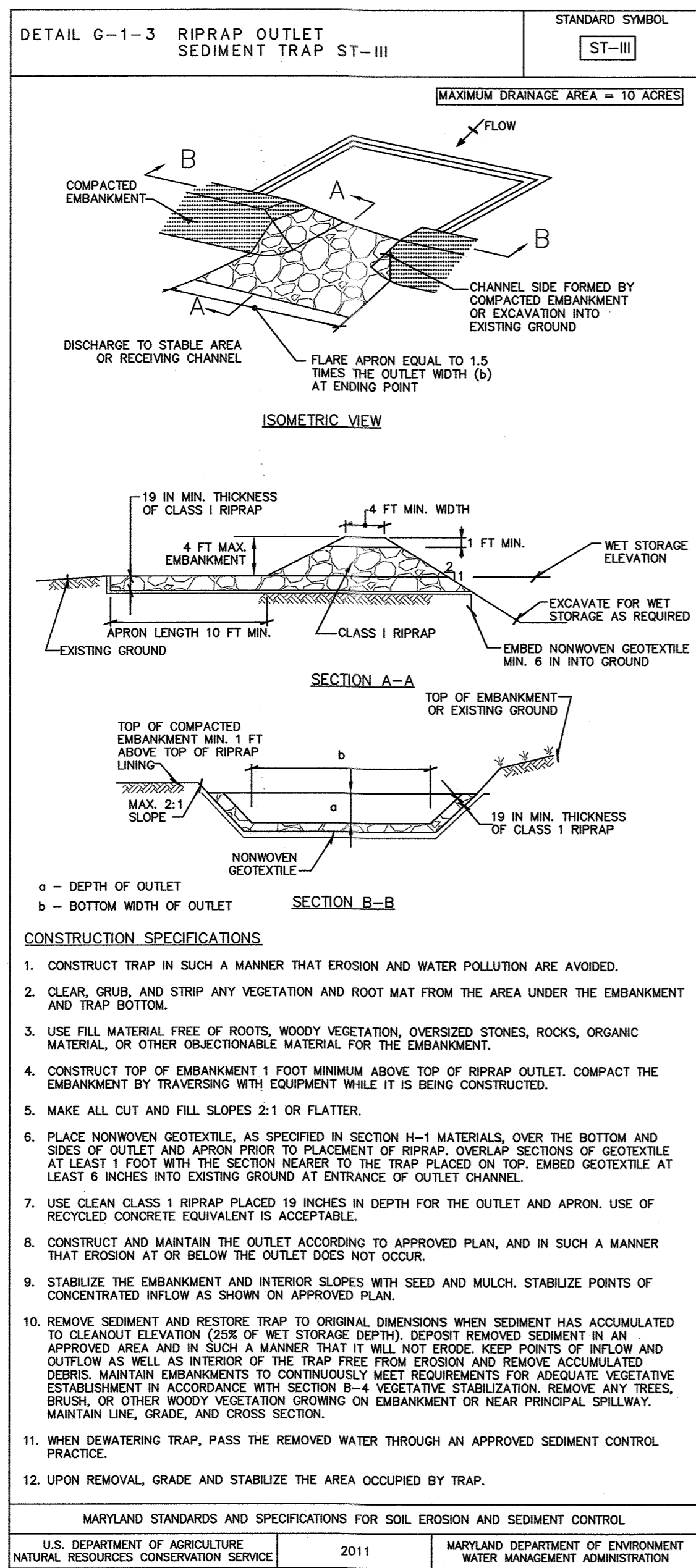
APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature: M. Melvin
Date: 12/18/2015
Chief, Bureau of Highways

Table with columns: NO., DESCRIPTION, DATE. Entry: 1) REMOVE THE BLOCK, 9/29/17.

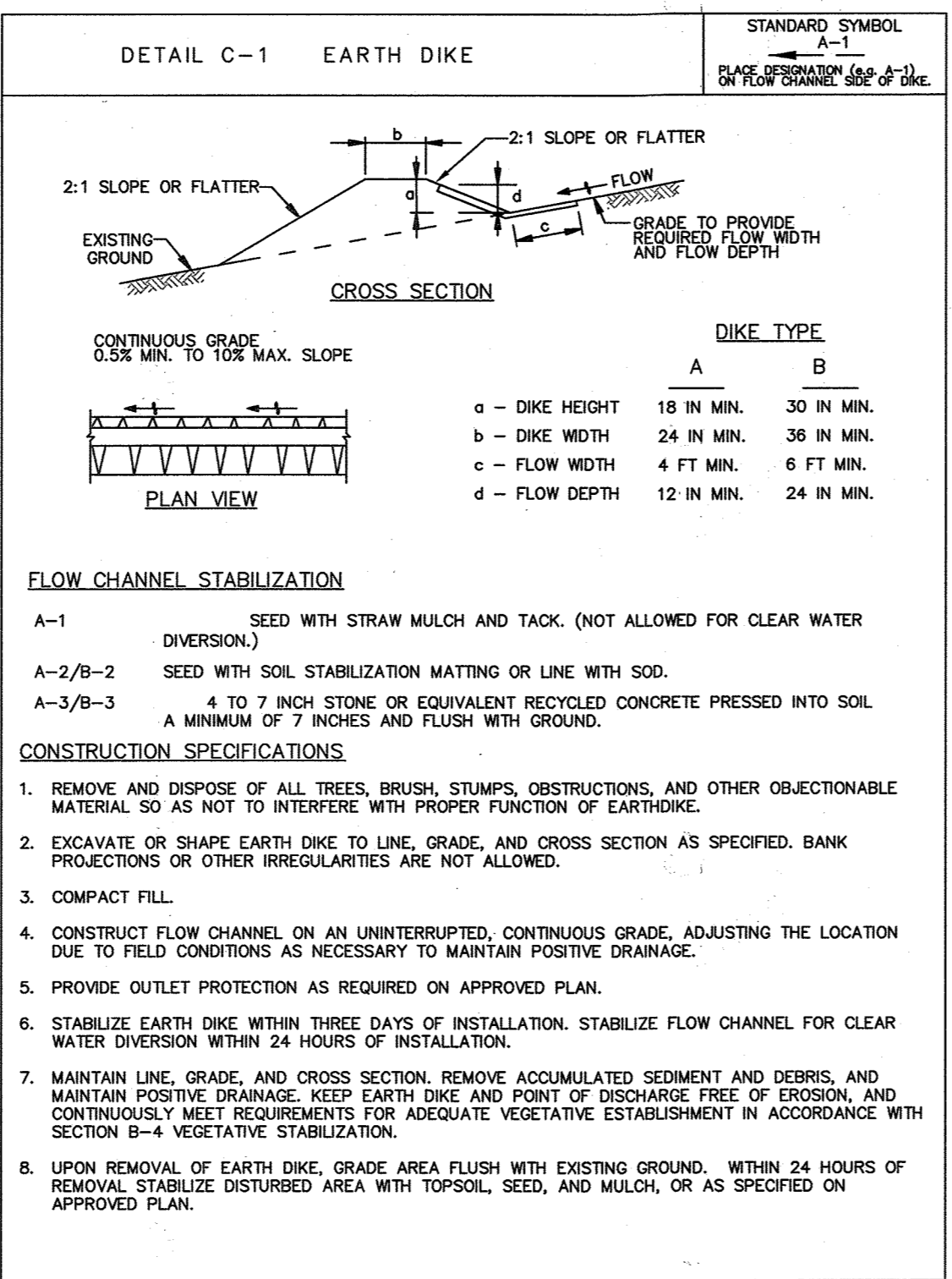
OWNERS
KENNETH ECKER
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THOMAS M MARCELLINO
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5300 DORSEY HALL DRIVE
SLUTE, MD 21158
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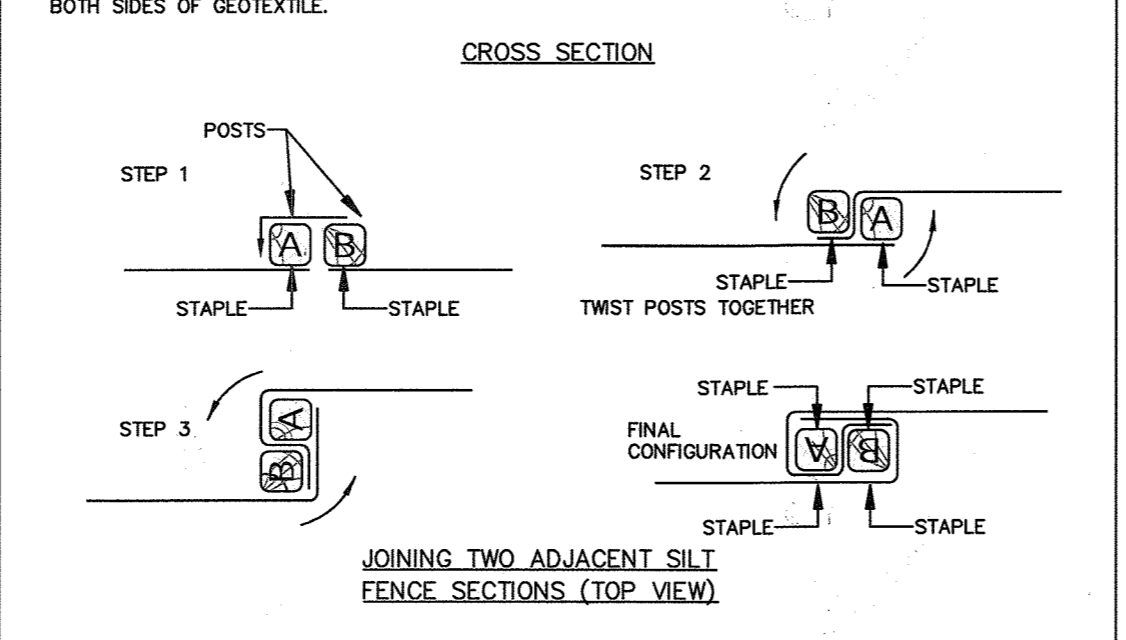
THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET



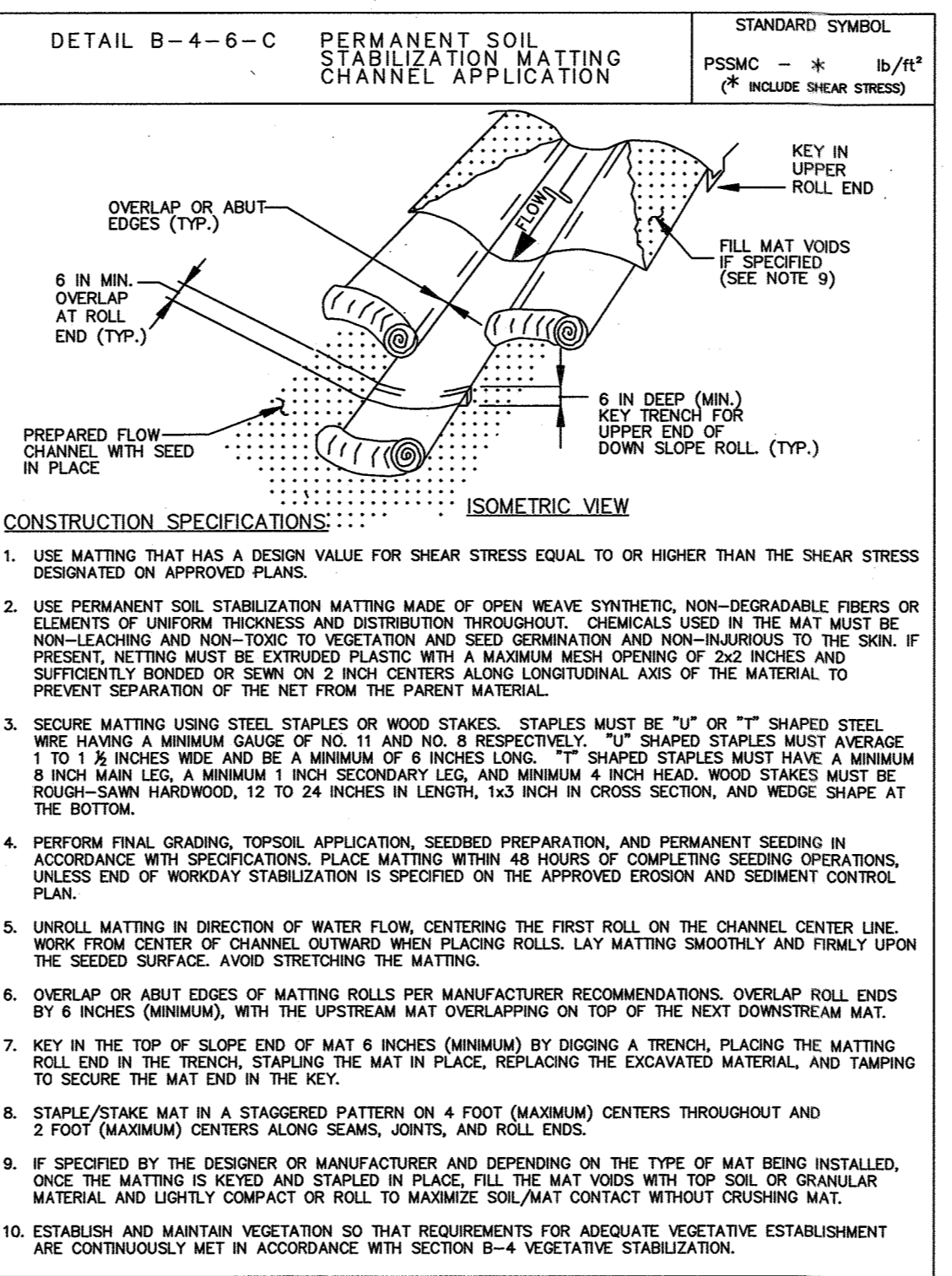
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



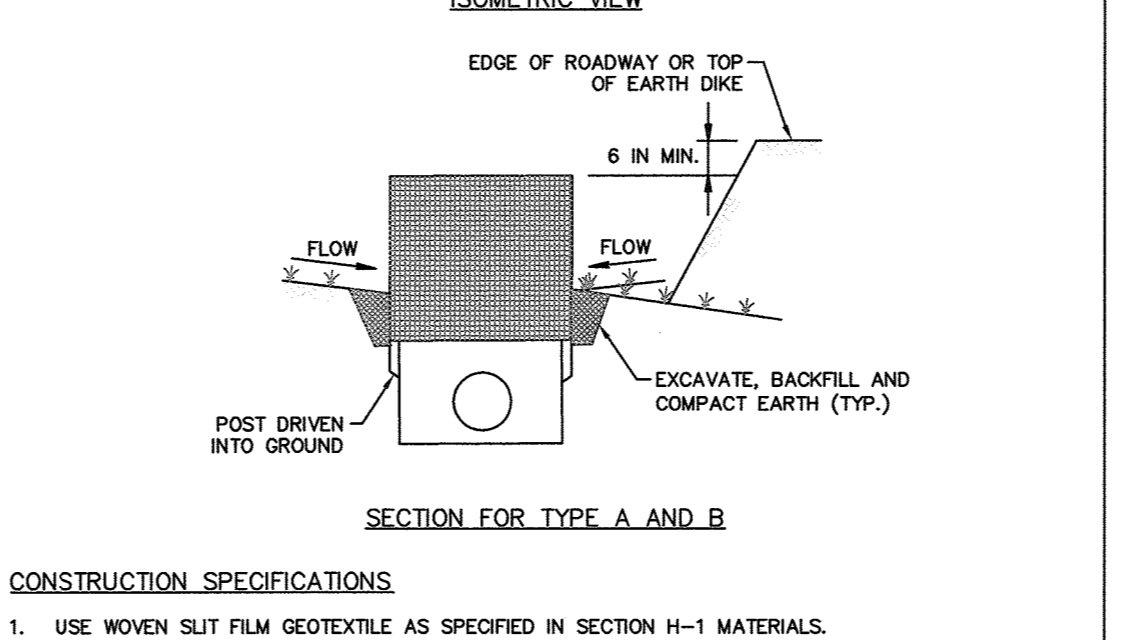
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



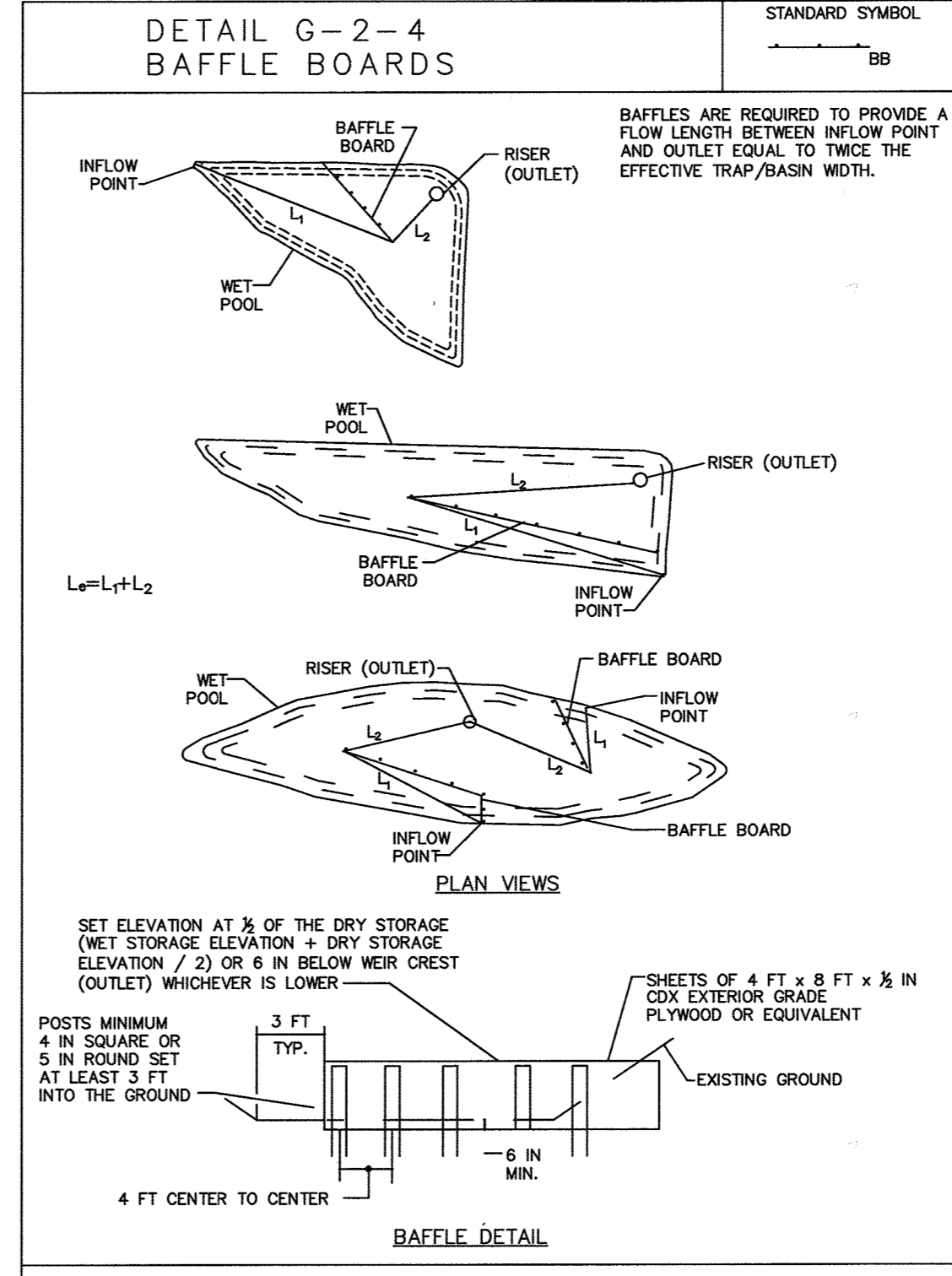
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



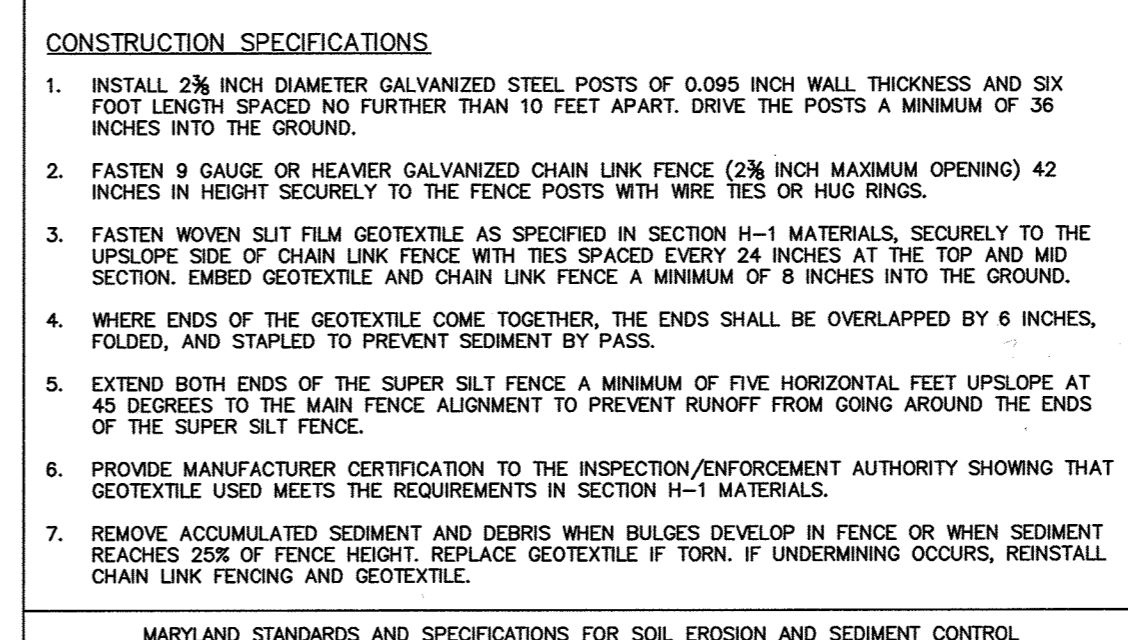
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
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U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

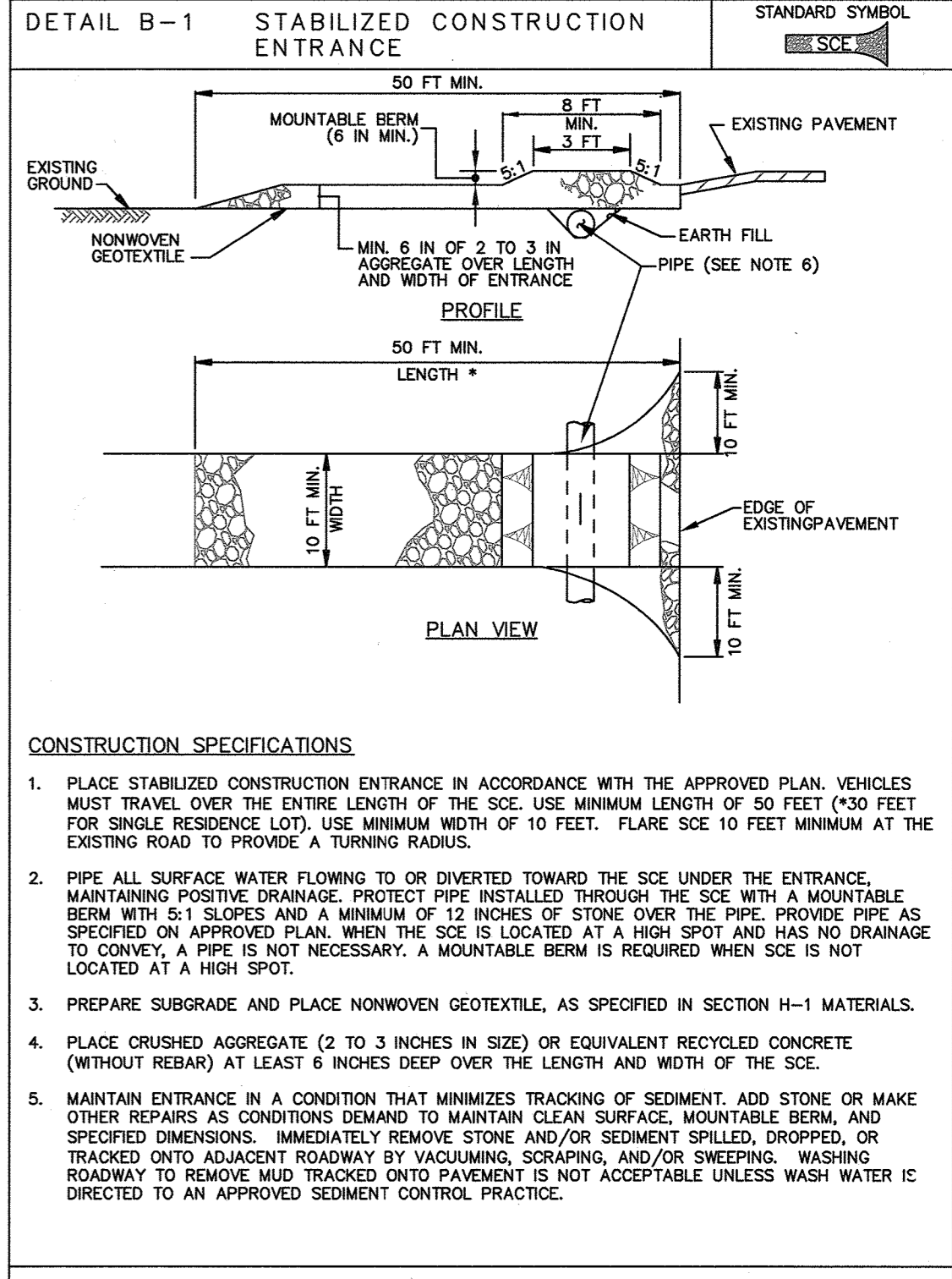


MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

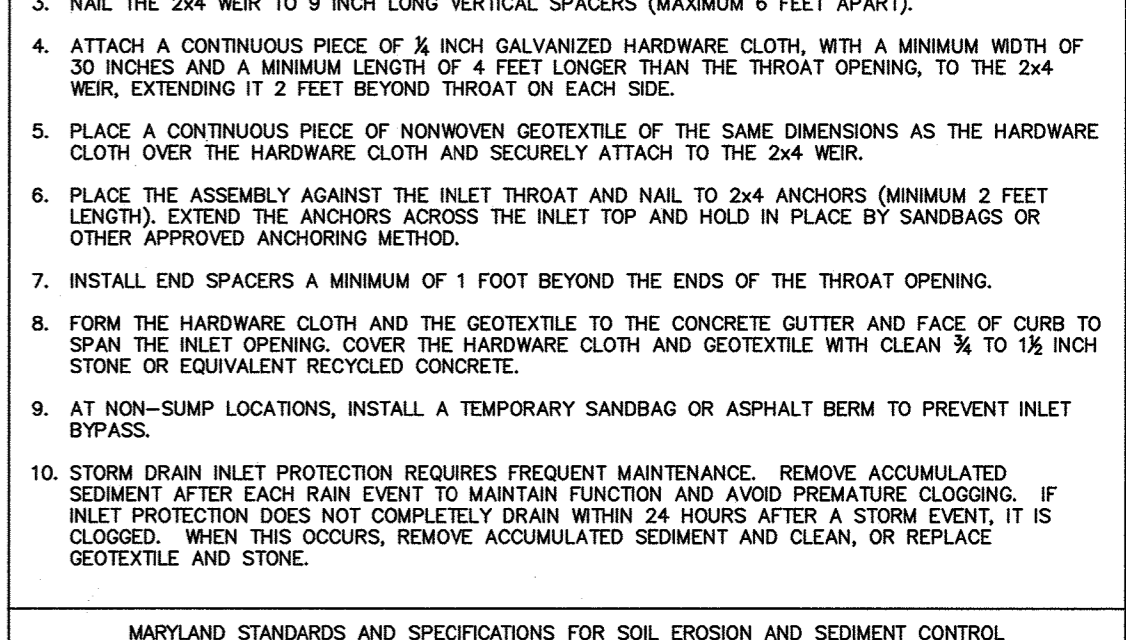


MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

AS-BUILT CERTIFICATION
Note: There is no "AS BUILT" information provided on this sheet.
CHARLES J. CORDO, JR. NO. 19304
3/7/20
Date



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	



MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION	

SEDIMENT & EROSION CONTROL NOTES AND DETAILS
FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
SP-14-003, CONTRACT #24-4849-D
ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 10 OF 24 F-15-053

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

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.
Frank John Mullanlan II 11/5/15
Signature of Engineer Date

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 Deemed Necessary."
11/5/15
Signature of Developer Date

Approved: This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.
John L. Rhoton 12/1/15
District Howard Soil Conservation Dist. Date

APPROVED: DEPARTMENT OF PUBLIC WORKS Chief, Bureau of Highways 12/8/2015 DATE	APPROVED: DEPARTMENT OF PLANNING AND ZONING Chief, Division of Land Development 12-21-15 DATE
--	--

REVISIONS		
NO.	DESCRIPTION	DATE
1	REMOVE THIS BLOCK	6/29/17

OWNERS		DEVELOPER	
KENNETH ECKER LISA MARCELLINO - ECKER 9120 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	MICHAEL R MARCELLINO 9131 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	BONNY A MARCELLINO THOMAS H MARCELLINO 9141 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	LAND DESIGN & DEVELOPMENT 5300 DORSEY HALL DRIVE SUITE 102 ELLCOTT CITY, MARYLAND 21042 (443)-367-0422



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/11/17.

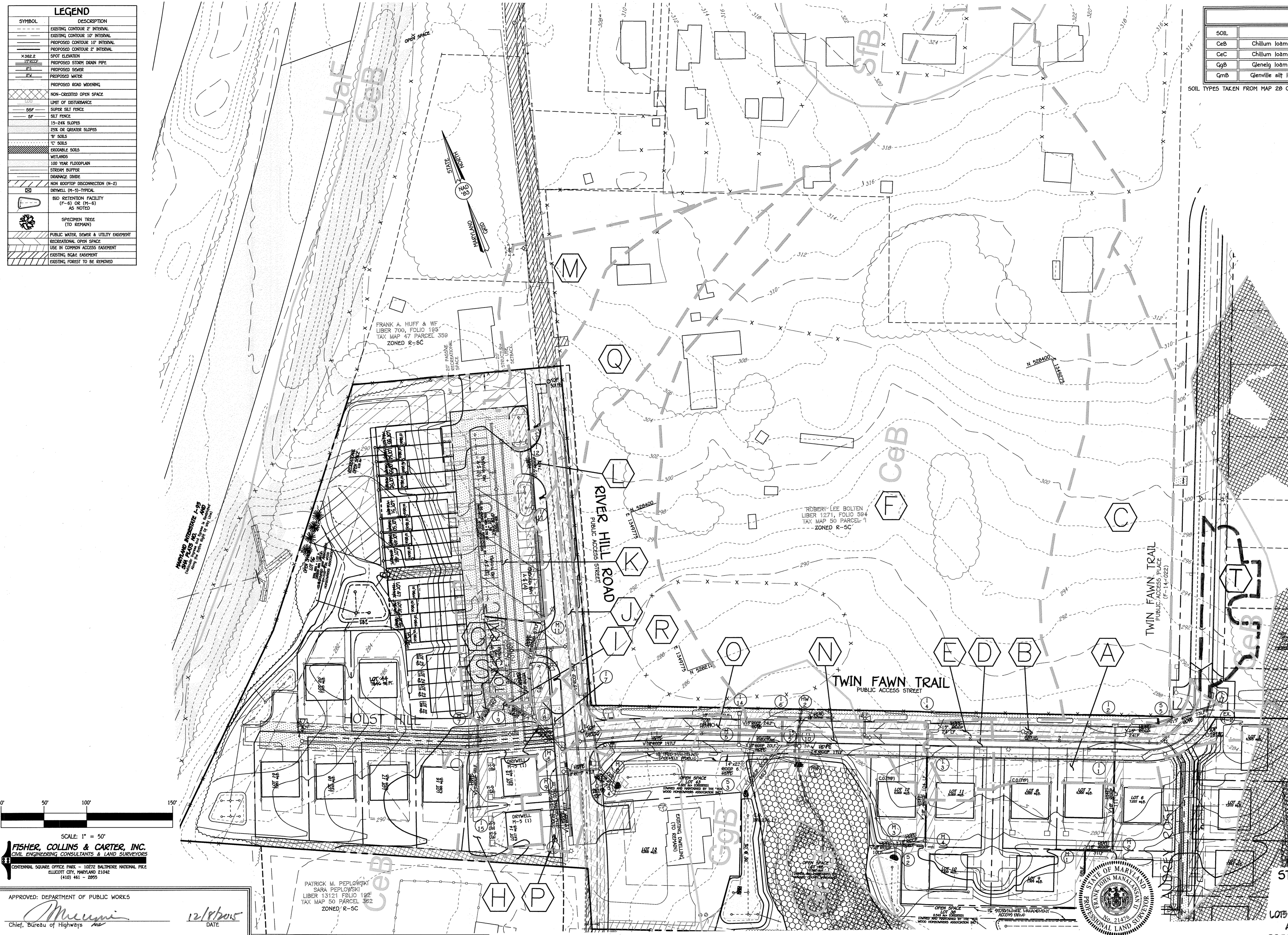
LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
X	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CREDITED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	1-1% SLOPES
---	2% OR GREATER SLOPES
---	1' SOILS
---	2' SOILS
---	ERODIBLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	DRAWELL (D-5) TYPICAL
---	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	PROFESSIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING BGA EASEMENT
---	EXISTING FOREST TO BE REMOVED

SOILS LEGEND				
SOIL	NAME	CLASS	Kw	
CeB	Chillum loam, 2 to 5 percent slopes	B	.37	
CeC	Chillum loam, 5 to 10 percent slopes	B	.37	
GyB	Glenelig loam, 3 to 8 percent slopes	B	.20	
GmB	Glenville silt loam, 3 to 8 percent slopes	C	.37	

SOIL TYPES TAKEN FROM MAP 28 OF THE SOIL SURVEY OF HOWARD COUNTY, MARYLAND, FOUND ON THE HSCD WEBSITE.

DRAINAGE AREA DATA					
STRUCTURE NO.	DRAINAGE AREA	AREA	'C'	ZONED	% IMP.
I-1	A	0.33 AC.	0.64	R-5C	61%
I-2	B	0.10 AC.	0.47	R-5C	40%
S-5	C	1.28 AC.	0.17	R-5C	2%
I-3	D	0.11 AC.	0.58	R-5C	100%
I-4	E	0.03 AC.	0.95	R-5C	100%
HW-2	F	6.51 AC.	0.29	R-5C	4%
I-9	G	0.22 AC.	0.70	R-5C	69%
I-15	H	0.23 AC.	0.42	R-5C	34%
I-8	I	0.06 AC.	0.29	R-5C	17%
I-7	J	0.72 AC.	0.29	R-5C	12%
I-16 (FUTURE)	K	0.35 AC.	0.75	R-5C	75%
I-11	L	0.10 AC.	0.61	R-5C	58%
I-12	M	0.44 AC.	0.37	R-5C	27%
I-5	N	0.26 AC.	0.81	R-5C	82%
I-6	O	0.13 AC.	0.95	R-5C	100%
I-13	P	0.12 AC.	0.61	R-5C	58%
I-7	Q	0.71 AC.	0.33	R-5C	12%
I-14	R	1.20 AC.	0.17	R-5C	2%
I-10	S	0.16 AC.	0.57	R-5C	52%
I-17	T	0.29 AC.	0.84	R-5C	95%

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. Crow
CHARLES J. CROW, P.E. NO. 19204
3/7/20
Date



SCALE: 1" = 50'
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 18272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 481-2895

APPROVED: DEPARTMENT OF PUBLIC WORKS
M. M...
Chief, Bureau of Highways
DATE: 12/8/2015

APPROVED: DEPARTMENT OF PLANNING AND ZONING
K. S...
Chief, Division of Land Development
DATE: 12-21-15

Old E...
Chief, Development Engineering Division
DATE: 12-11-15

REVISIONS		
NO.	DESCRIPTION	DATE
1	ADD I-17 DRAIN, DRAINAGE AREA & TREE MAINTENANCE EASEMENT	12/21/15
2	REVISE TITLE BLOCK, LOT LINES & LOT NUMBERS	6/29/17

OWNERS
KENNETH ECKER
LISA MARCELLINO ECKER
9120 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

MICHAEL R MARCELLINO
9131 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

BONNY A MARCELLINO
THOMAS M MARCELLINO
9141 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

DEVELOPER
LAND DESIGN & DEVELOPMENT
5300 DORSEY HALL DRIVE
SUITE 102
ELLCOTT CITY, MARYLAND 21042
(443)-367-0422

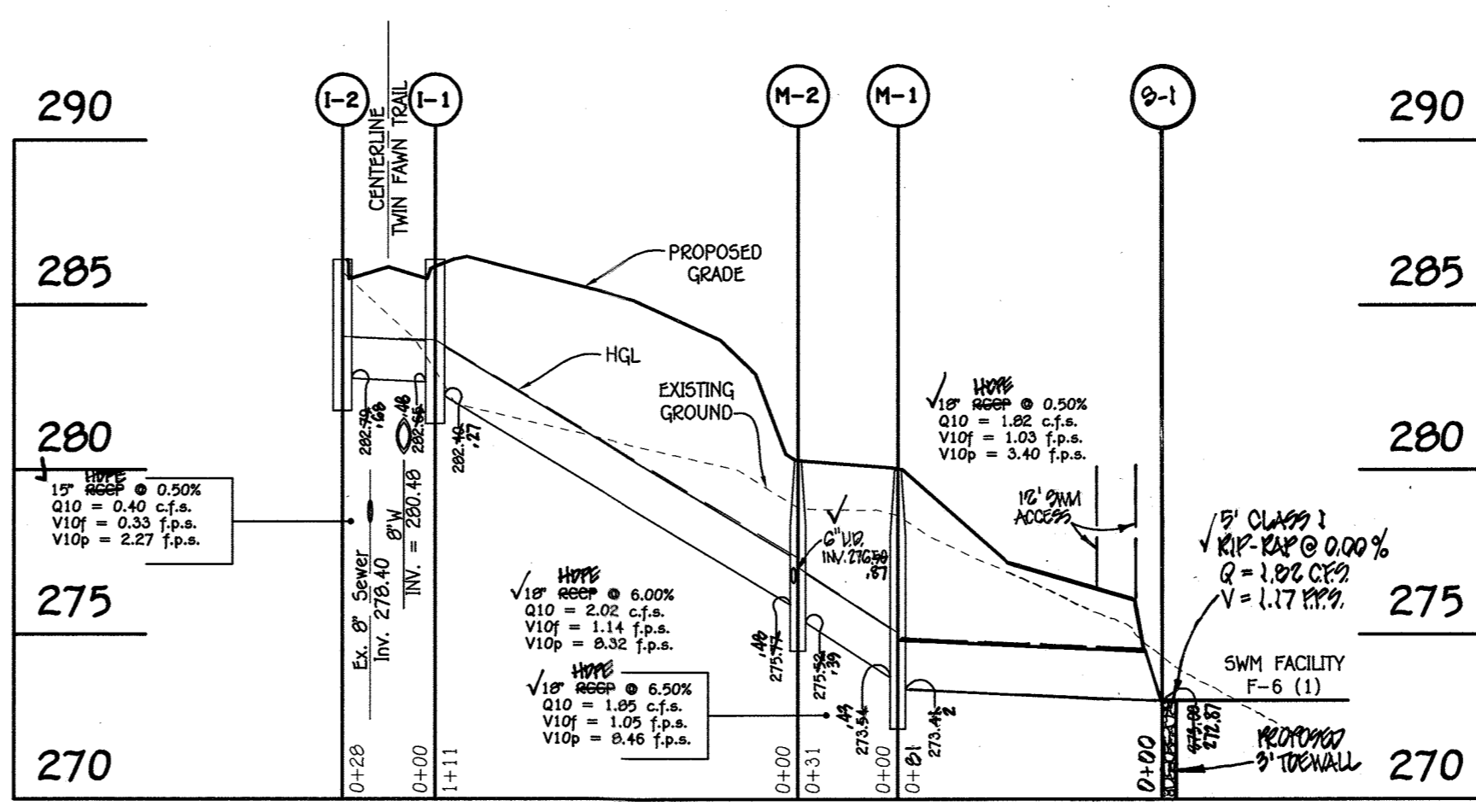
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
Frank John Manalansan II
FRANK JOHN MANALANSAN II
DATE: 11/5/15

STORM DRAIN DRAINAGE AREA MAP AND SOILS MAP
FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4849-D
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 11 OF 24 F-15-053

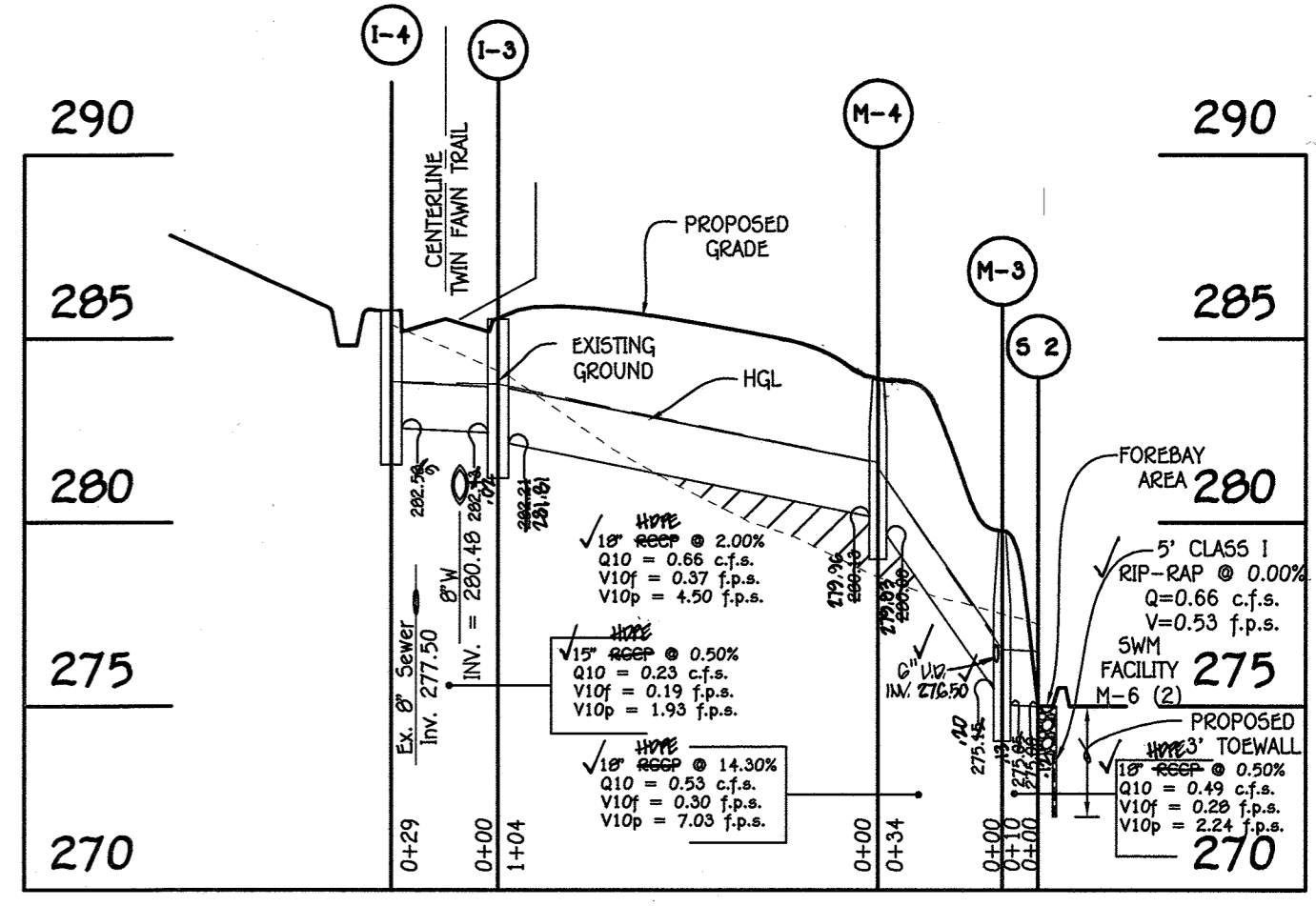
AS-BUILT

STRUCTURE SCHEDULE							
STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV IN	INV OUT	COORDINATES	TYPE	REMARKS
I-1	PUBLIC	286.37	282.65 (I-2) 15'	282.65 (M-2) 18'	N 527964.84 E 1350192.05	A-5 INLET	SD-4.01
I-2	PUBLIC	286.37	-----	282.65 (I-1) 15'	N 527992.10 E 1350205.05	A-5 INLET	SD-4.01
I-3	PUBLIC	285.76	282.43 (I-4) 15'	282.43 (M-4) 18'	N 528047.37 E 1349997.48	A-5 INLET	SD-4.01
I-4	PUBLIC	285.76	-----	282.43 (I-3) 15'	N 528068.51 E 1350007.34	A-5 INLET	SD-4.01
I-5	PUBLIC	282.91	279.56 (I-6) 15'	279.56 (M-10) 18'	N 528109.24 E 1349846.26	A-10 INLET	SD-4.03
I-6	PUBLIC	282.91	-----	279.56 (I-5) 15'	N 528126.54 E 1349856.13	A-10 INLET	SD-4.03
I-7	PUBLIC	291.74	-----	285.07 (M-8) 15'	N 528238.76 E 1349660.02	A-5 INLET	SD-4.01
I-8	PUBLIC	289.50	285.00 (I-9) 18'	285.00 (M-6) 18'	N 528222.54 E 1349598.04	YARD INLET	SD-4.14
I-9	PUBLIC	289.35	284.46 (I-7) 18'	284.46 (I-8) 18'	N 528260.98 E 1349561.43	A-5 INLET	SD-4.01
I-10	PUBLIC	290.00	286.00 (I-11) 18'	286.00 (I-8) 18'	N 528276.44 E 1349611.50	D INLET	SD-4.10
I-11	PUBLIC	290.00	284.46 (I-12) 18'	284.46 (M-11) 18'	N 528444.37 E 1349674.26	D INLET	SD-4.10
I-12	PUBLIC	290.00	284.46 (I-12) 18'	284.46 (M-11) 18'	N 528513.54 E 1349694.53	D INLET	SD-4.10
I-13	PUBLIC	288.17	-----	283.23 (M-9) 15'	N 528079.88 E 1349588.84	A-5 INLET	SD-4.01
I-14	PUBLIC	282.74	-----	283.23 (M-5) 18'	N 528148.24 E 1349815.22	D INLET	SD-4.10
I-15	PUBLIC	287.75	-----	285.00 (M-7) 15'	N 528149.24 E 1349508.80	YARD INLET	SD-4.14
I-16	PUBLIC	292.00	-----	289.25 (M-11) 18'	N 528347.56 E 1349580.61	A-5 INLET	SD-4.01
M-1	PUBLIC	280.00	273.54 (M-2) 18'	273.54 (S-1) 18'	N 527878.92 E 1350124.53	STANDARD MANHOLE	G-5.12
M-2	PUBLIC	280.34	275.00 (M-1) 18'	275.00 (M-1) 18'	N 527862.65 E 1350152.55	STANDARD MANHOLE	G-5.12
M-3	PUBLIC	279.78	275.00 (M-4) 18'	275.00 (S-2) 18'	N 527950.10 E 1349926.50	STANDARD MANHOLE	G-5.12
M-4	PUBLIC	284.00	280.00 (I-3) 18'	280.00 (M-3) 18'	N 527944.37 E 1349933.92	STANDARD MANHOLE	G-5.12
M-5	PUBLIC	283.90	277.18 (I-14) 18'	277.18 (HW-1) 23'	N 528115.17 E 1349800.54	STANDARD MANHOLE	G-5.12
M-6	PUBLIC	288.00	283.00 (I-8) 18'	283.00 (M-5) 18'	N 528178.39 E 1349613.69	STANDARD MANHOLE	G-5.12
M-7	PUBLIC	290.50	284.22 (I-15) 15'	284.22 (I-9) 18'	N 528240.80 E 1349535.10	STANDARD MANHOLE	G-5.12
M-8	PUBLIC	289.00	280.00 (M-9) 18'	280.00 (S-4) 18'	N 528141.95 E 1349645.74	STANDARD MANHOLE	G-5.12
M-9	PUBLIC	288.49	283.23 (I-13) 15'	283.23 (M-8) 18'	N 528151.16 E 1349605.55	STANDARD MANHOLE	G-5.12
M-10	PUBLIC	283.00	277.00 (I-5) 18'	277.00 (HW-1) 24'	N 528090.40 E 1349863.33	STANDARD MANHOLE	G-5.12
M-11	PUBLIC	293.50	288.00 (I-11) 18'	288.00 (I-10) 18'	N 528317.33 E 1349640.53	STANDARD MANHOLE	G-5.12
S-1	PUBLIC	274.67	-----	273.00 18'	N 527818.36 E 1350093.46	HOPE END SECTION	D-5.51
S-3	PUBLIC	280.00	-----	279.00 18'	N 528064.12 E 1349798.36	END SECTION	D-5.51
S-4	PUBLIC	280.00	-----	283.00 18'	N 528122.27 E 1349658.37	HOPE END SECTION	D-5.51
S-8.5	PUBLIC	280.00	-----	285.00 15'	N 527978.13 E 1350248.83	END SECTION	D-5.51
S 2	PUBLIC	276.00	-----	275.00 18'	N 527940.80 E 1349922.54	HOPE END SECTION	D-5.51
HW 1	PUBLIC	280.10	-----	276.00 (HW-2) 24'	N 528071.44 E 1349853.39	TYPE 'A' HEADWALL	D-5.11
HW-2	PUBLIC	282.74	-----	280.00 (HW-1) 18'	N 528124.83 E 1349876.53	TYPE 'A' HEADWALL	D-5.11
9-5	PUBLIC	280.00	-----	285.00 15'	N 527978.13 E 1350248.83	TYPE 'B' HEADWALL	MD-996.01
I-17	PUBLIC	285.00	-----	280.00 7.5'	N 527987.27 E 1350317.17	COG/COB OPENING	MD-374.00

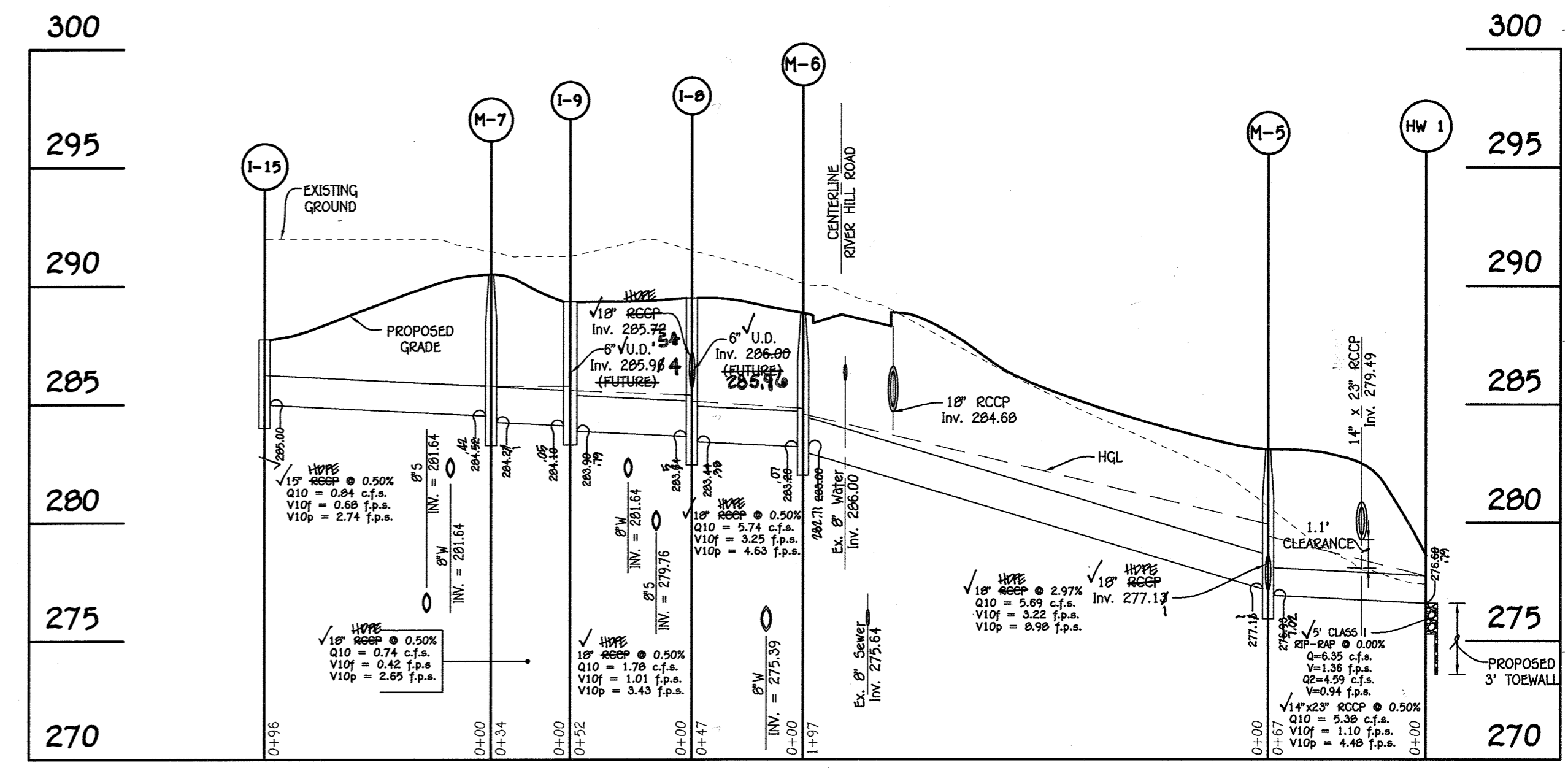
* DENOTES THREAT OPENING



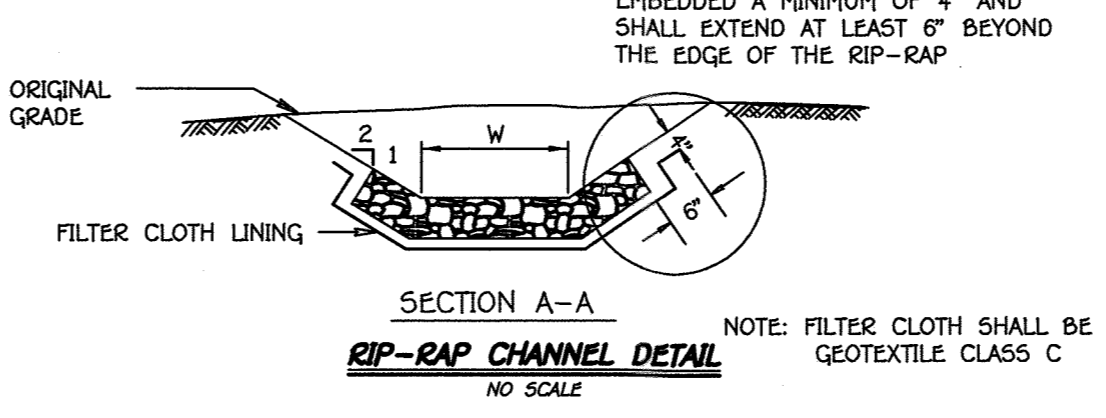
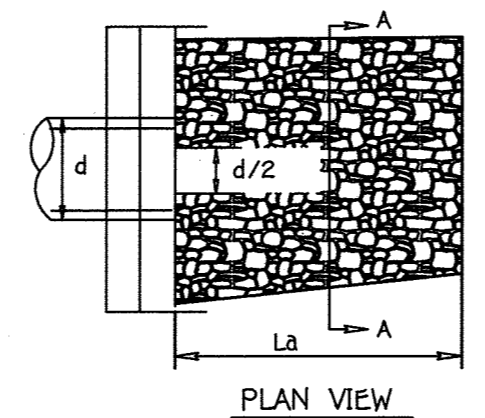
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VERT. 1" = 5'



SCALE HORZ. 1" = 50'
VERT. 1" = 5'

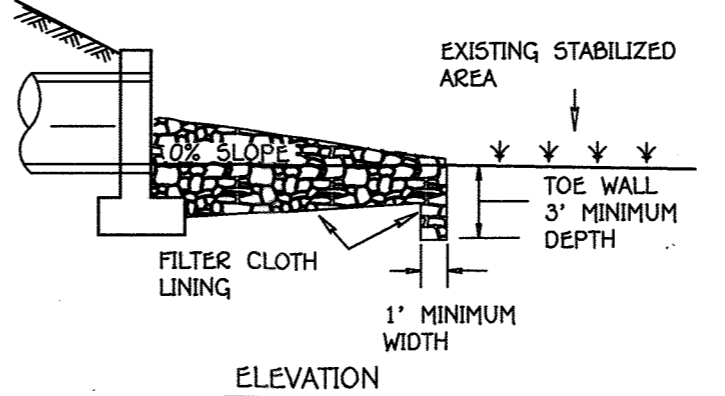


SCALE HORZ. 1" = 50'
VERT. 1" = 5'



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 punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps whether for repairs or for joining two pieces of cloth shall be a minimum of one foot.
- Stone for the riprap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying material. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Spalls shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.



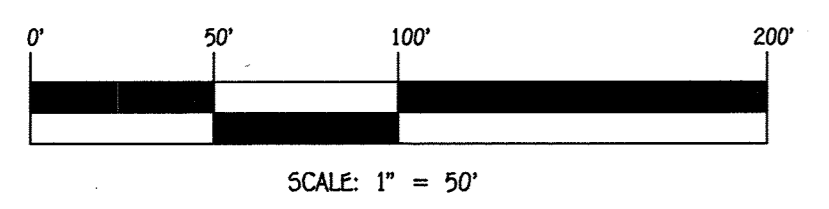
PIPE SCHEDULE		
SIZE	CLASS	LENGTH
24"	AS-BUILT HOPE	18'
23"x14"	RCCP	133'
18"	AS-BUILT HOPE	1120'
15"	AS-BUILT HOPE	104'
6"	Schedule 40 PVC	242'
6"	Perforated Schedule 40 PVC	560'

NOTE: HOPE MAY BE SUBSTITUTED WITH RCCP, CL. IV PIPE MATERIAL.

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. CROND, SR. 11/2/2014



APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 DATE: 12/18/2015

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development
 DATE: 12-21-15

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 DATE: 12-11-15

REVISIONS		
NO.	DESCRIPTION	DATE
1	RENAME STRUCTURE SCHEDULE AND STORM DRAIN PROFILES	12/21/15
2	RENAME TITLE BLOCK	12/21/15

OWNERS
 KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

DEVELOPER
 LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/11/17.

FRANK JOHN MANALANSAN II
 DATE: 11/5/15



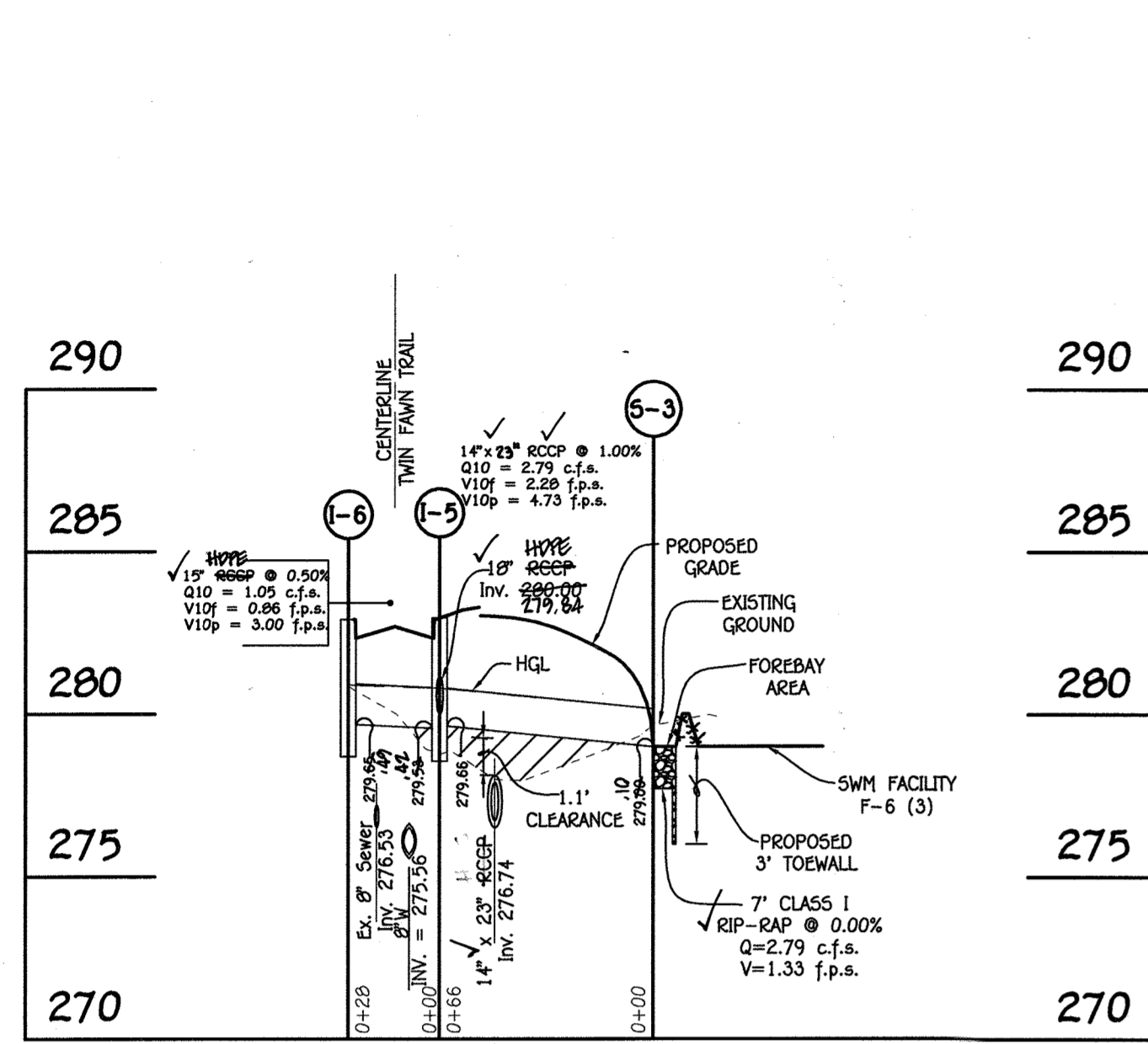
STORM DRAIN PROFILES AND DETAILS
FOX WOOD MANOR
 LOTS 1 THRU 6, 0 THRU 12, 14 THRU 22, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 28, 30, 31 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4049-D

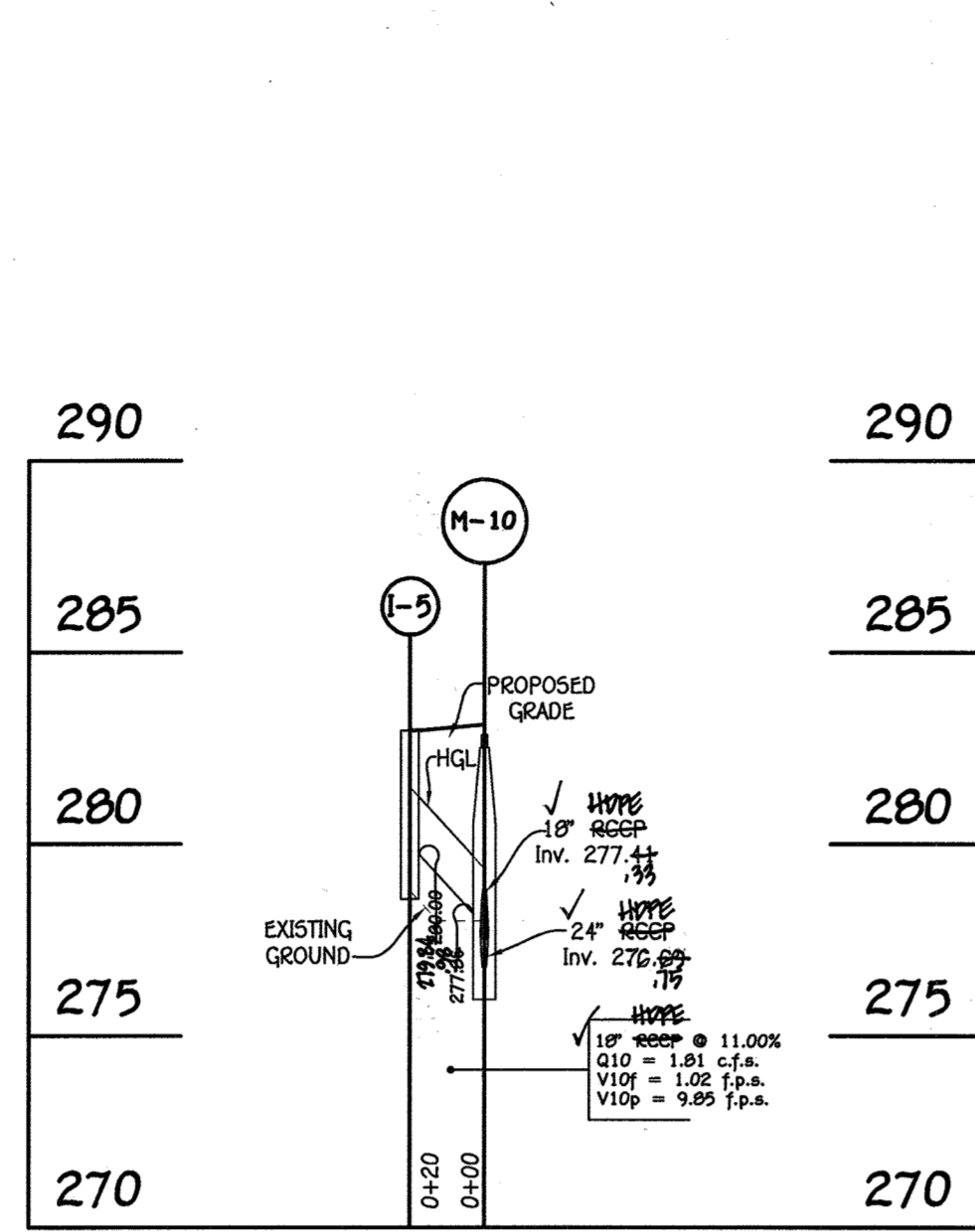
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 12 OF 24

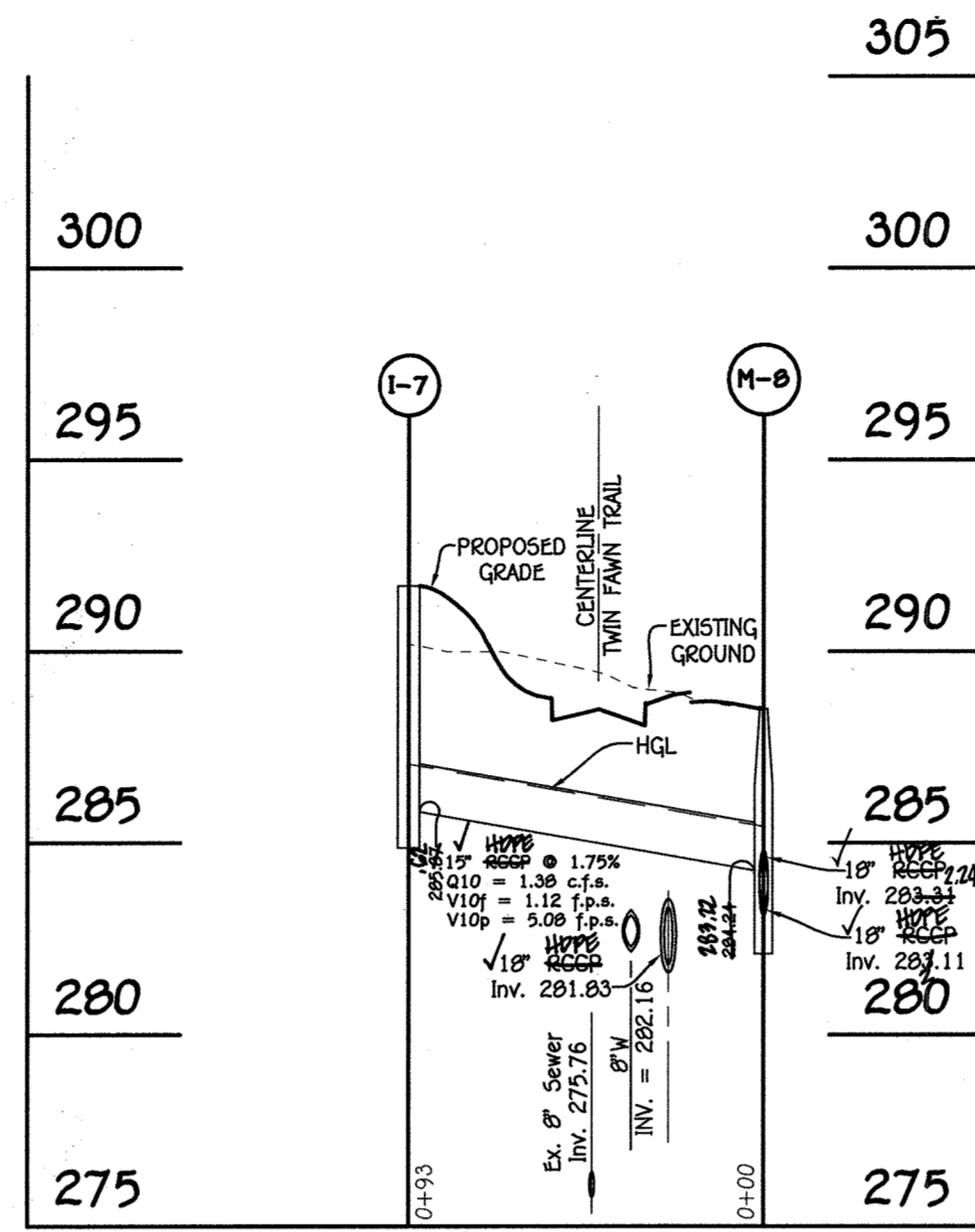
AS-BUILT



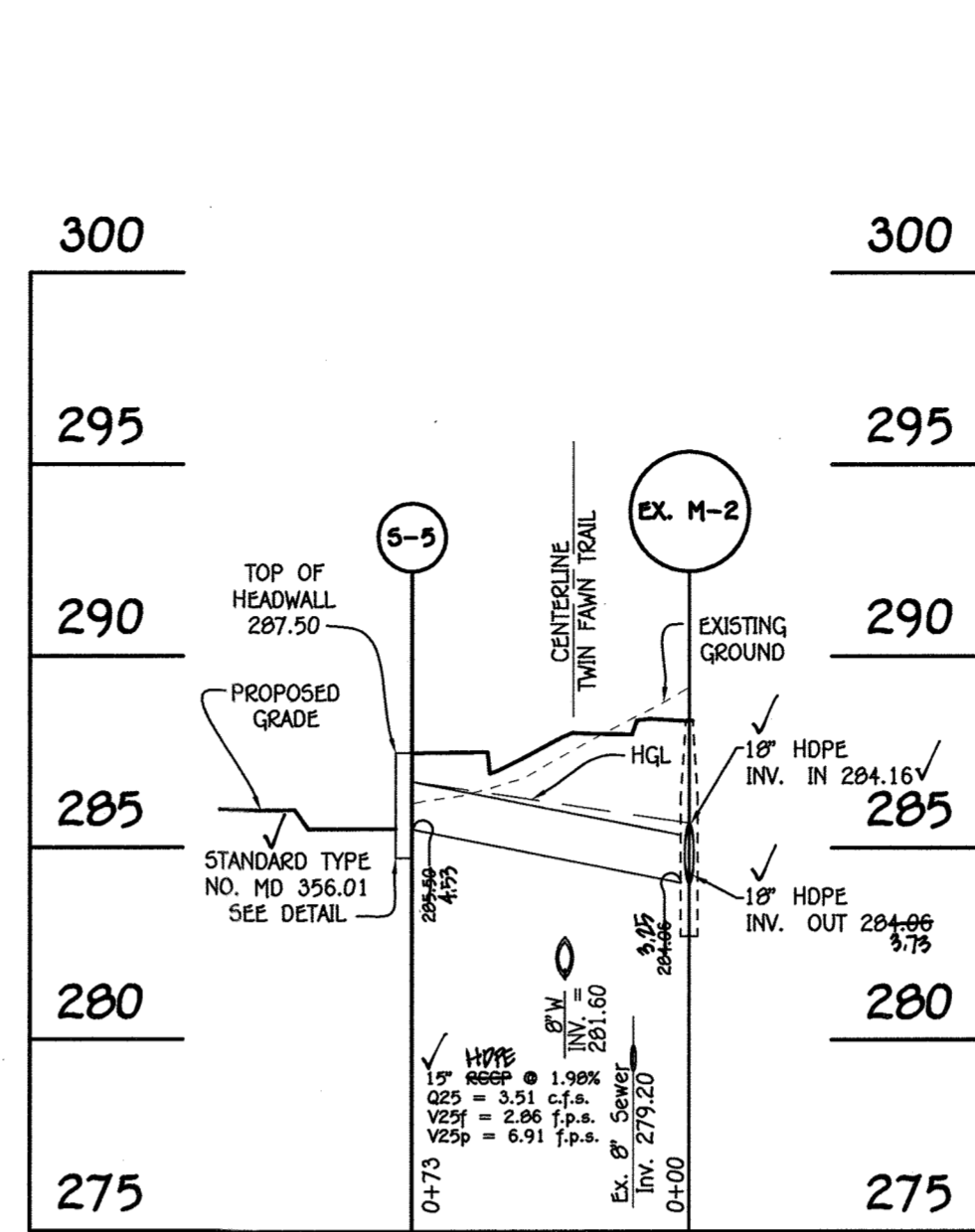
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VERT. 1" = 5'



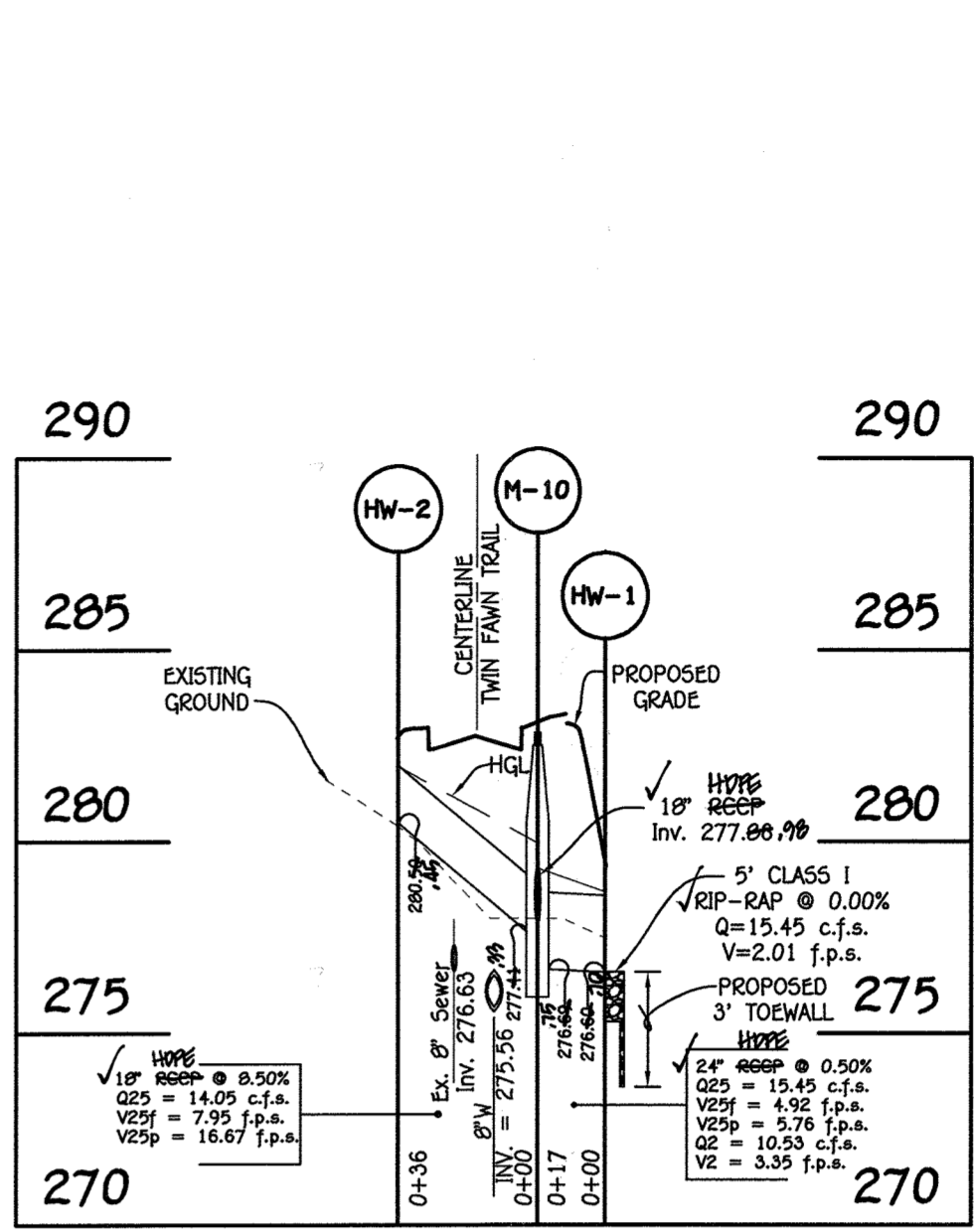
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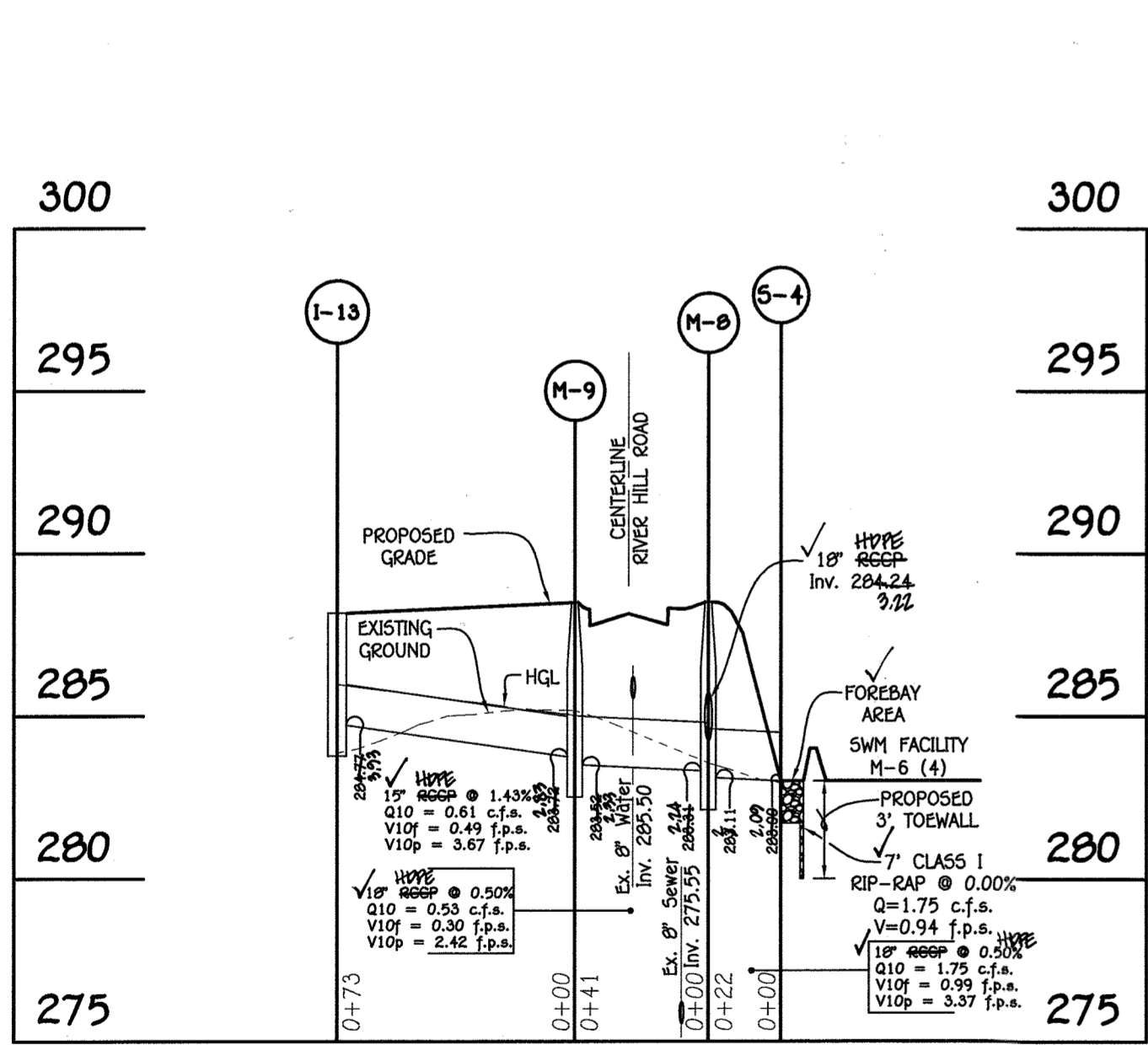
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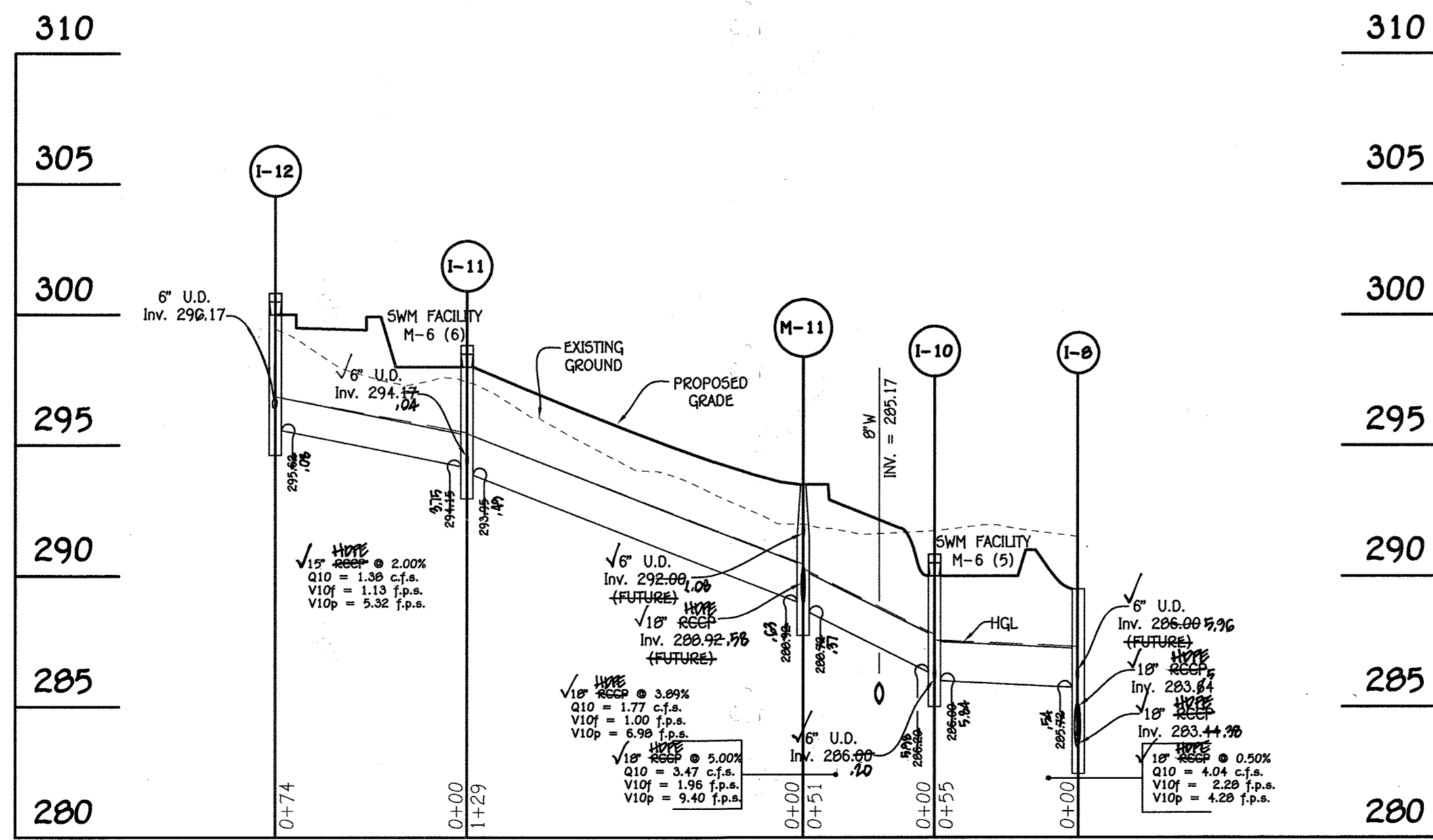
SCALE HORZ. 1" = 50'
VERT. 1" = 5'



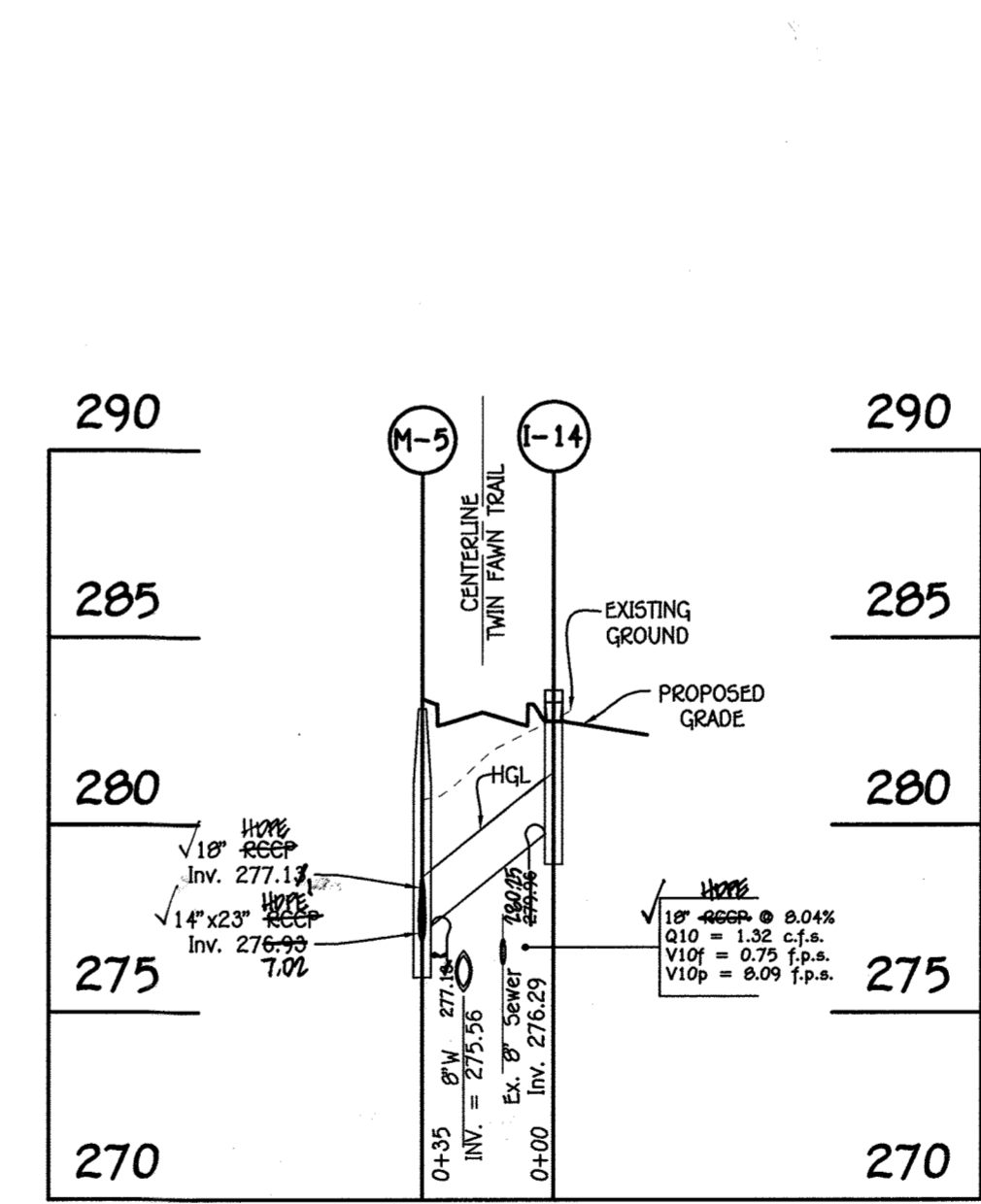
SCALE HORZ. 1" = 50'
VERT. 1" = 5'



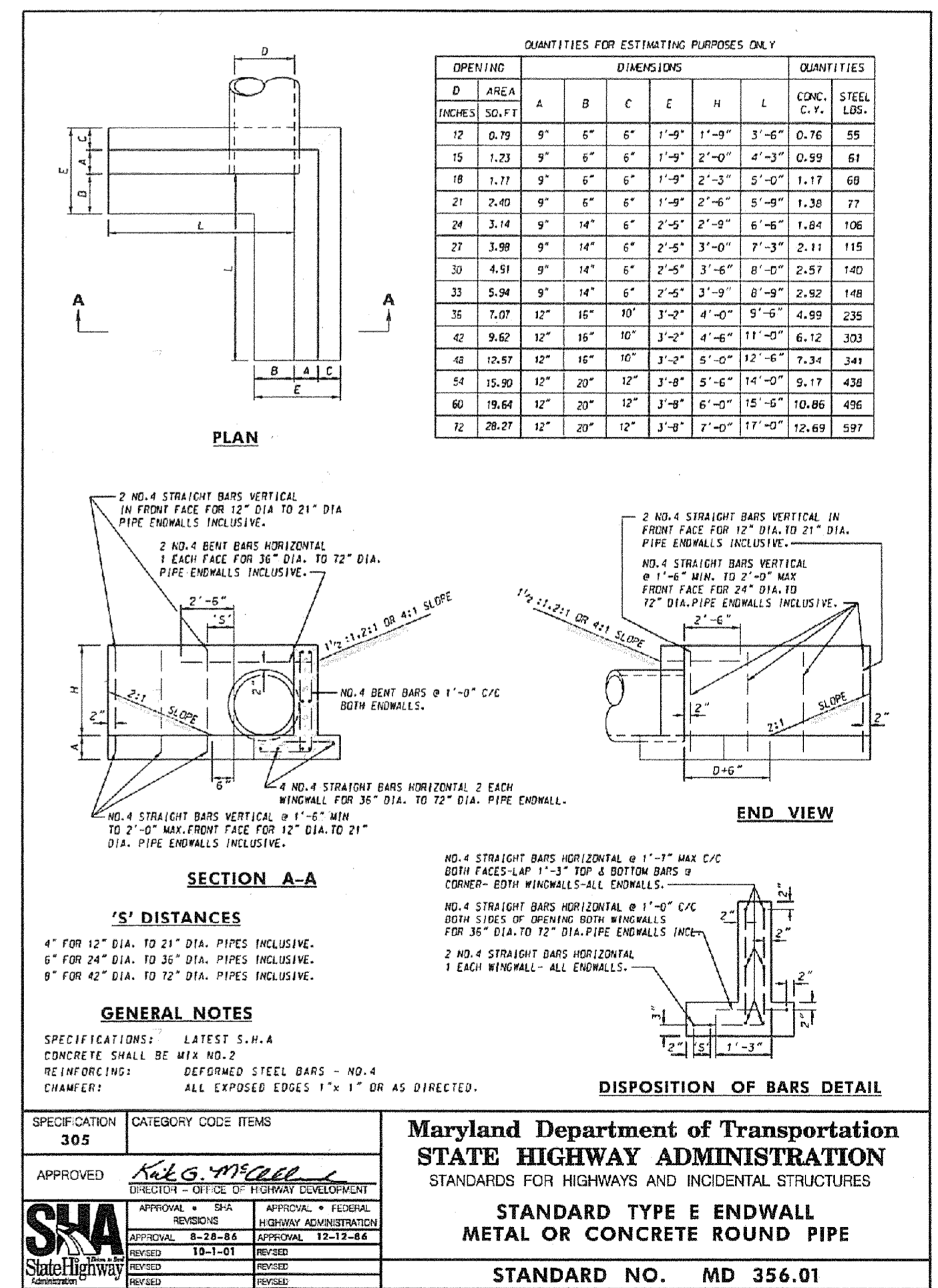
SCALE HORZ. 1" = 50'
VERT. 1" = 5'



SCALE HORZ. 1" = 50'
VERT. 1" = 5'



SCALE HORZ. 1" = 50'
VERT. 1" = 5'



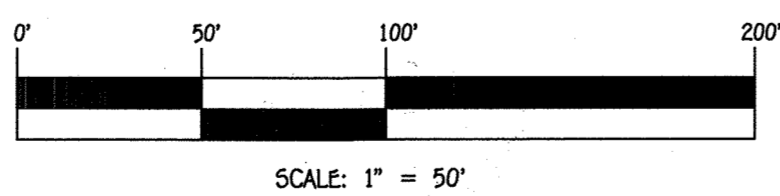
APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 DATE: 12/8/20

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development
 DATE: 12-21-20

Chief, Development Engineering Division
 DATE: 12-11-15

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

NO.	DESCRIPTION	DATE
1	RENAME INVERT ELEVATIONS	12/21/20
2	RENAME TITLE BLOCK	12/21/20



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. CROW, P.E., NO. 19204
 DATE: 3/7/20



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/11/17.
 FRANK JOHN MAMLANSAN II
 DATE: 11/5/15

OWNERS
 KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

MICHAEL R MARCELLINO
 9131 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

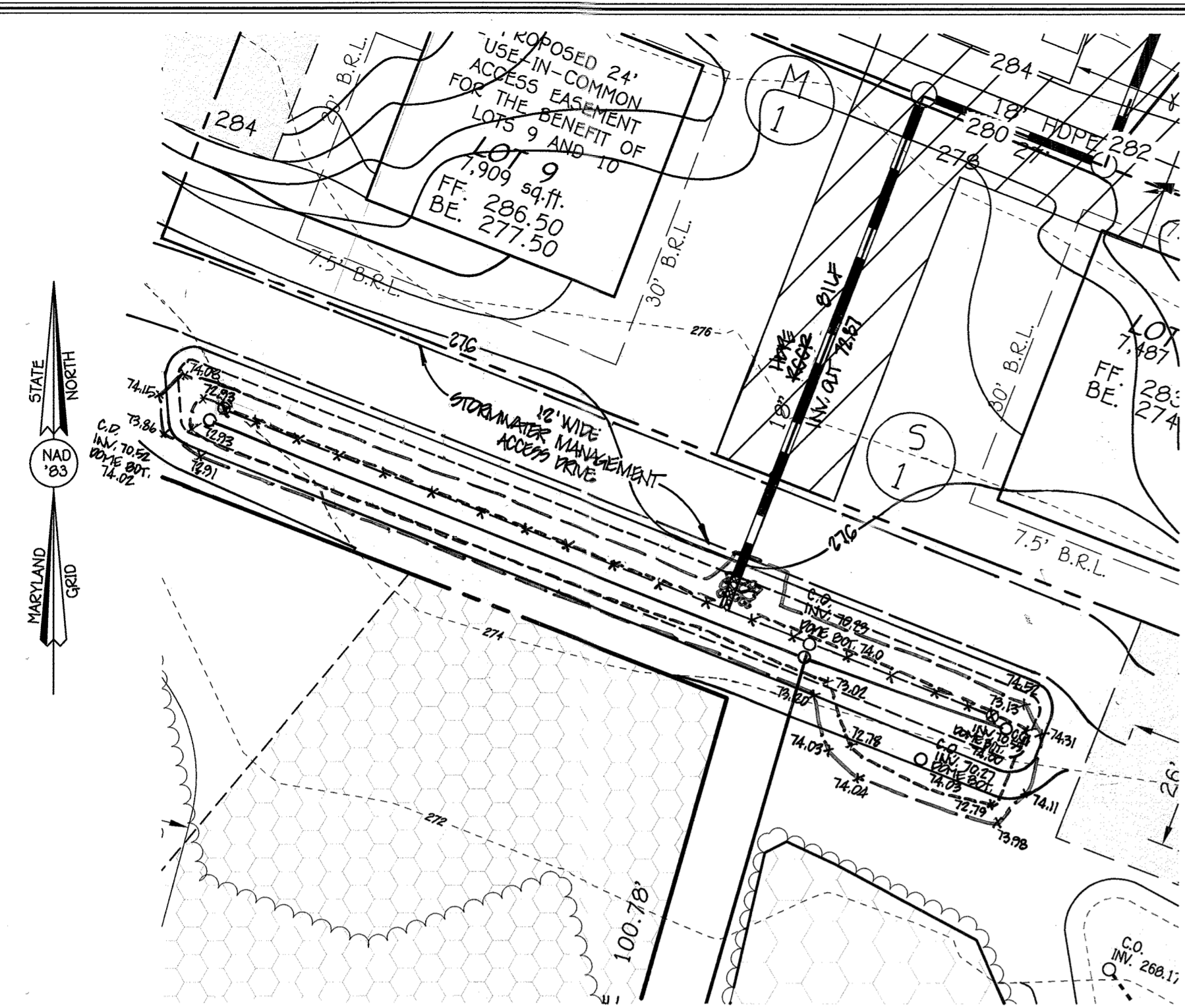
BONNY A MARCELLINO
 THOMAS M MARCELLINO
 9141 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

DEVELOPER
 LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422

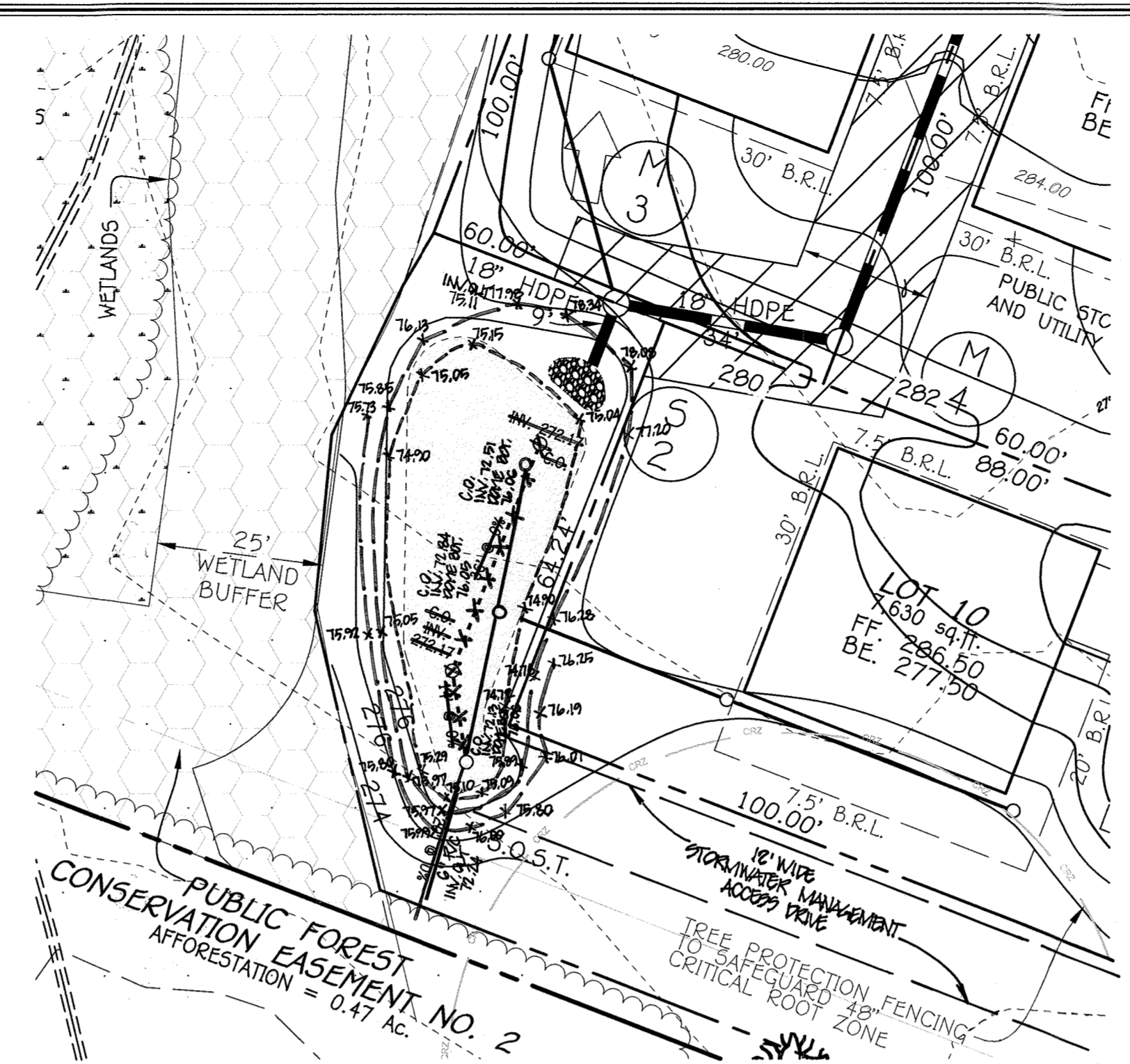
**STORM DRAIN PROFILES AND DETAILS
 FOX WOOD MANOR**

LOTS 1 THRU 6, 8 THRU 10, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 30, 39, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4849-D
 ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 13 OF 24 F-15-053

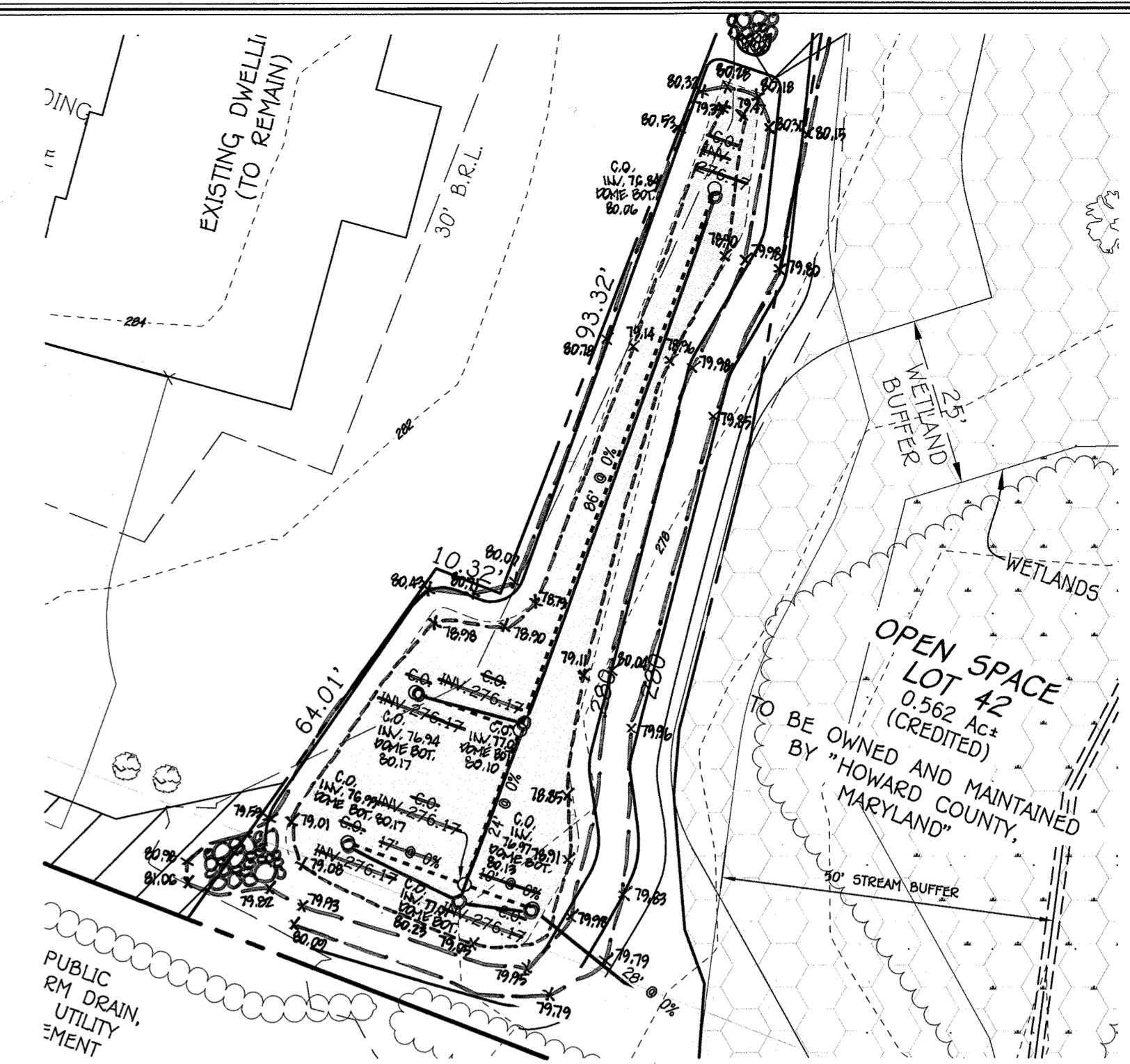
AS-BUILT



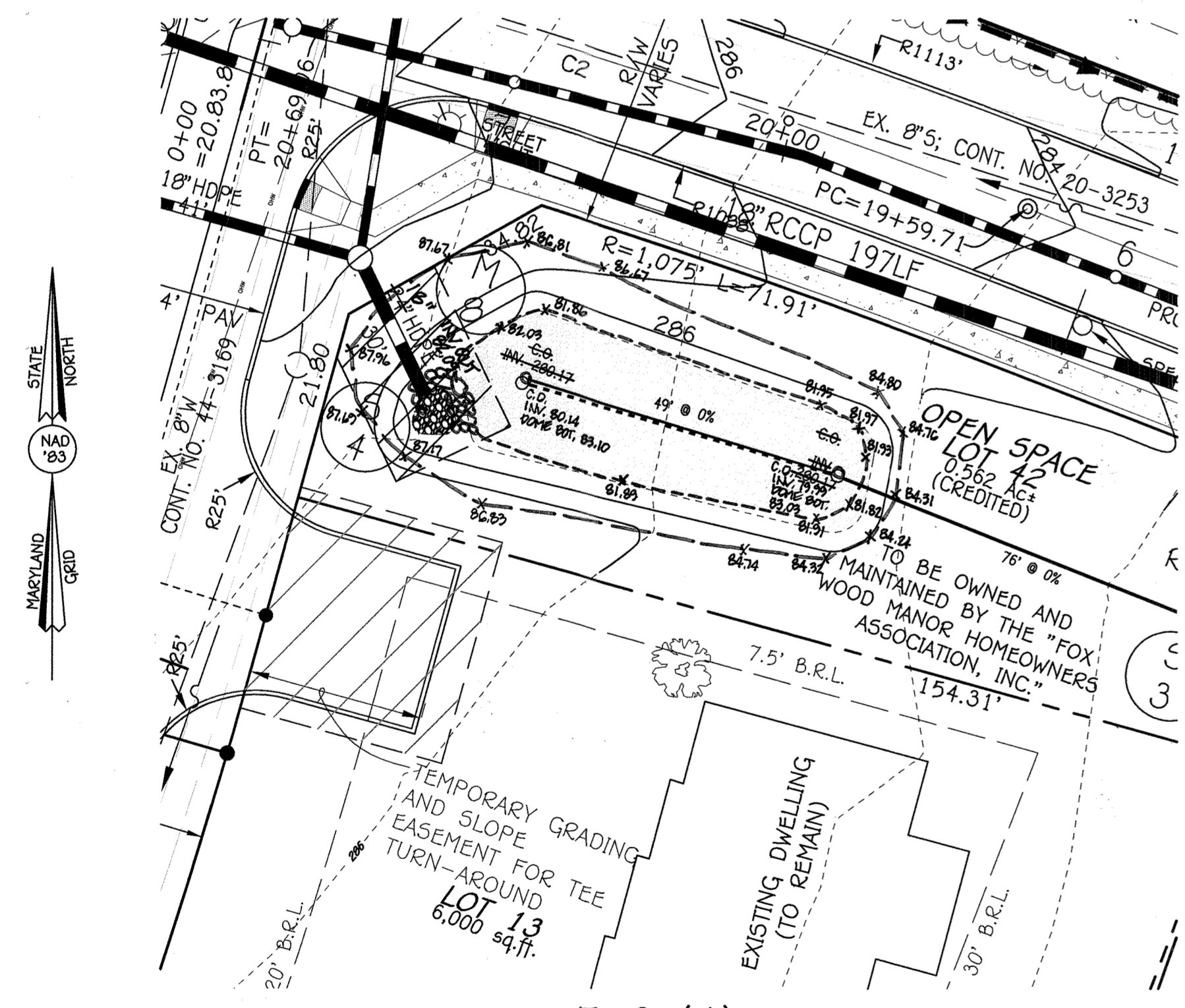
F-6 (1)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 42,521 SqFt.
 FILTER AREA: 1,977 SqFt.
 ELEVATION: 273.00
 PERIMETER: 307'
 WEIR ELEVATION: 274.00



M-6 (2)
 (MICRO BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 21,609 SqFt.
 FILTER AREA: 1,172 SqFt.
 ELEVATION: 275
 PERIMETER: 150'
 WEIR ELEVATION: 276



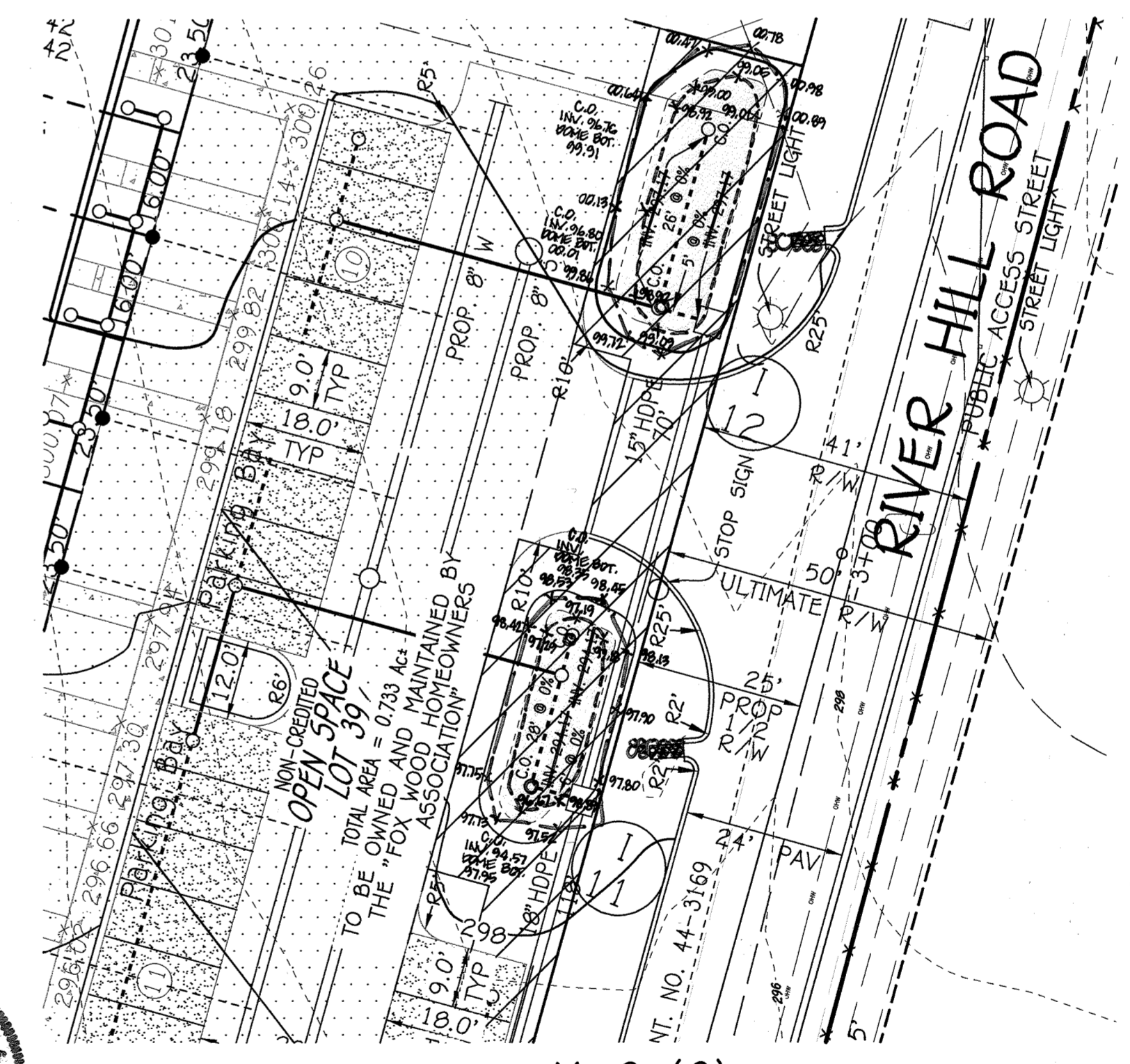
F-6 (3)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 59,363 SqFt.
 FILTER AREA: 2,299 SqFt.
 ELEVATION: 279.00
 PERIMETER: 320'
 WEIR ELEVATION: 280.00



F-6 (4)
 (BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 49,470 SqFt.
 FILTER AREA: 1,312 SqFt.
 ELEVATION: 283
 PERIMETER: 151'
 WEIR ELEVATION: 284



M-6 (5)
 (MICRO BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 6,879 SqFt.
 FILTER AREA: 606 SqFt.
 ELEVATION: 289
 PERIMETER: 99'
 WEIR ELEVATION: 290



M-6 (6)
 (MICRO BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 4,195 SqFt.
 FILTER AREA: 319 SqFt.
 ELEVATION: 297
 PERIMETER: 79'
 WEIR ELEVATION: 298

M-6 (7)
 (MICRO BIO-RETENTION FACILITY)
 SCALE: 1" = 20'
 DRAINAGE AREA: 19,734 SqFt.
 FILTER AREA: 528 SqFt.
 ELEVATION: 299
 PERIMETER: 99'
 WEIR ELEVATION: 300

APPROVED: DEPARTMENT OF PUBLIC WORKS
 Chief, Bureau of Highways
 DATE: 12/18/2015

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development
 DATE: 12-11-15

Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2255

NO.	REVISIONS	DATE
1	REVISE SWM FACILITY NO. (1) AND SWM ACCESS DRIVE	10/21/16
2	REVISE TITLE BLOCK	6/29/17

OWNERS

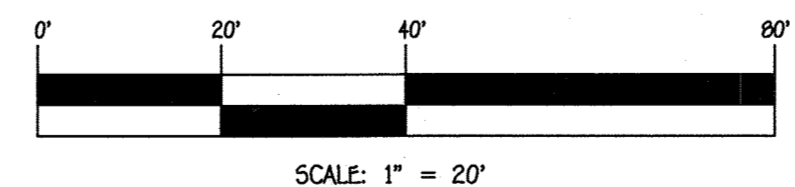
KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

MICHAEL R MARCELLINO
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 (443)-367-0422

BONNY A MARCELLINO
 THOMAS H MARCELLINO
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 (443)-367-0422

DEVELOPER

LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELLICOTT CITY, MARYLAND 21042
 (443)-367-0422



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 in accordance with the approved plans and specifications.

CHARLES J. CRAVO, P.E. NO. 19204
 DATE: 3/7/20

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

FRANK JOHN MANALANSAN II
 DATE: 11/6/15

STORMWATER MANAGEMENT DETAILS
FOX WOOD MANOR
 LOTS 1 THRU 6, 8 THRU 13, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4049-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 14 OF 24

AS-BUILT

Infiltration and Filter System Construction Specifications

Infiltration and filter systems either take advantage of existing permeable soils or create a permeable medium such as sand for WC, and Re v. In some instances where permeability is great, these facilities may be used for ap as well. The most common systems include infiltration trenches, infiltration basins, sand filters, and organic filters.

When properly planted, vegetation will thrive and enhance the functioning of these systems. For example, pre-treatment buffers will trap sediments that often are bound with phosphorus and metals. Vegetation planted in the facility will aid in nutrient uptake and water storage. Additionally, plant roots will provide arteries for stormwater to permeate soil for groundwater recharge. Finally, successful plantings provide aesthetic value and wildlife habitat making these facilities more desirable to the public.

Design Constraints:

- > Planting buffer strips of at least 20 feet will cause sediments to settle out before reaching the facility thereby reducing the possibility of clogging.
- > Determine areas that will be saturated with water and water table depth so that appropriate plants may be selected (hydrology will be similar to bioretention facilities, see figure A.5 and Table A.4 for planting material guidance).
- > Plants known to send down deep taproots should be avoided in systems where filter fabric is used as part of facility design.
- > Test soil conditions to determine if soil amendments are necessary.
- > Plants shall be located so that access is possible for structure maintenance.
- > Stabilize heavy flow areas with erosion control mats or sod.
- > Temporally divert flows from seeded areas until vegetation is established.
- > See Table A.5 for additional design considerations.

Bio-retention

Soil Bed Characteristics

The characteristics of the soil for the bioretention facility are perhaps as important as the facility location, size, and treatment volume. The soil must be permeable enough to allow runoff to filter through the media, while having characteristics suitable to promote and sustain a robust vegetative cover crop. In addition, much of the nutrient pollutant uptake (nitrogen and phosphorus) is accomplished through absorption and microbial activity within the soil profile. Therefore, soils must balance their chemical and physical properties to support biotic communities above and below ground.

The planting soil should be a sandy loam, loamy sand, loam (USDA), or a loam/sand mix (should contain a minimum 35 to 60% sand, by volume). The clay content for these soils should be less than 5% by volume (Environmental Quality Resources (EQR), 1996; Engineering Technology Inc. and Biohabitats, Inc. (ETAB), 1993). Soils should fall within the SM, ML, SC classifications or the Unified Soil Classification System (USCS). A permeability of at least 1.0 feet per day (0.5"/hr) is required (a conservative value of 0.5 feet per day is used for design). The soil should be free of stones, stumps, roots, or other woody material over 1" in diameter. Brush or seeds from noxious weeds (e.g., Johnson Grass, Mugwort, Nutsedge, and Canada Thistle or other noxious weeds as specified under COMAR 15.08.01.05.) should not be present in the soils. Placement of the planting soil should be in 12 to 18 lifts that are loosely compacted (tamped lightly with a backhoe bucket or traversed by dozer tracks). The specific characteristics are presented in Table A.3.

Table A.3 Planting Soil Characteristics

Parameter	Value
pH range	5.2 to 7.00
Organic matter	1.5 to 4.0% (by weight)
Magnesium	35 lbs. per acre, minimum
Phosphorus (phosphate - P2O5)	75 lbs. per acre, minimum
Potassium (potash - K2O)	85 lbs. per acre, minimum
Soluble salts	500 ppm
Clay	0 to 5 %
Silt	30 to 55 %
Sand	35 to 60%

Mulch Layer

The mulch layer plays an important role in the performance of the bioretention system. The mulch layer helps maintain soil moisture and avoids surface sealing, which reduces permeability. Mulch helps prevent erosion, and provides a microenvironment suitable for soil biota at the mulch/soil interface. It also serves as a pretreatment layer, trapping the finer sediments, which remain suspended after the primary pretreatment.

The mulch layer should be standard landscape style, single or double shredded hardwood mulch or chips. The mulch layer should be well aged (stockpiled or stored for at least 12 months), uniform in color, and free of other materials, such as weed seeds, soil, roots, etc. The mulch should be applied to a maximum depth of three inches. Grass clippings should not be used as mulch material.

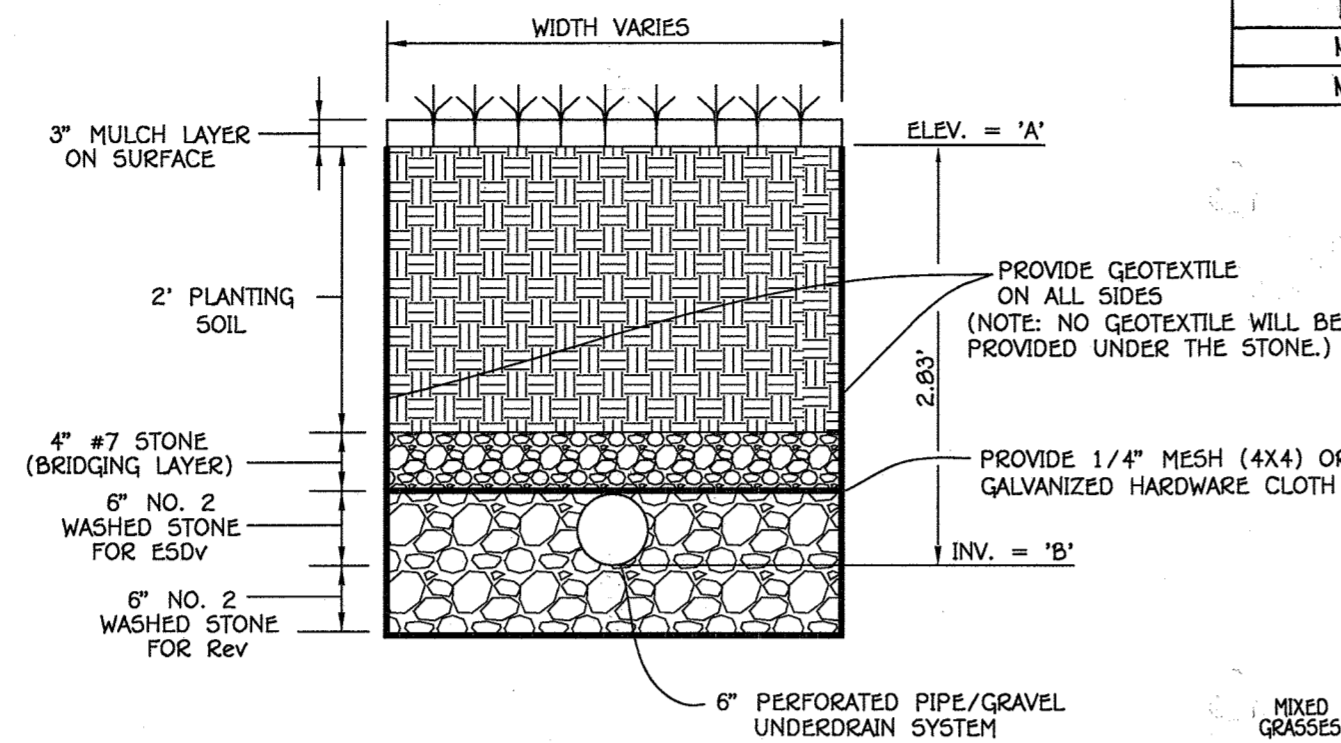
Planting Guidance

Plant material selection should be based on the goal of simulating a terrestrial forested community of native species. Bioretention simulates an upland-species ecosystem. The community should be dominated by trees, but have a distinct community of understory trees, shrubs and herbaceous materials. By creating a diverse, dense plant cover, a bioretention facility will be able to treat stormwater runoff and withstand urban stresses from insects, disease, drought, temperature, wind, and exposure. The proper selection and installation of plant materials is key to a successful system. There are essentially three zones within a bioretention facility (Figure A.5). The lowest elevation supports plant species adapted to standing and fluctuating water levels. The middle elevation supports plants that like drier soil conditions, but can still tolerate occasional inundation by water. The outer edge is the highest elevation and generally supports plants adapted to drier conditions. A sample of appropriate plant materials for bioretention facilities are included in Table A.4. The layout of plant material should be flexible, but should follow the general principals described in Table A.5. The objective is to have a system, which resembles a random, and natural plant layout, while maintaining optimal conditions for plant establishment and growth. For a more extensive bioretention plan, consult ETAB, 1993 or Claytor and Schueler, 1997.

OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-6) AND (F-6)

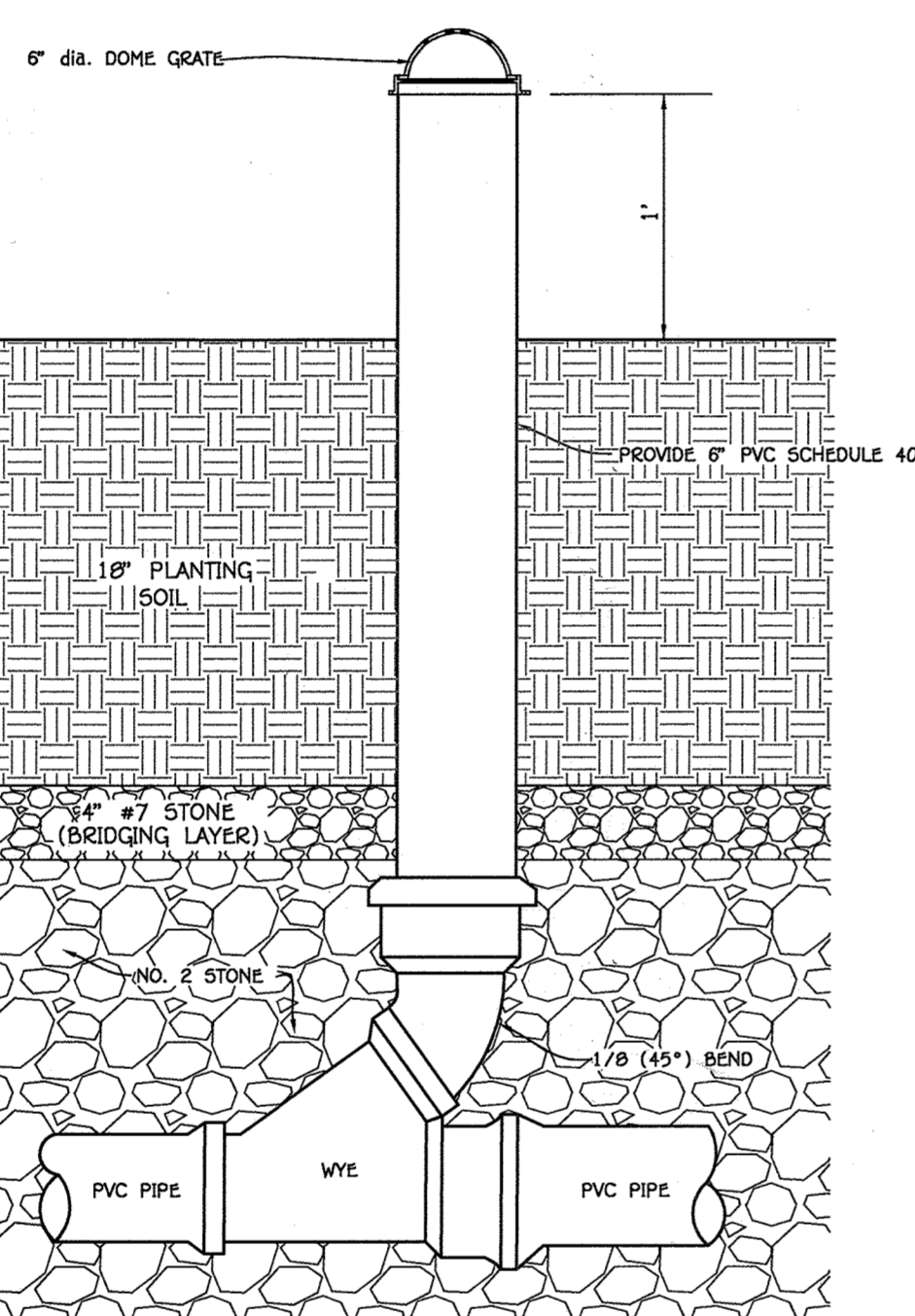
1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING.
2. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.
3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

FACILITY NO.	A	B
F-6 (1)	273.00	270.17
M-6 (2)	275.00	272.17
F-6 (3)	279.00	276.17
F-6 (4)	283.00	280.17
M-6 (5)	289.00	286.17
M-6 (6)	297.00	294.17
M-6 (7)	299.00	296.17
M-6 (8)	299.00	296.17
F-6 (9)	291.00	279.17
M-6 (10)	291.00	279.17
M-6 (11)	271.00	269.17

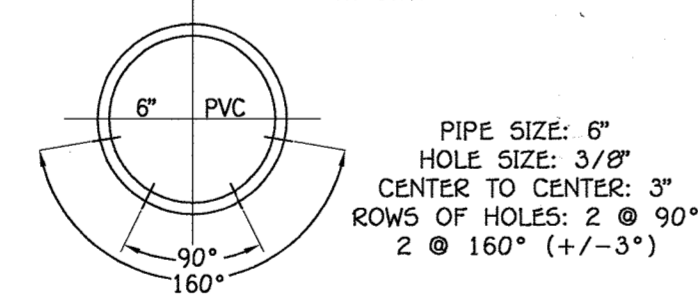


NOTE: THE BOTTOM OF EACH BIO-RETENTION FACILITY (M-6) SHALL BE ROTOTILLED PRIOR TO STONE INSTALLATION.

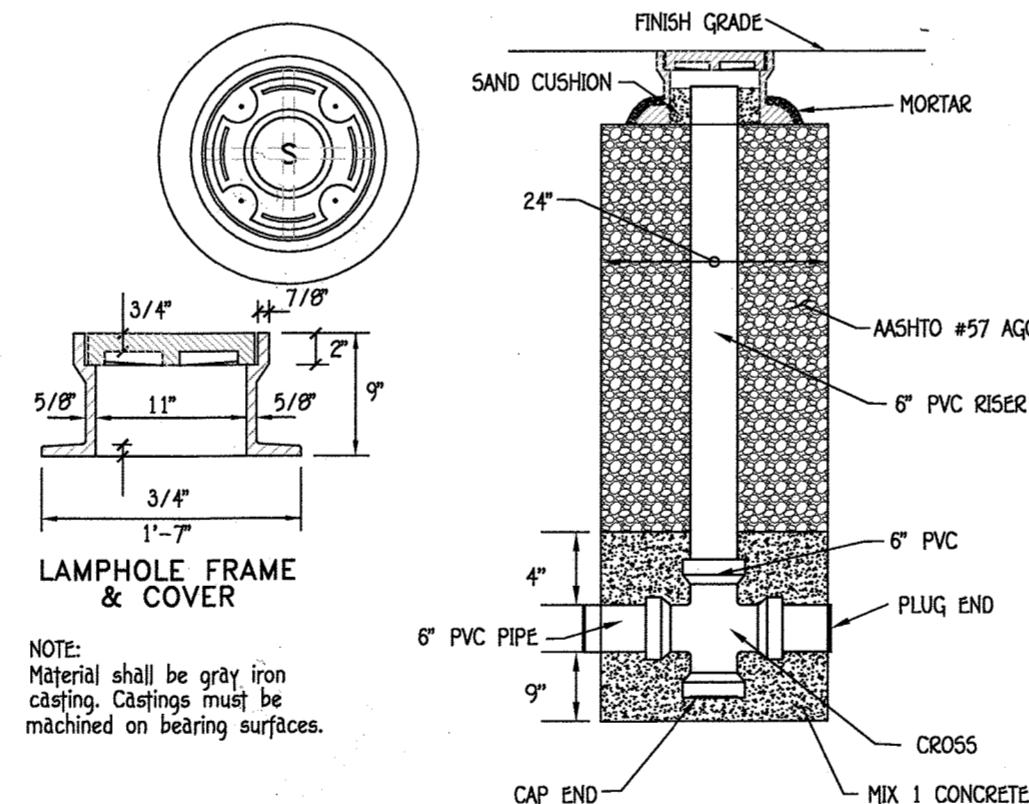
TYPICAL SECTION - BIO-RETENTION FACILITY (F-6)



TYPICAL CLEAN-OUT DETAIL



SCH40 PVC PERFORATED UNDERDRAIN PIPE DETAIL FOR HORIZONTAL DRAIN PIPE

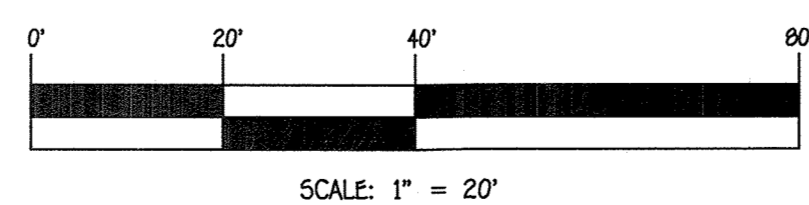


CLEANOUT/ WATER QUALITY SAMPLING PORT DETAIL

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 in accordance with the approved plans and specifications.

CHARLES J. GREGG, P.E. NO. 19804 Date 3/1/20



OWNERS

KENNETH ECKER
LISA MARCELLINO ECKER
9120 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

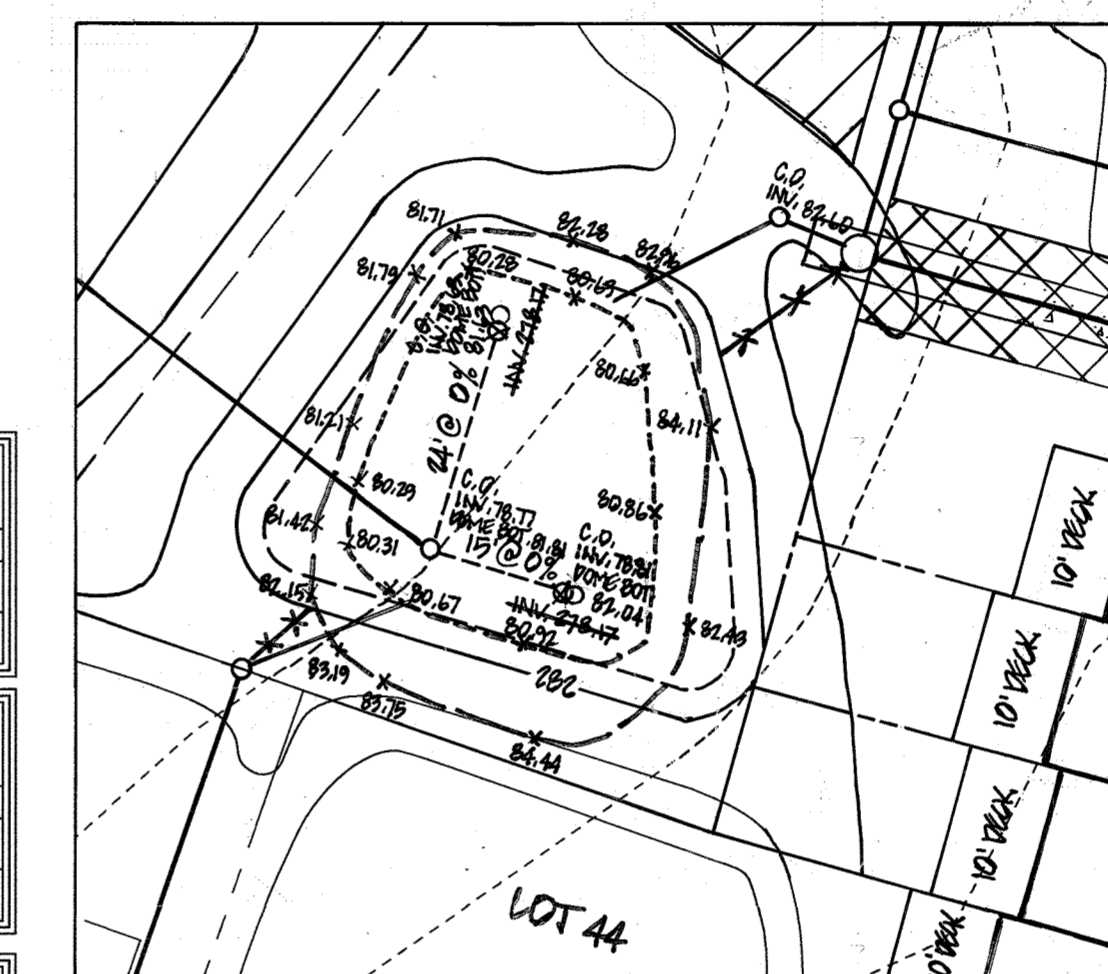
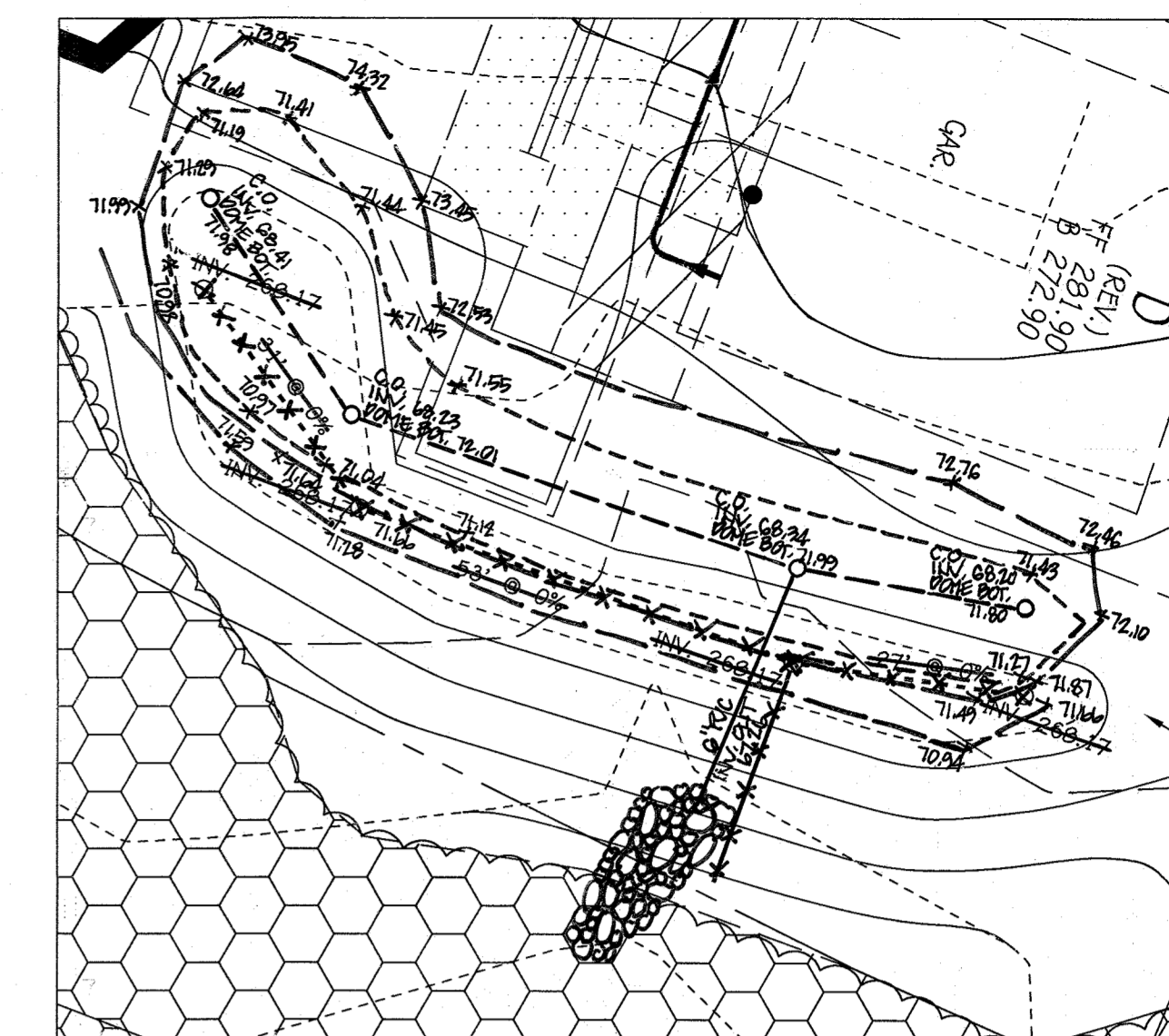
DEVELOPER

MICHAEL R MARCELLINO
9131 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

BONNY A MARCELLINO
THOMAS N MARCELLINO
SUITE 102
LAUREL, MARYLAND 20723-1781
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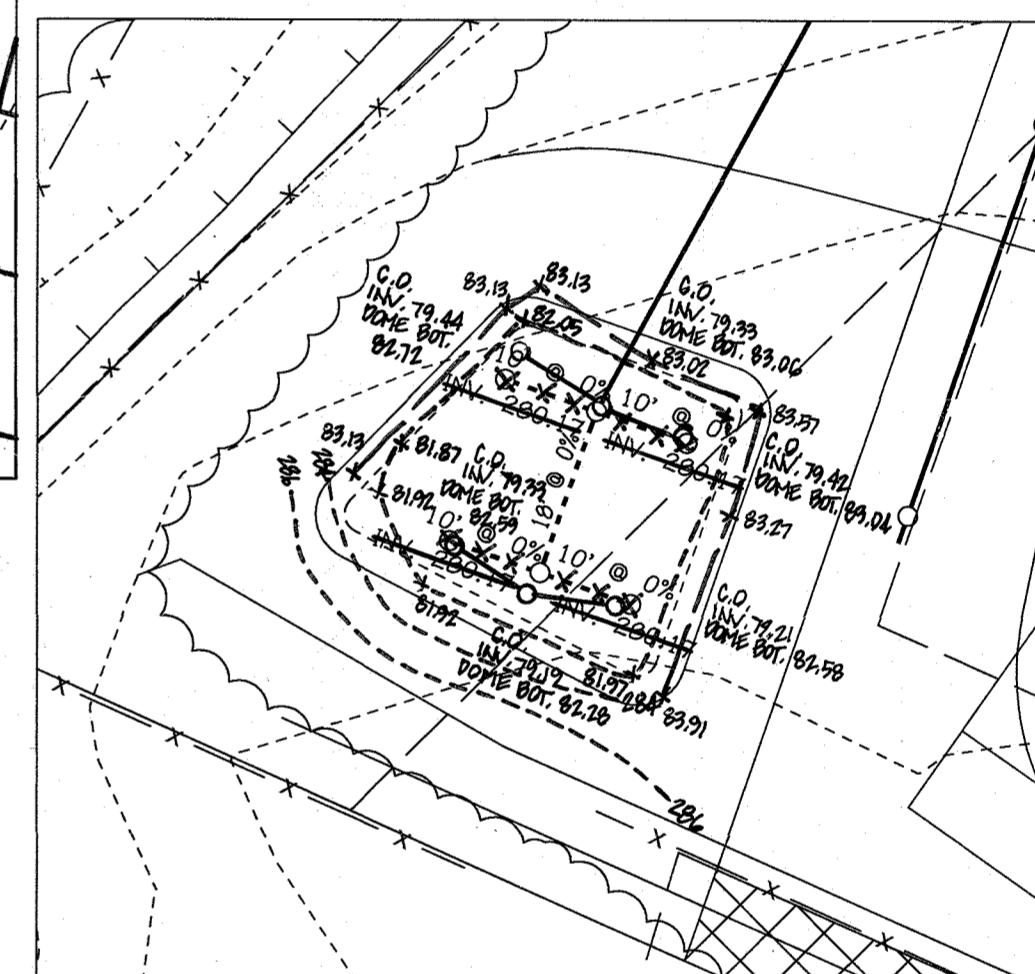
PRIVATE STORMWATER MANAGEMENT SIZING CHART
(FINAL DESIGN TO BE PROVIDED AT SITE DEVELOPMENT PLAN STAGE)

AREA ID	BIO 6\"/>								
F-6 (8)	96	48	884						
F-6 (9)	45	35	1,522						
M-6 (10)	58	29	590						
F-6 (11)	26	105	1,374						
A-2 (1)			1,620	1.90	22	66			9 X 7 X 5
A-2 (2)			1,782	2.42	17	89			9 X 7 X 5
A-2 (3)			1,937	2.31	10	84			9 X 7 X 5
A-2 (4)			1,782	1.24	20	101			9 X 7 X 5
M-5 (1b)									9 X 7 X 5
M-5 (1c)									9 X 7 X 5
M-5 (2a)									9 X 7 X 5
M-5 (2b)									9 X 7 X 5
M-5 (3a)									9 X 7 X 5
M-5 (3b)									9 X 7 X 5
M-5 (4a)									9 X 7 X 5
M-5 (4b)									9 X 7 X 5



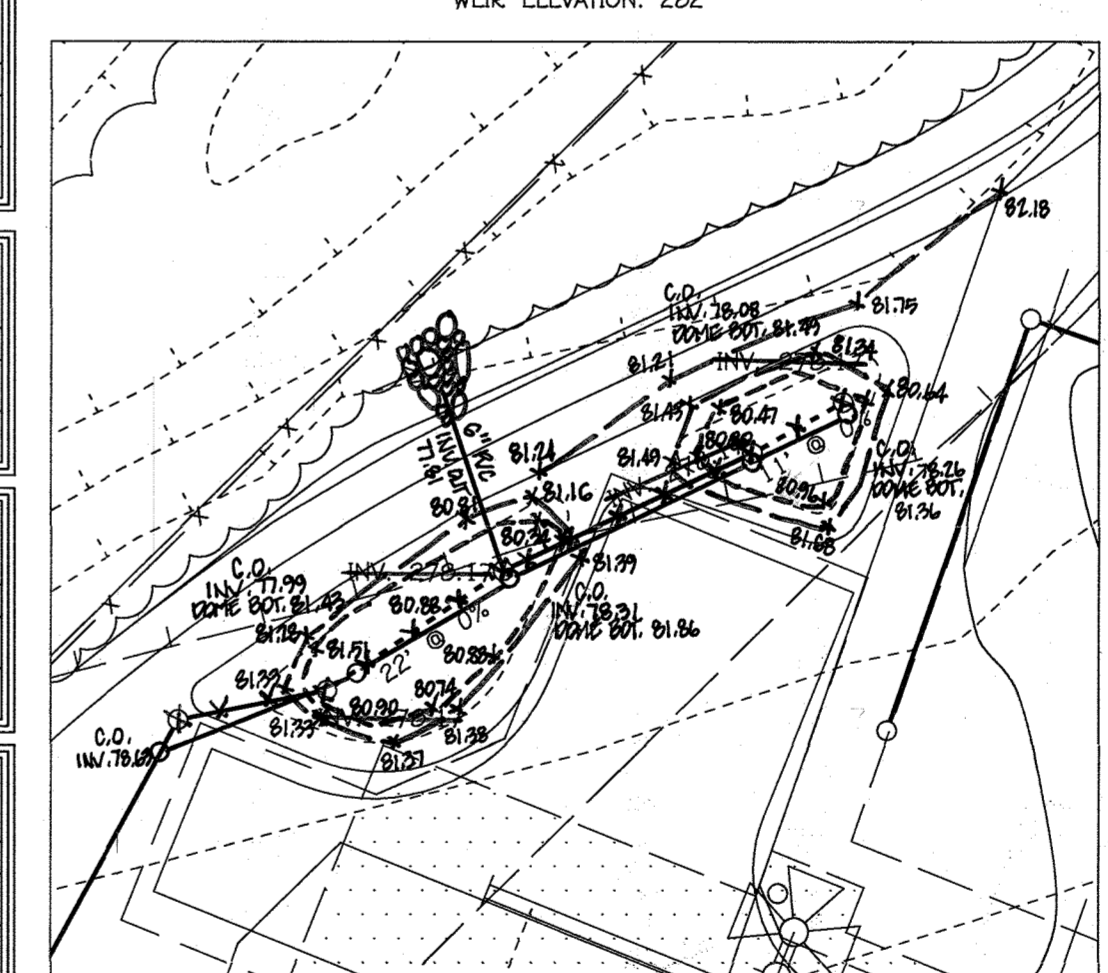
NOTE:
FINAL DESIGN OF STORMWATER MANAGEMENT TO BE PROVIDED AT SDP STAGE OF PROJECT

F-6 (9)
(BIO-RETENTION FACILITY)
SCALE: 1" = 20'
DRAINAGE AREA: 26,340 SqFt.
FILTER AREA: 1,522 SqFt.
ELEVATION: 281
PERIMETER: 191
WEIR ELEVATION: 282



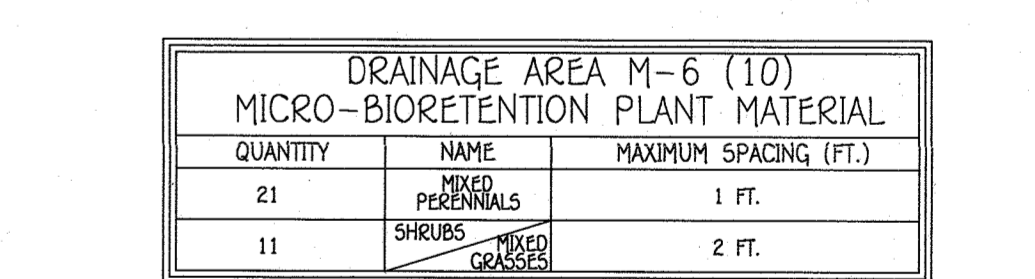
NOTE:
FINAL DESIGN OF STORMWATER MANAGEMENT TO BE PROVIDED AT SDP STAGE OF PROJECT

F-6 (8)
(BIO-RETENTION FACILITY)
SCALE: 1" = 20'
DRAINAGE AREA: 30,499 SqFt.
FILTER AREA: 884 SqFt.
ELEVATION: 283
PERIMETER: 117
WEIR ELEVATION: 284



NOTE:
FINAL DESIGN OF STORMWATER MANAGEMENT TO BE PROVIDED AT SDP STAGE OF PROJECT

M-6 (10)
(BIO-RETENTION FACILITY)
SCALE: 1" = 20'
DRAINAGE AREA: 16,360 SqFt.
FILTER AREA: 590 SqFt.
ELEVATION: 281
PERIMETER: 144
WEIR ELEVATION: 282



NOTE:
FINAL DESIGN OF STORMWATER MANAGEMENT TO BE PROVIDED AT SDP STAGE OF PROJECT

M-6 (11)
(BIO-RETENTION FACILITY)
SCALE: 1" = 20'
DRAINAGE AREA: 30,499 SqFt.
FILTER AREA: 884 SqFt.
ELEVATION: 283
PERIMETER: 117
WEIR ELEVATION: 284

STORMWATER MANAGEMENT NOTES AND DETAILS

FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 22, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4849-D

ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 15 OF 24



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

Frank John Manalansan II DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development

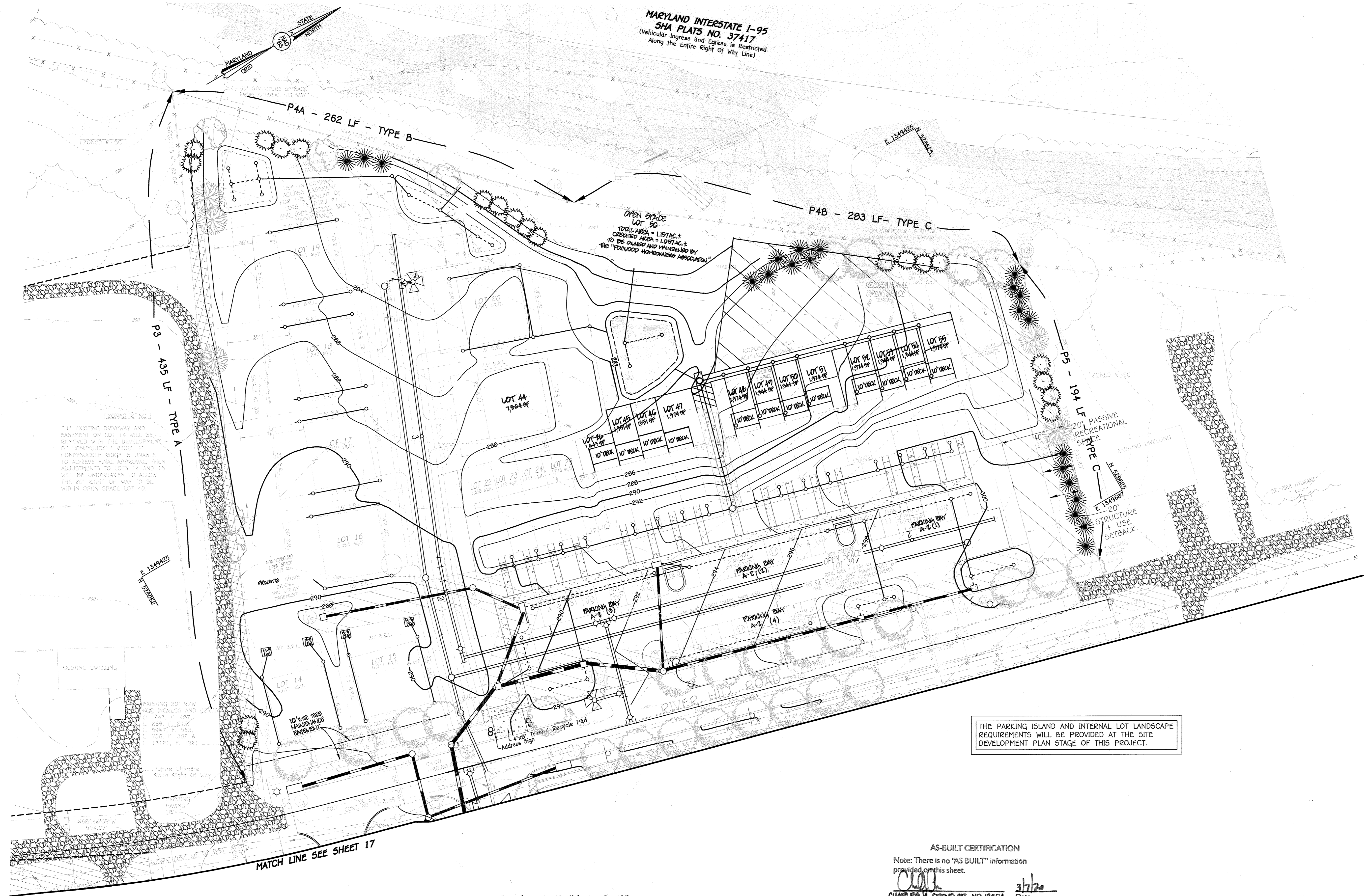
APPROVED: DEVELOPMENT ENGINEERING DIVISION
Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21046
(410) 461-2295

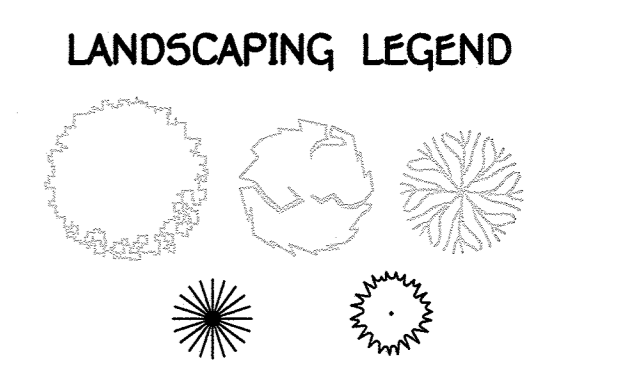
NO.	REVISIONS	DESCRIPTION	DATE
1	ADD SWM FACILITIES AND CHART		10/21/16
2	REVISE TITLE BLOCK AND M-6 (8)		12-11-15

AS-BUILT

MARYLAND INTERSTATE I-95
SHA PLATS NO. 37417
(Vehicular ingress and egress is restricted
Along the Entire Right of Way Line)



LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
+	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CROPPED OPEN SPACE
---	LIST OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	3% SOILS
---	1% SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	DRYWELL (H-5)-TYPICAL
---	BIO RETENTION FACILITY (F-3) OR (F-4) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SEWER EASEMENT
---	EXISTING FOREST TO BE REMOVED



THE EXISTING DRIVEWAY AND EASEMENT ON LOT 14 WILL BE REMOVED WITH THE DEVELOPMENT OF HORIZONTAL CURB. IF HORIZONTAL CURB IS UNABLE TO ACHIEVE FINAL APPROVAL, THEN ADJUSTMENTS TO LOTS 14 AND 15 WILL BE UNDERTAKEN TO ALLOW THE 20' RIGHT OF WAY TO BE WITHIN OPEN SPACE LOT 4G.

THE PARKING ISLAND AND INTERNAL LOT LANDSCAPE REQUIREMENTS WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE OF THIS PROJECT.

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 12/20/15
Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 12-20-15
Chief, Division of Land Development

[Signature] 12-11-15
Chief, Development Engineering Division

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

NO.	DESCRIPTION	DATE
1	REMOVE SIGN FACILITY & ADD TREE MAINTENANCE EASEMENT	10/21/16
2	REMOVE TREE BLOCK, LOT LINES, LOT NUMBERS & LOT AREAS	6/29/17

Developer's/Builder's Certificate

I/We certify that the landscaping shown on this plan will be done according to Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of Landscape Installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

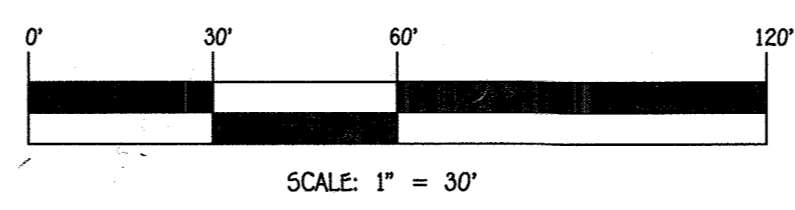
[Signature] 11/6/15
Developer/Builder Date

OWNERS
KENNETH ECKER
LISA MARCELLINO - ECKER
9120 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

MICHAEL R MARCELLINO
9131 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

BONNY A MARCELLINO
THOMAS M MARCELLINO
9141 RIVER HILL RD
SUITE 102
LAUREL, MARYLAND 20723-1781
(443)-367-0422

AS-BUILT CERTIFICATION
Note: There is no "AS BUILT" information provided on this sheet.
[Signature] 11/16/15
CHARLES S. CROON, P.E., NO. 19204 Date

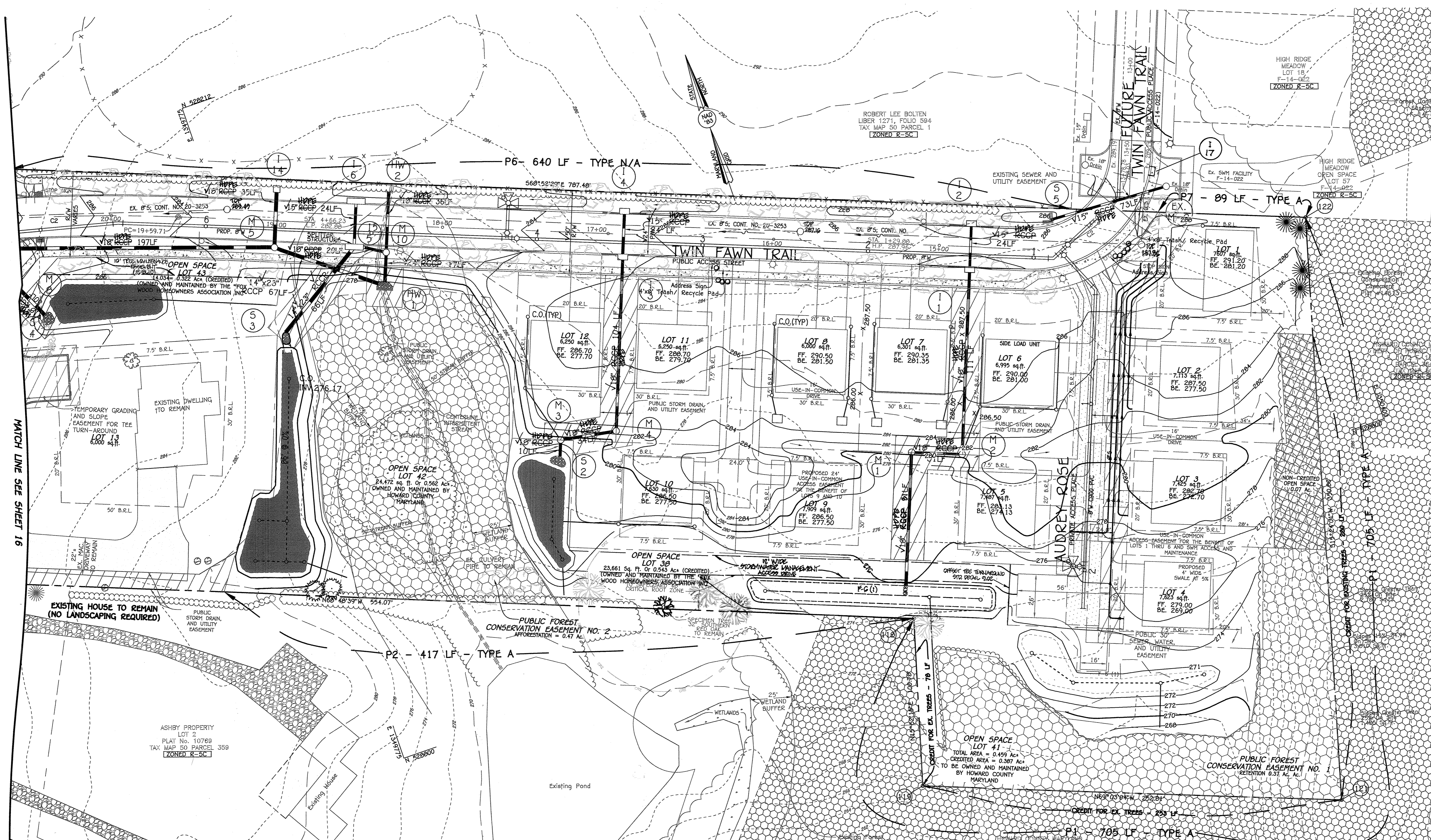


PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
[Signature] 11/6/15
FRANK JOHN MANALANSAN II DATE

LANDSCAPE PLAN
FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
AND OPEN SPACE LOTS 5B, 5C, 5D, 5E, 5F & 5G

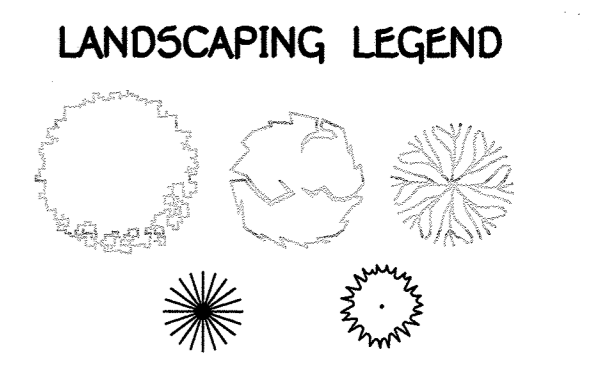
PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
5P-14-003, CONTRACT #24-4849-0
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 16 OF 24 F-15-053

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



LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
X 362.2	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CREDITED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	BY SOILS
---	C SOILS
---	ERODIBLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DITCH
---	NON ROOFTOP DISCONNECTION (N-R)
---	DRYWELL (M-S)-TYPICAL
---	BIO RETENTION FACILITY (F-S) OR (M-S) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE-IN-COMMON ACCESS EASEMENT
---	EXISTING ROAD EASEMENT
---	EXISTING FOREST TO BE REMOVED



Developer's/Builder's Certificate

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

[Signature] *[Signature]*
 Developer/Builder Date

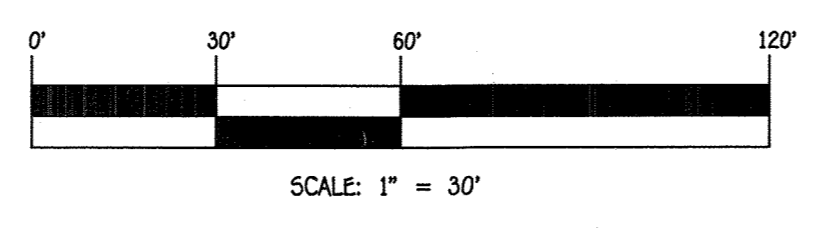
APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 12/8/2015
 Chief, Bureau of Highways DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 12-21-15
 Chief, Division of Land Development DATE

[Signature] 12-11-16
 Chief, Development Engineering Division DATE

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELICOTT CITY, MARYLAND 21046
 (410) 461-2295

NO.	REVISIONS	DESCRIPTION	DATE
1	ADD I-17 INLET, TREE MAINTENANCE EASEMENT & SWM FACILITY	12/21/16	
2	REVISE TITLE BLOCK	6/20/17	



OWNERS

KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

MICHAEL R MARCELLINO
 9131 RIVER HILL RD
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BONNY A MARCELLINO
 THOMAS M MARCELLINO
 SUITE 102
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

DEVELOPER

LAND DESIGN & DEVELOPMENT
 5300 DORSEY HALL DRIVE
 SUITE 102
 ELICOTT CITY, MARYLAND 21042
 (443)-367-0422



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] 3/7/20
 CHARLES J. CROW, No. 19324 Date



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

[Signature] 11/6/16
 FRANK JOHN HAMALANSAN II DATE

LANDSCAPE PLAN
FOX WOOD MANOR
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 30, 31, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4049-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
 SHEET 17 OF 24 F-15-053

AS-BUILT

NOTES

1. THE PERIMETER LANDSCAPE OBLIGATION IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY IN THE AMOUNT OF \$13,550.00 BASED ON (20) SHADE TREES @ \$300/SHADE TREE, 40 EVERGREEN TREES @ \$150/EVERGREEN TREE, AND (13) SHRUBS @ \$30/SHRUB SHALL BE BONDED AS PART OF THE DPW DEVELOPERS AGREEMENT.
2. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
3. THE OWNER, TENANT, AND/OR THESE AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BENCHES, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DISEASE, INSECT, DEFOLIATION, BOOMS, SUN SCALD, BURNING, BRUISES OF THE BARK, PLANT TISSUE, INSECT FEED DAMAGE, AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIVE DEFOLIATIONS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FREELY DUG, NO HEALD-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR MULTIPLE-RESIDENTIAL DEVELOPMENT" (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, LATEST EDITION, INCLUDING ALL AGENDA.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "PESS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES. DAMAGE TO EXISTING STRUCTURE AND UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

PROTECTION OF EXISTING VEGETATION TO REMAIN SHALL BE ACCOMPLISHED BY THE TEMPORARY INSTALLATION OF 4 FOOT HIGH SNOW FENCE OR BLAZE ORANGE SAFETY FENCE AT THE DOW LINE.

CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE. ALL PLANTING IS TO BE COMPLETED WITHIN THE GROWING SEASON OF COMPLETION OF SITE CONSTRUCTION.

BD SHALL BE BASED ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.

PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN TAKE PRECEDENCE.

ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE.

PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE. ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HERRIS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (NANO) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRAVED AND SEEDED. THIS PLAN IS INTENDED FOR LANDSCAPE USE ONLY. SEE OTHER PLAN SHEETS FOR MORE INFORMATION ON GRADING, SEEDMENT CONTROL, LAYOUT, ETC.

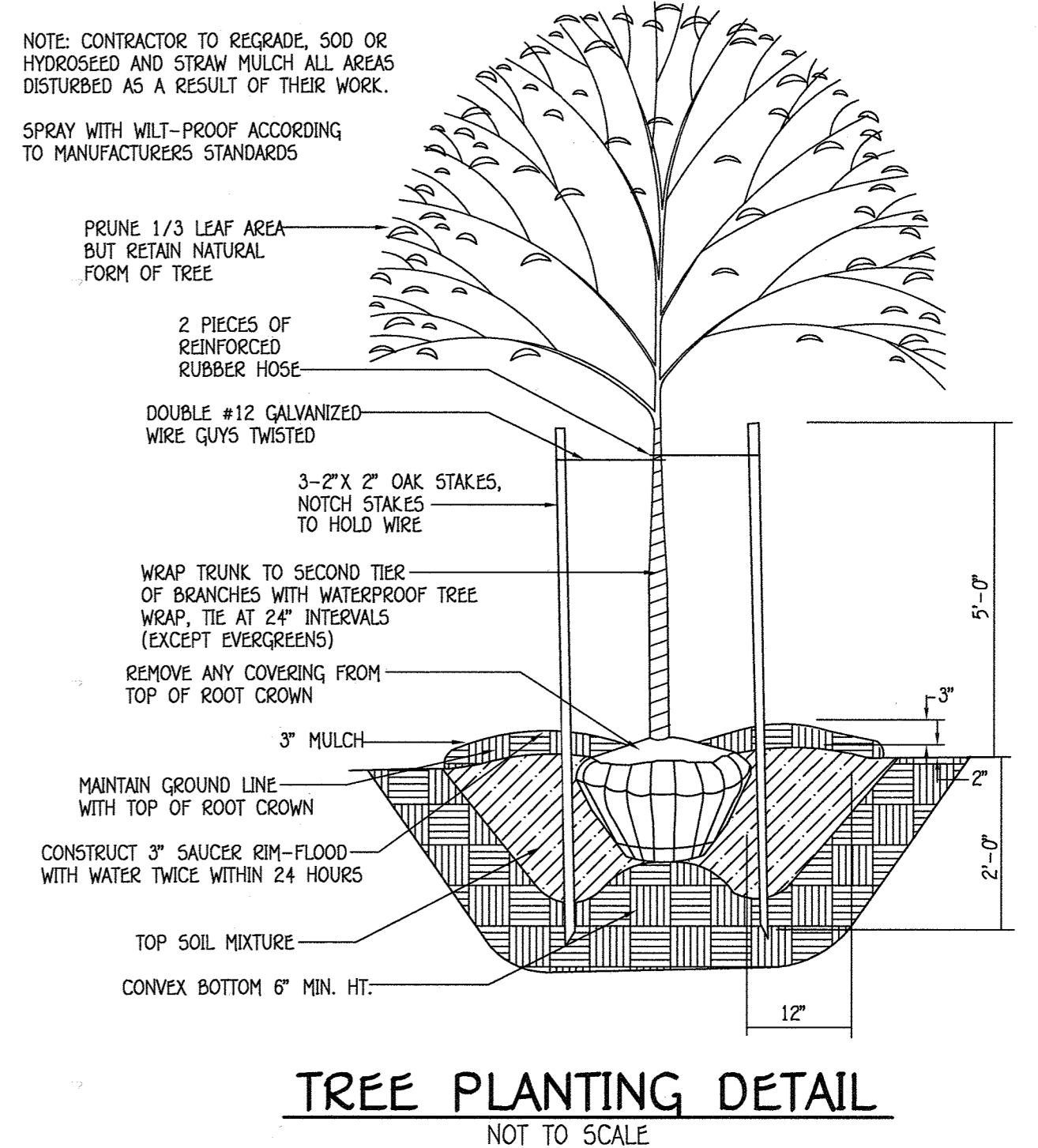
SCHEDULE A - PERIMETER LANDSCAPE EDGE												
PERIMETER CATEGORY	1	2	3	4A	4B	5	6	7	TRASH	TRASH	TRASH	TOTAL
ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO ROADWAY (SFD SIDE TO ROW)	ADJACENT TO ROADWAY (SFA ROW TO ROW)	SFA ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO PERIMETER PROPERTIES (ROW TO SFD)	ADJACENT TO PERIMETER PROPERTIES (ROW TO SFD)	ADJACENT TO RIVER HILL ROAD	ADJACENT TO LOTS 8-11 UIC DRIVE	ADJACENT TO LOT 1		
LANDSCAPE TYPE	A	A	A	B	C	C	A	A				
LINEAR FEET OF PERIMETER	705 L.F.	417 L.F.	435 L.F.	262 L.F.	283 L.F.	194 L.F.	640 L.F.	89 L.F.				
CREDIT FOR EXISTING VEGETATION (LINEAR FEET (LF) OF CREDIT REMAINING PERIMETER (LF))	611 LF OF EX. TREES 94 LF REMAINING	N/A	N/A	N/A	97 LF OF EX. TREES 186 LF REMAINING	N/A	N/A	N/A				
NUMBER OF PLANTS REQUIRED	2 (97/60' = 1.6 OR 2)	7 (417/60' = 7)	7 (435/60' = 7.3 OR 7)	5/7 (262/60' = 4.4 OR 5) (186/40' = 4.7 OR 5)	5/9 (283/40' = 7.1 OR 8) (186/20' = 9.3 OR 10)	5/10 (194/40' = 4.9 OR 5) (194/20' = 9.7 OR 10)	N/A	1 (89/60' = 1.48 OR 1)				32 26
CREDIT FOR EXISTING VEGETATION (SHADE TREES)	0	1	0	0	0	0	0	0				1
SMALL/MEDIUM DECIDUOUS OR EVERGREEN TREES (2:1 SUBSTITUTION)	0	0	0	0	0	0	0	0				0
NUMBER OF PLANTS PROVIDED (SHADE TREES)	1	5	5	3	4	2	0	2	0	0	0	20
SMALL/MEDIUM DECIDUOUS OR EVERGREEN TREES (2:1 SUBSTITUTION)	2	2	4	11	11	16	0	2	0	0	0	48
SHRUBS (10:1 SUBSTITUTION)									4	4	5	13

PERIMETER LANDSCAPE PLANT LIST			
QTY.	KEY	NAME	SIZE
4		ACER RUBRUM 'ARMSTRONG' (ARMSTRONG COLUMNAR RED MAPLE)	2.5"-3" CAL. FULL CROWN, B&B
7		GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL' (IMPERIAL THORNLESS HONEYLOCUST)	2.5"-3" CAL. FULL CROWN, B&B
9		TILIA CODATA 'GREENSPIRE' (GREENSPIRE LITTLELEAF LINDEN)	2.5"-3" CAL. FULL CROWN, B&B
22		ILEX X 'NELLIE R. STEVENS' (NELLIE STEVENS HOLLY)	5'-6" HT. B&B
26		THUJA STANDISHII X PUCATA (GREEN GIANT ARBORVITAE)	5'-6" HT. B&B
13		TAXUS MEDIA 'HICKSII' (HICKS' YEW)	2.5"-3" HT. CONT/B&B

TOTAL: 20 SHADE TREES, 48 EVERGREEN TREES, 13 SHRUBS

STREET TREE PLANTING SCHEDULE				
SYMBOL	ROAD NAME	TYPE & QTY.	SIZE	COMMENTS
	TWIN FAWN TRAIL	GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL' (IMPERIAL THORNLESS HONEYLOCUST) 36 TREES (41482 LF/40' = 35.5)	2.5"-3" CAL.	SPACING 40' APART
	RIVER HILL ROAD	ACER RUBRUM 'ARMSTRONG' (ARMSTRONG COLUMNAR RED MAPLE) 23 TREES (4904 LF/40' = 22.6)	2.5"-3" CAL.	SPACING 40' APART (SINCE ADEQUATE ROW EXISTS ALONG THE BOLTON PROPERTY, STREET TREES HAVE BEEN PLACED IN THE ROW ALONG THE BOLTON PROPERTY)

TOTAL QUANTITY = 59 STREET TREES
* LENGTH EXCLUDES AREAS WITHIN INTERSECTIONS.



TREE PLANTING DETAIL
NOT TO SCALE

Developer's/Builder's Certificate

I/We certify that the landscaping shown on this plan will be done according to Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a letter of notice of Landscape Installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Developer/Builder
Date: 11/5/15

APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways
Date: 12/8/2015

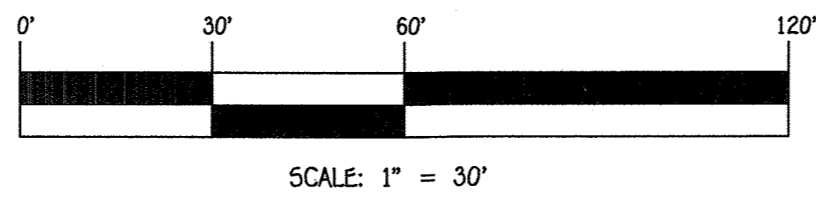
APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development
Date: 12-21-15

Chief, Development Engineering Division
Date: 12-11-15

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

REVISIONS		
NO.	DESCRIPTION	DATE
1	REMOVE TITLE BLOCK	6/22/17



OWNERS

KENNETH ECKER
LISA MARCELLINO - ECKER
9120 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422

MICHAEL R MARCELLINO
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BONNY A MARCELLINO
THOMAS M MARCELLINO
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SUITE 102
ELLCOTT CITY, MARYLAND 21042
(443)-367-0422

DEVELOPER

LAND DESIGN & DEVELOPMENT
5300 DORSEY HALL DRIVE
SUITE 102
ELLCOTT CITY, MARYLAND 21042
(443)-367-0422

AS-BUILT CERTIFICATION
Note: There is no "AS BUILT" information provided on this sheet.

MICHAEL J. CROW, P.E., No. 19224
Date: 3/7/20



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/15.

FRANK JOHN MANALANSAN I
Date: 11/5/15

LANDSCAPE NOTES AND DETAILS

FOX WOOD MANOR
LOTS 1 THRU 6, 0 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
AND OPEN SPACES LOTS 30, 32, 41 THRU 43 & 56

PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
SP-14-003, CONTRACT #24-4849-D

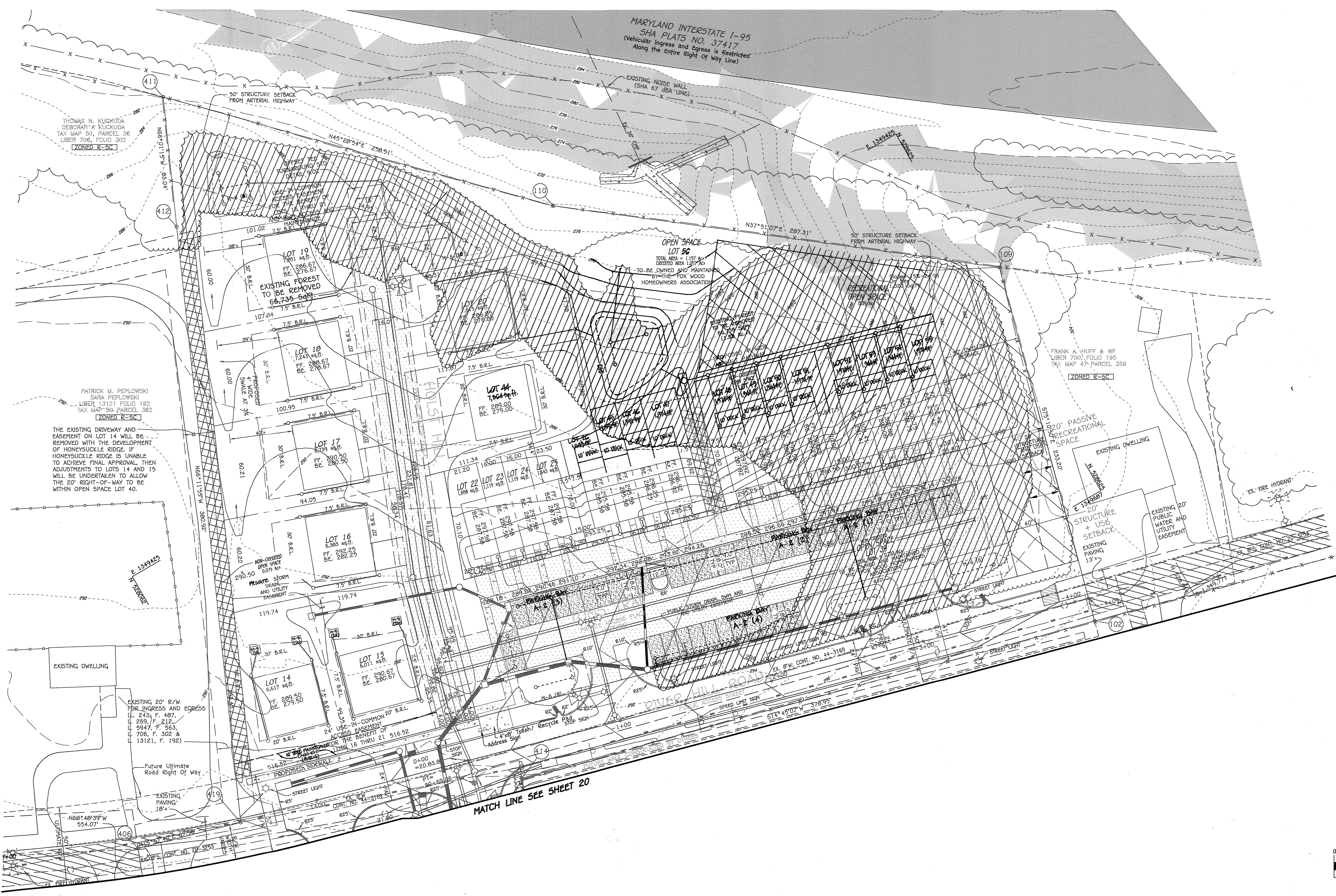
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 18 OF 24 F-15-053

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

MARYLAND INTERSTATE I-95
SHA PLATS NO. 37417
(Vehicular Ingress and Egress is Restricted
Along the Entire Right Of Way Line)

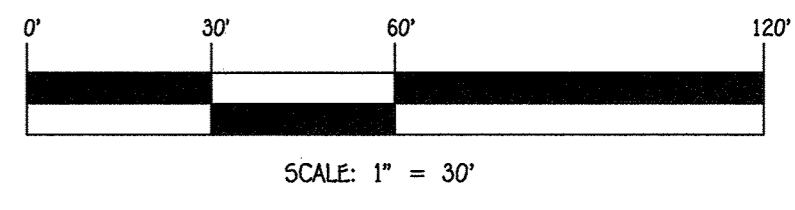
LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
X	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
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---	NON-CREATED OPEN SPACE
---	LIMIT OF DISTURBANCE
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---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	B' SOILS
---	C' SOILS
---	PROBABLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	DETENTION (N-3)-TYPICAL
---	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SEGA EASEMENT
---	EXISTING FOREST TO BE REMOVED



THE EXISTING DRIVEWAY AND EASEMENT ON LOT 14 WILL BE REMOVED WITH THE DEVELOPMENT OF HONEYSUCKLE RIDGE. IF HONEYSUCKLE RIDGE IS UNABLE TO ACHIEVE FINAL APPROVAL, THEN ADJUSTMENTS TO LOTS 14 AND 15 WILL BE UNDERTAKEN TO ALLOW THE 20' RIGHT-OF-WAY TO BE WITHIN OPEN SPACE LOT 40.

OPEN SPACE LOT 56
TOTAL AREA = 1,197 sq. ft.
DEDICATED AREA 1,197 sq. ft.
TO BE OWNED AND MAINTAINED BY THE FOX WOOD HOMEOWNERS ASSOCIATION

FRANK A. HUFF & WF
LIBER 700, FOLIO 195
TAX MAP 47 PARCEL 359
ZONED R-5C



APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 12/8/15
Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 12-21-15
Chief, Division of Land Development

[Signature] 12-11-15
Chief, Development Engineering Division

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CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
(410) 461-2995

REVISIONS		
NO.	DESCRIPTION	DATE
1	REVISE SWM FACILITY & ADD TREE MAINTENANCE EASEMENT	10/01/16
2	REVISE TREE BLOCK, LOT LINES, LOT NUMBERS & LOT AREAS	09/29/17

OWNERS

KENNETH ECKER LISA MARCELLINO - ECKER 9120 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	MICHAEL R MARCELLINO 9131 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	BONNY A MARCELLINO THOMAS M MARCELLINO 9141 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422
---	---	--

AS-BUILT CERTIFICATION
Note: There is no "AS BUILT" information provided on this sheet.
[Signature] 3/7/20
CHARLES J. CREW, P.E., 1/17, 1970/4
Date

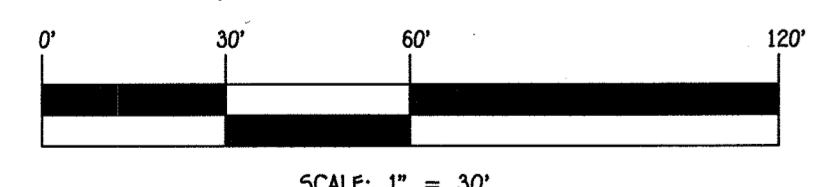
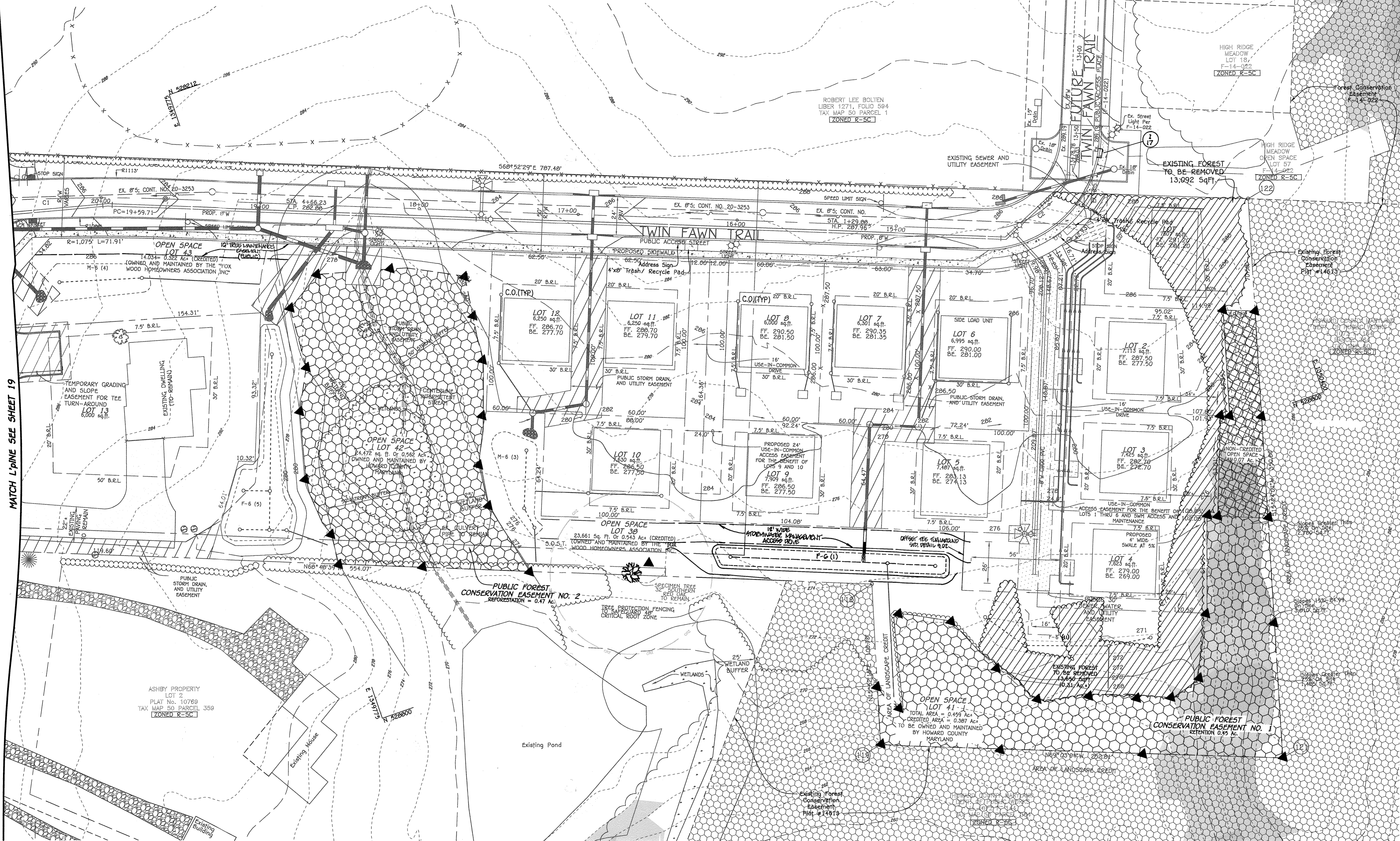
DEVELOPER
LAND DESIGN & DEVELOPMENT
5300 DORSEY HALL DRIVE
SUITE 102
ELICOTT CITY, MARYLAND 21042
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FOREST CONSERVATION PLAN
FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
AND OPEN SPACE LOTS 30, 39, 41 THRU 43 & 56
PREVIOUS FILE NUMBERS: 5DP-05-067, ECP-13-074,
SP-14-003, CONTRACT #24-4849-D
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30" DATE: NOVEMBER 4, 2015
SHEET 19 OF 24 F-15-053

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

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
X 300.2	SPOT ELEVATION
---	PROPOSED STORM DRAIN PIPE
---	PROPOSED SEWER
---	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CREDITED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SALT FENCE
---	SALT FENCE
---	15-30% SLOPES
---	25% OR GREATER SLOPES
---	1' SOILS
---	2' SOILS
---	PROBABLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DIVIDE
---	NON ROOFTOP DISCONNECTION (N-2)
---	ORNTL (N-3)-TYPICAL
---	810 RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SEWER EASEMENT
---	EXISTING FOREST TO BE REMOVED



APPROVED: DEPARTMENT OF PUBLIC WORKS
Macmillan 12/8/2015
 Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
W. Sullivan 12-21-15
 Chief, Division of Land Development

Chad E. Smith 12-11-15
 Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21104
 (410) 461-2955

NO.	REVISIONS	DATE
1	ADD INLET 1-17, TREE MAINTENANCE EASEMENT & REUSE SWM FACILITY (W)	12/21/15
2	REVISE THIS BLOCK	6/29/17

OWNERS

KENNETH ECKER
 LISA MARCELLINO - ECKER
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

MICHAEL R MARCELLINO
 9131 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

BONNY A MARCELLINO
 THOMAS M MARCELLINO
 9141 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

AS-BUILT CERTIFICATION
 Note: There is no "AS BUILT" information provided on this sheet.
Charles J. Crovo 3/7/20
 CHARLES J. CROVO, P.E., NO. 19204 Date



FOREST CONSERVATION PLAN
FOX WOOD MANOR
 LOTS 1 THRU 6, 8, 9, 14 THRU 20, 22 THRU 26, 44 THRU 55
 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
 SP-14-003, CONTRACT #24-4849-D
 ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1"=30' DATE: NOVEMBER 4, 2015
 SHEET 20 OF 24 F-15-053

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

Reforestation Note:

The reforestation obligation will be met within priority planting areas on the site. This includes floodplain, wetland and buffers. The final planting location and the planting specifications, details, and schedule will be provided on Final Forest Conservation Plan.

Forest Stand Data

Key	Community Type	Acreage (NTA)	Dominant Vegetation	General Condition	Retention Priority
F1	Oak/Poplar	1.7	Pinus virginiana, Fagus grandiflora, Liriodendron tulipifera, Quercus alba, Quercus velutina,	Good	Low
F2	Virginia Pine	0.8	Pinus virginiana, Prunus serotina, Sassafras albidum	Good	Moderate

See accompanying report for complete stand descriptions

FCE Planting Area - 0.47 acres

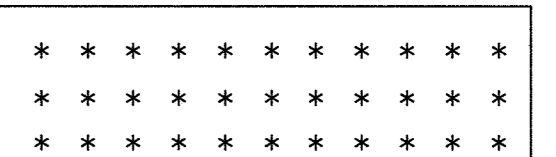
Qty	Species	Size	Spacing	Total FCA Units
10	Acer rubrum - Red maple	1" cal.	15' o.c.	
10	Quercus alba - White oak	1" cal.	15' o.c.	
20 Total 1" caliper trees (3.5 planting units per tree) = 70 Total FCA unit credit				
15	Acer rubrum - Red maple	2-3" whip	11' o.c.	
15	Cercia canadensis - Red bud	2-3" whip	11' o.c.	
15	Cornus florida - Flowering dogwood	2-3" whip	11' o.c.	
15	Liriodendron tulipifera - Tulip poplar	2-3" whip	11' o.c.	
15	Prunus serotina - Black cherry	2-3" whip	11' o.c.	
15	Robinia pseudo-acacia - Black locust	2-3" whip	11' o.c.	
13	Quercus alba - White oak	2-3" whip	11' o.c.	
13	Viburnum prunifolium - Blackhaw	2-3" whip	11' o.c.	
130 Total whip plantings (2 planting units per tree) = 260 Total FCA unit credit				
Total Unit Credit (260 + 70)				330

1" CAL TREES = 200/AERE (20 TREES/200 = 0.10 A.C.)
WHIPS w/shelters = 350/AERE = 350 x 0.37 AC = 130 WHIPS
3.5 Planting units = 1 - 1" Cal. Tree
2 Planting units = 1 Whip

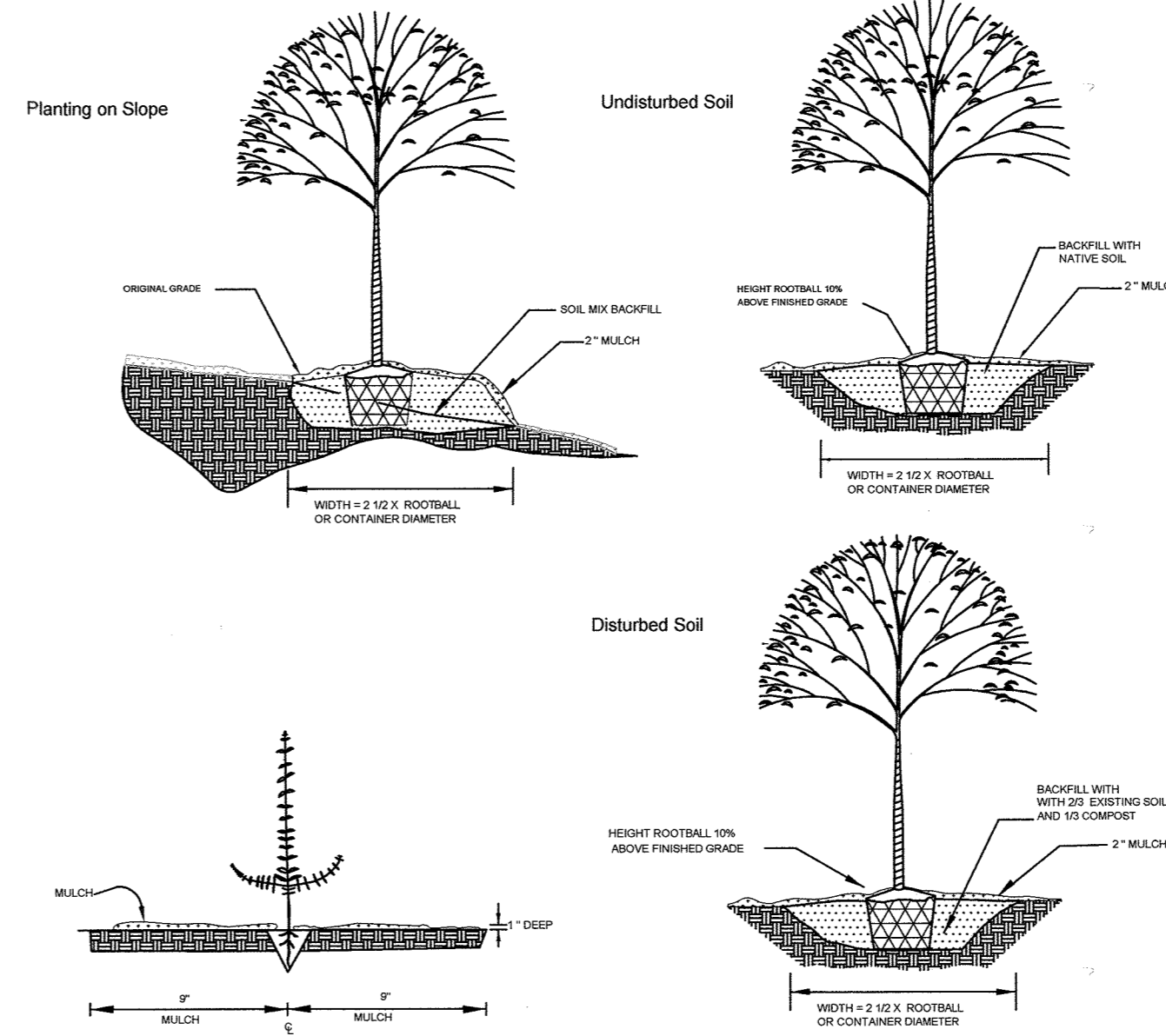
Planting Notes:

Planting units defined by the spacing requirements established in the FCA Manual. One planting unit is defined as 1 seedling or whip without shelter. The Manual states that 700 seedlings/whips without shelters are required per acre, or 350 whips w/shelters, or 200 1" caliper trees, or 100 2" caliper trees. By conversion it has been determined that 1 seedling or whip without shelter = 1 unit, whip with shelter = 2 units, 1" caliper tree = 3.5 units and 2" caliper tree = 7 units. The use of planting units simplifies the planting calculations when mixing stock size. ** - These species should not be planted within the wetland limits. 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 Foot Spacing. Whip plantings to be placed on 11 foot centers, shelters will be required per Howard County Policy. Planting shall be made in a curvilinear fashion along contour. The planting should avoid a grid appearance but should be spaced to facilitate maintenance. Mulch/rates/heavy brush removal/control may be required prior to installation of planting. All whips are required to be installed with tree shelters per Howard County FCA requirements.

PATTERN SPACING DIAGRAM



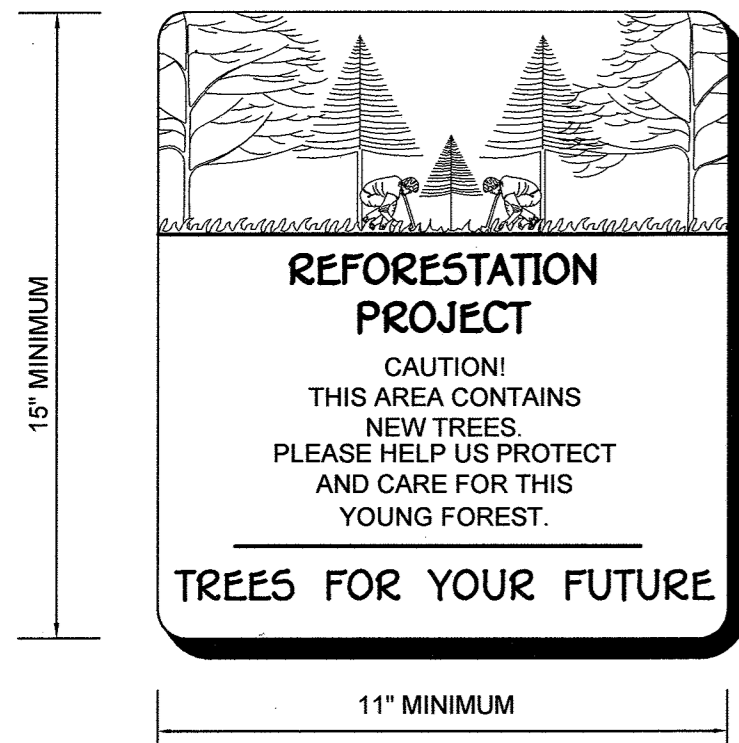
* - whip w/shelter 11' on center spacing
- 1" caliper tree 15' on center spacing
Species shall be randomly interspersed, rows should be planting along contours



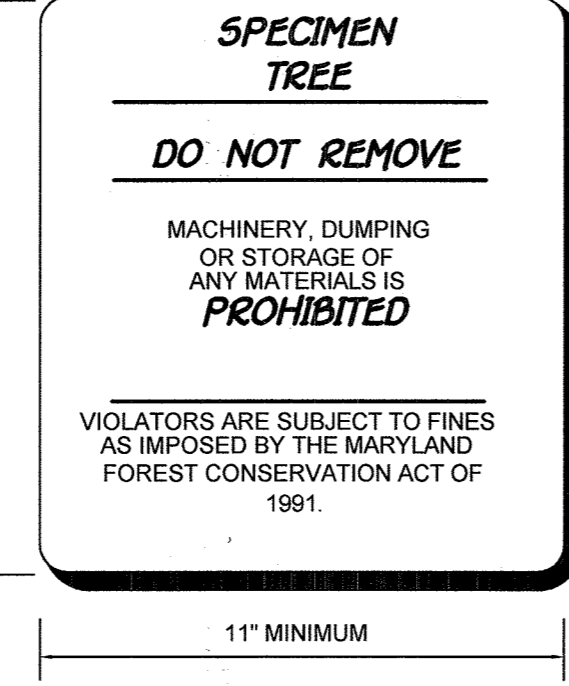
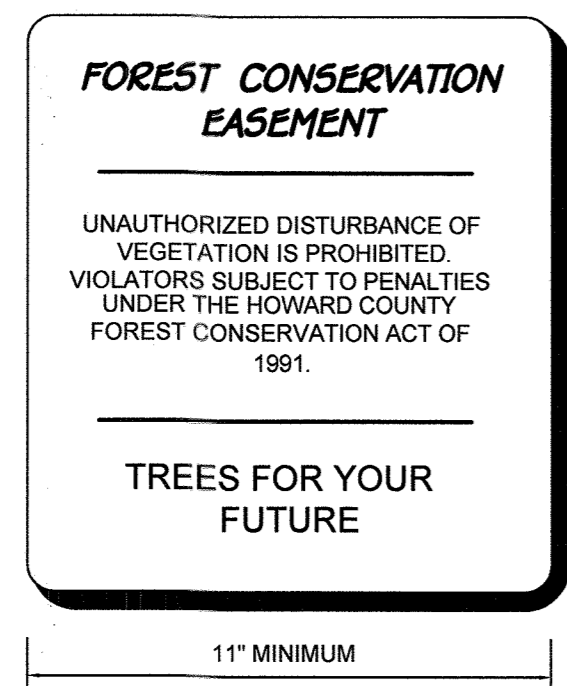
Seeding and Whip Planting Specification

FOREST CONSERVATION WORKSHEET VERSION 1.0

NET TRACT AREA	ACRES
A. TOTAL TRACT AREA	9.39
B. DEDUCTIONS (AREA WITHIN 100 YEAR FLOODPLAIN)	0.00
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION	0.00
D. NET TRACT AREA	9.39
LAND USE CATEGORY: HIGH DENSITY RESIDENTIAL	
E. AFFORESTATION THRESHOLD (NET TRACT AREA (C) x 15%)	1.41
F. CONSERVATION THRESHOLD (NET TRACT AREA (C) x 20%)	1.88
EXISTING FOREST COVER	
G. EXISTING FOREST COVER WITHIN THE NET TRACT AREA	2.50
H. AREA OF FOREST ABOVE AFFORESTATION TRESHOLD	-
I. AREA OF FOREST ABOVE CONSERVATION TRESHOLD	0.62
BREAK/EVEN POINT	
J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION	1.1
BREAK/EVEN POINT	
K. CLEARING PERMITTED WITHOUT MITIGATION	0.50
PROPOSED FOREST CLEARING	
L. TOTAL AREA OF FOREST TO BE CLEARED OR RETAINED OUTSIDE FCE	2.05
M. TOTAL AREA OF FOREST TO BE RETAINED	0.45
PLANTING REQUIREMENTS	
N. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION TRESHOLD	0.16
P. REFORESTATION FOR CLEARING BELOW THE CONSERVATION TRESHOLD	2.86
C. CREDIT FOR RETENTION ABOVE THE CONSERVATION TRESHOLD	0.00
R. TOTAL REFORESTATION REQUIRED	3.02
S. TOTAL AFFORESTATION REQUIRED	0.00
T. TOTAL PLANTING REQUIREMENT	3.02



ON-SITE SIGNAGE



NOTE: SIGNAGE SHALL BE PLACED ADJACENT TO SPECIMEN TREE AND SHALL REMAIN IN PLACE IN PERPETUITY

Specimen Tree Chart

Key	Species, Size (dbh)	Comment
A	SOUTHERN RED OAK, 32"	GOOD, ROOT ZONE CURRENTLY IMPACTED BY DRIVEWAY

NOTE: The existing specimen tree located within Open Space Lot 39 is to remain and in accordance with MDNCR's State Conservation Program (State Bill 666) it must be left undisturbed, unless a formal waiver petition is granted.

FSD NOTES:

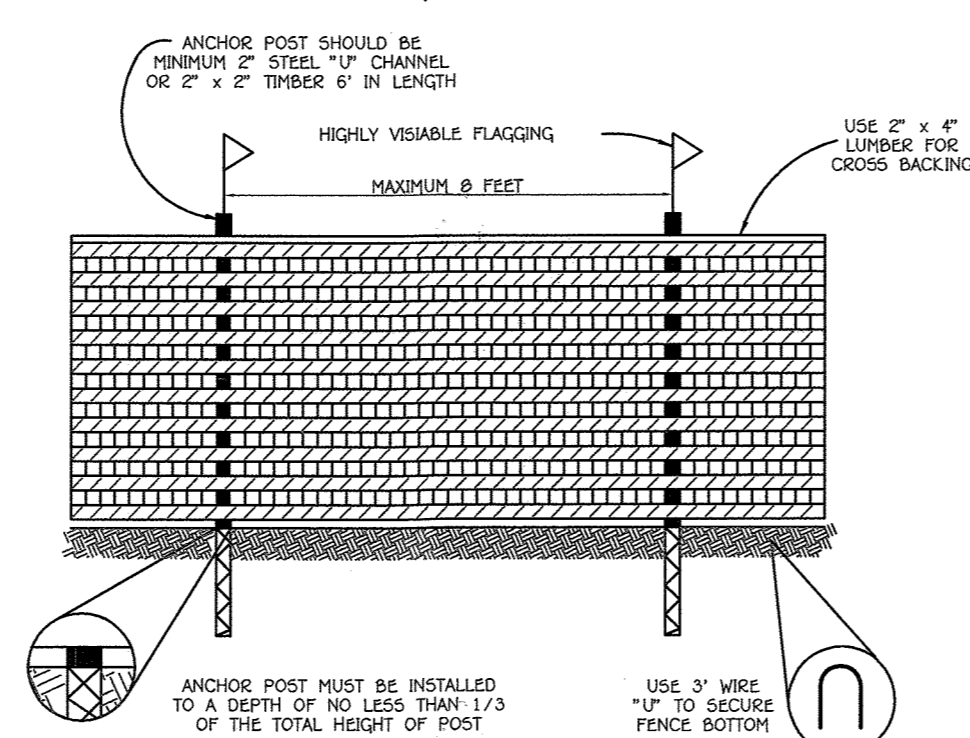
- No rare, threatened or endangered species or their appropriate habitat were observed on the property.
- Surrounding land use is primarily residential.
- Approximately 1.3 acres of forest extends onto adjacent offsite property within 100 feet of the subject property.
- No wetlands, streams or buffers are present on the property.

FOREST CONSERVATION DATA

EASEMENT NO.	RETENTION AREA	PLANTING AREA	TOTAL EASEMENT AREA
1	0.45 AC.	0.09 AC.	0.45 AC.
2	0.00 AC.	0.47 AC.	0.47 AC.
TOTAL	0.45 AC.	0.47 AC.	0.92 AC.

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
X 562.2	SPOT ELEVATION
M 24" DIA	PROPOSED STORM DRAIN PIPE
IF 2"	PROPOSED SEWER
W 4"	PROPOSED WATER
---	PROPOSED ROAD WIDENING
---	NON-CROPPED OPEN SPACE
---	LIMIT OF DISTURBANCE
---	SUPER SILT FENCE
---	SILT FENCE
---	15-24% SLOPES
---	25% OR GREATER SLOPES
---	3" SOILS
---	12" SOILS
---	EXPOSABLE SOILS
---	WETLANDS
---	100 YEAR FLOODPLAIN
---	STREAM BUFFER
---	DRAINAGE DITCH
---	NON-ROOFTOP DISCONNECTION (N-2)
---	DRYWELL (M-5)-TYPICAL
---	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	SPECIMEN TREE (TO REMAIN)
---	PUBLIC WATER, SEWER & UTILITY EASEMENT
---	RECREATIONAL OPEN SPACE
---	USE IN COMMON ACCESS EASEMENT
---	EXISTING SCALP EASEMENT

BLAZE ORANGE PLASTIC MESH



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

TREE PROTECTION DETAIL

NOT TO SCALE

OWNER	DEVELOPER
KENNETH ECKER LISA MARCELLINO ECKER 9120 RIVER HILL RD LAUREL, MARYLAND 20723-1781 (443)-367-0422	MICHAEL R MARCELLINO 9131 RIVER HILL RD SUITE 102 LAUREL, MARYLAND 20723-1781 (443)-367-0422 BONNY A MARCELLINO THOMAS N MARCELLINO 5300 DORSEY HALL DRIVE SUITE 102 ELLCOTT CITY, MARYLAND 21042 (443)-367-0422

AS-BUILT CERTIFICATION

Note: There is no "AS BUILT" information provided on this sheet.
Signature: Charles J. Cravo, PE, ND 19304
Date: 3/7/20

MD DNR Qualified Professional



FOREST CONSERVATION NOTES AND DETAILS

FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
AND OPEN SPACE LOTS 30, 39, 41 THRU 43 & 56
PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
SP-14-003, CONTRACT #24-4849-D
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 21 OF 24 F-15-053

APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature: [Redacted]
Chief, Bureau of Highways
DATE: 12/18/2015

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: [Redacted]
Chief, Division of Land Development
DATE: 12-21-15

Signature: [Redacted]
Chief, Development Engineering Division
DATE: 12-11-15

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21046
(410) 481-2295

NO.	REVISIONS	DESCRIPTION	DATE
1	REVISED TITLE BLOCK		6/23/17

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

PLANTING SPECIFICATIONS AND NOTES

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

PLANT STORAGE AND INSPECTION

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

PLANT INSTALLATION

- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
- PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.

FERTILIZING

- DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
- NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
- IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

- ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
- ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
- VOLUNTARY SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
- REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
- REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
- A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

- ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER "QUALIFIED PROFESSIONAL" AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.19.06.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.

NOTE :

THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENTS EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.

THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION, SOIL COMPACTION, OR EXCAVATION, INTRODUCTION OF TOXIC CHEMICALS OR OTHER DISTURBANCES DETRIMENTAL TO THE LIVE SPECIMEN TREES OR CRITICAL ROOT ZONES FOR THESE TREES EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.

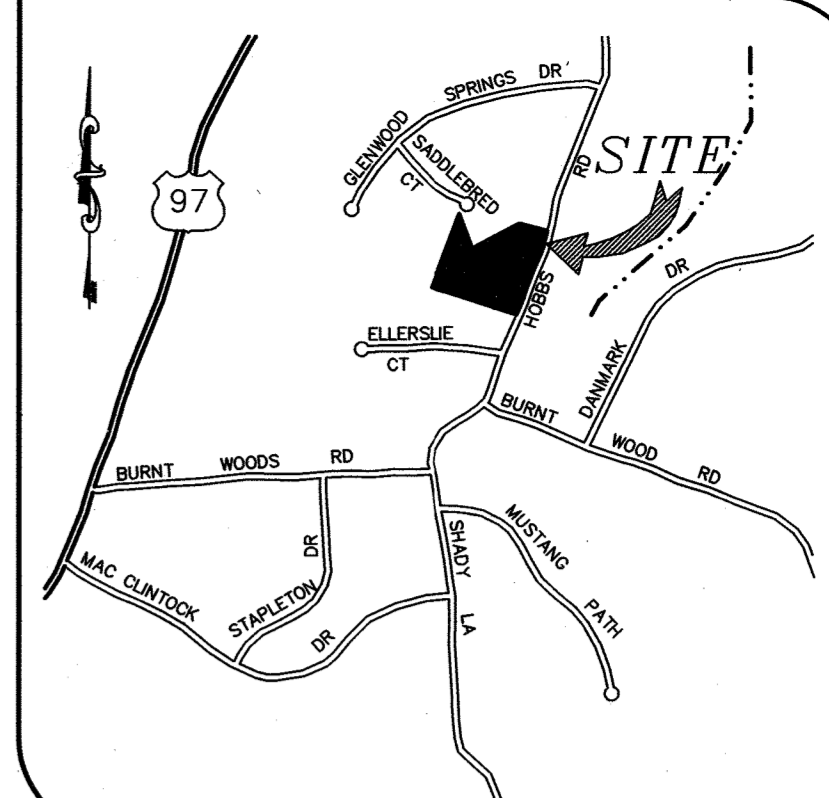
SOILS CLASSIFICATION

SYMBOL	DESCRIPTION
BaA	BAILE SILT LOAM, 0 TO 3 PERCENT SLOPES (D)
ChB	CHILLUM-RUSSETT LOAMS, 2 TO 5 PERCENT SLOPES (B)
GgA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES (B)
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES (B)

OFF-SITE FOREST CONSERVATION EASEMENT AREAS

TOTAL EASEMENT AVAILABLE FOR PLANTING: 8.87 ACRES±

PROJECT	EASEMENT AREA PROVIDED	REMAINING EASEMENT AREA	FINAL PLAN #
NORDAU PROPERTY	0.77 ACRES±	8.10 ACRES±	F-12-047
TURLEY'S MEADOW	1.36 ACRES±	6.74 ACRES±	F-13-084
MONTGOMERY CROSSING, PHASE 2	1.08 ACRES±	5.66 ACRES±	F-14-029
TURLEY'S OVERLOOK	0.52 ACRES±	5.14 ACRES±	F-14-079
BETHEL MINISTRIES, INC.	0.81 ACRES±	4.33 ACRES±	SDP-14-042
GUILFORD OVERLOOK	0.47 ACRES±	3.86 ACRES±	F-11-059
PINE GROVE ADDITION LOTS 1-6	0.27 ACRES±	3.59 ACRES±	F-15-036
WILSON VILLAGE	0.83 ACRES±	2.76 ACRES±	SDP-14-021
FOX WOOD MANOR, LOTS 1-3 & 0/5 LOTS 38-43	2.55 ACRES±	0.21 ACRES±	F-15-053



VICINITY MAP

SCALE: 1" = 2000'
ADC MAP 17 B-4

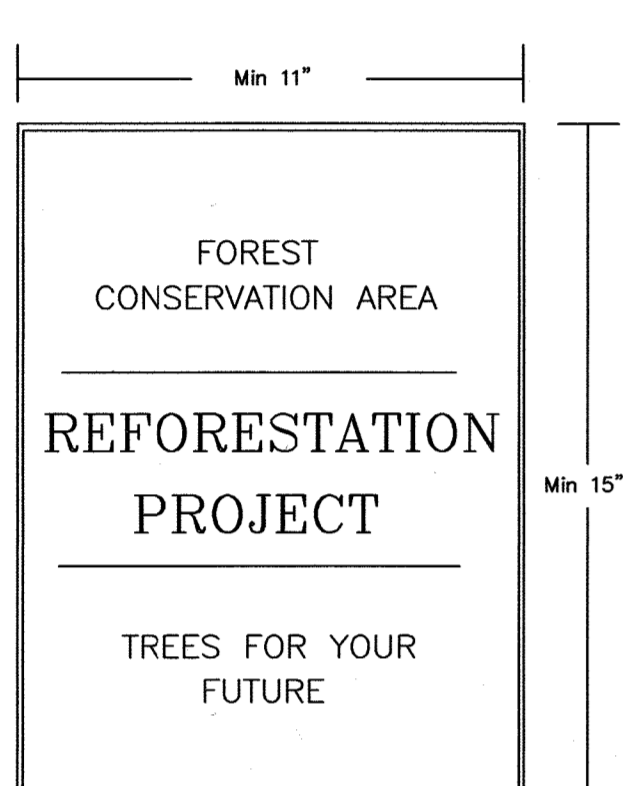
PROJECT BACKGROUND:

LOCATION: TAX MAP: 50 GRID: 1 PARCELS: 405, 429 AND 468
ELECTION DISTRICT: SIXTH
ZONING: R-SC
PREVIOUS DPZ FILES: SP-14-003, ECP-13-074

date	NOV 2015	engineering	MM	approval	RH
project	NOV 2015	illustration	MMT	scale	1" = 100'
no.	07/17	description		revisions	
					RENAME TITLE BLOCK

no.		description	

OFFSITE FOREST CONSERVATION PLAN
HOWARD COUNTY, MARYLAND
FOURTH ELECTION DISTRICT
FOREST CONSERVATION EASEMENT GRANTED FROM ROSEBAR PROPERTY, PRESERVATION PARCEL "A"
FOR THE PROJECT: FOX WOOD MANOR, LOTS 1 THRU 43 AND OPEN SPACE LOTS 38 THRU 43
DATE: 11/20/15



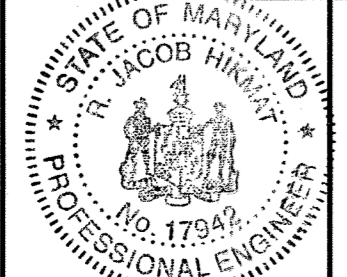
SIGNAGE DETAILS
NOT TO SCALE

LEGEND

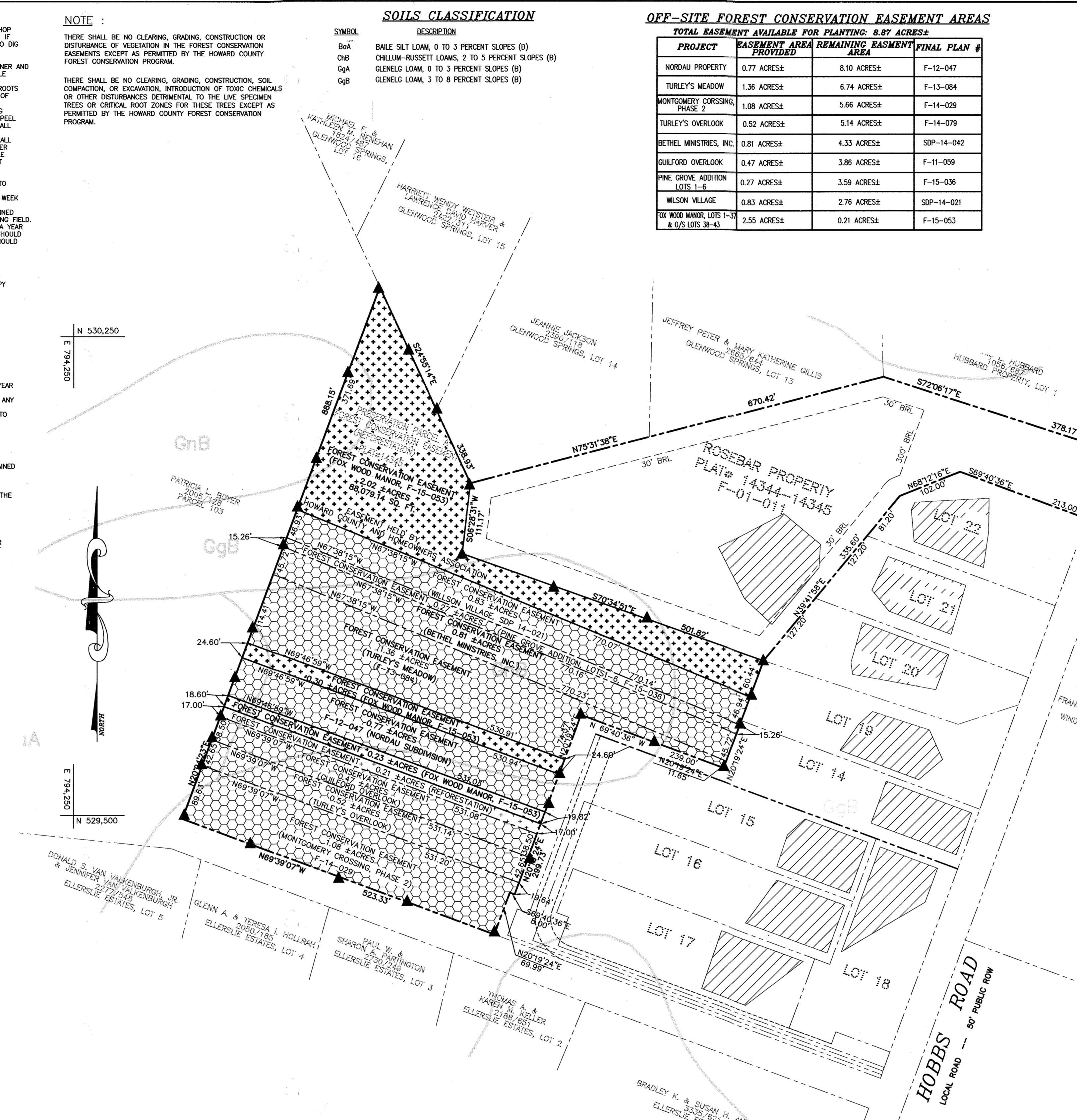
- EXISTING SEPTIC EASEMENT
- FOREST CONSERVATION EASEMENT (REFORESTATION) THAT SATISFY OTHER SUBDIVISION FOREST CONSERVATION OBLIGATION.
- EXISTING FOREST CONSERVATION EASEMENT (REFORESTATION) F-01-11 AVAILABLE.
- PROPOSED FOREST CONSERVATION EASEMENT FOR FOX WOOD MANOR
- ▲ DENOTES FOREST CONSERVATION SIGNAGE

OWNER / DEVELOPER
WOODBINE BRANTLY, LLC
5300 DORSEY HALL DRIVE
ELLCOTT CITY, MARYLAND 21042
(413)367-0422

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 12-11-15
DATE
[Signature] 12-21-15
DATE

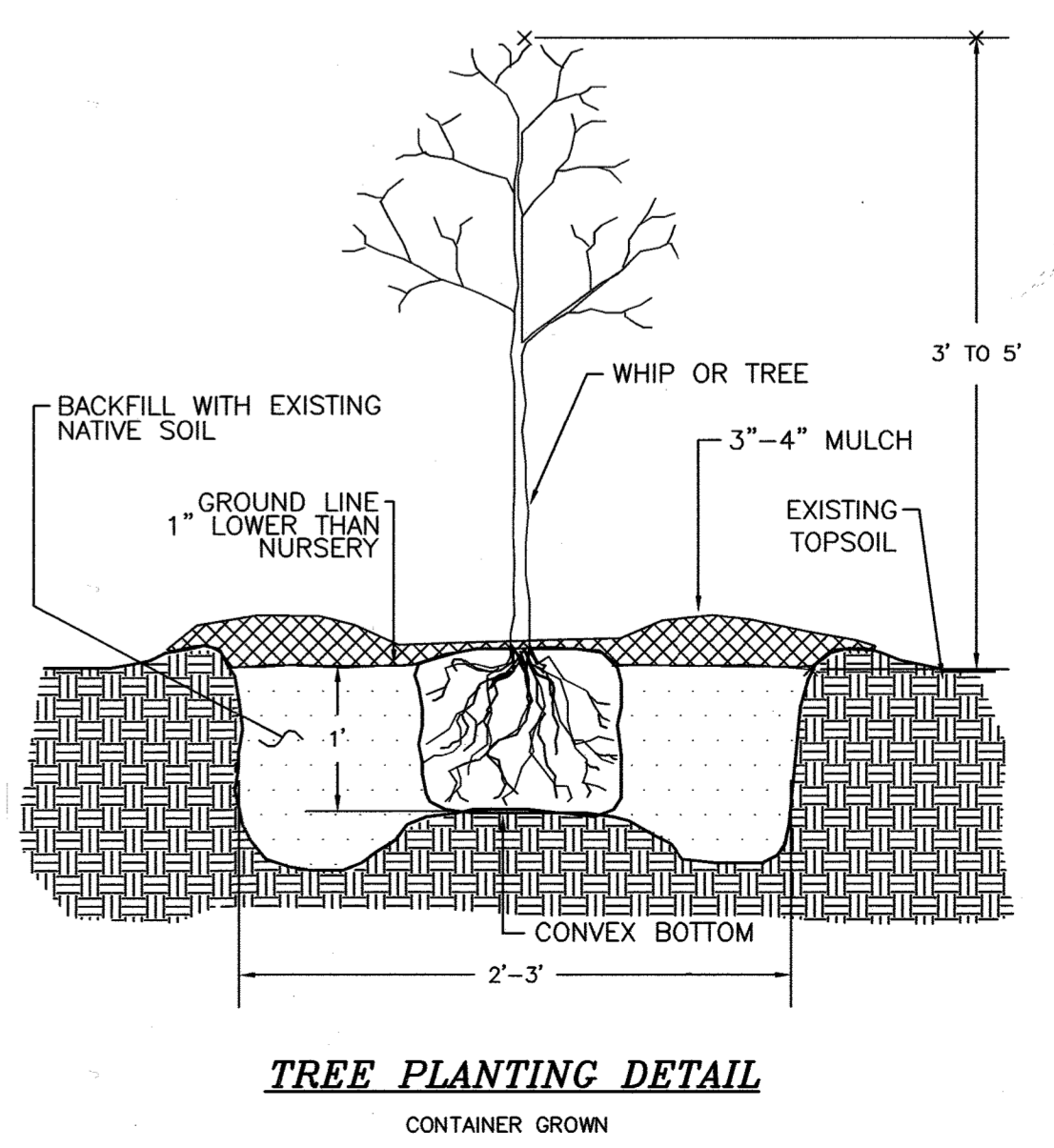


I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16
R. JACOB HIKMAT P.E. 11/20/15 DATE:



FOREST CONSERVATION IN ACCORDANCE WITH SECTION 16.1202 OF THE FOREST CONSERVATION MANUAL SHALL BE PROVIDED BY PLACEMENT OF 2.55 ACRES OF REQUIRED REFORESTATION FOR THE FOX WOOD MANOR, LOTS 1 THRU 37 AND OPEN SPACE LOTS 38 THRU 43 INTO AN OFF-SITE EASEMENT ON PROPERTY IDENTIFIED AS THE ROSEBAR PROPERTY, PRESERVATION PARCEL A, LOCATED ON TAX MAP NO. 14 AND IDENTIFIED AS PARCEL 221, SITUATED ON THE WEST SIDE OF HOBBS ROAD. THE ROSEBAR FOREST CONSERVATION EASEMENT HAS BEEN SHOWN ON SHEET 18 OF SDP-97-115/NEW COLONY VILLAGE. WITH THIS PLAN 2.55 ACRES OF REFORESTATION DEDUCTED FROM THE TOTAL FO EASEMENT LOCATED ON ROSEBAR. SURETY FOR THE OFF-SITE FOREST CONSERVATION EASEMENT ON THE ROSEBAR PROPERTY HAS BEEN PREVIOUSLY POSTED BY THE OWNER OF THE EASEMENT HOLDER.

AS-BUILT CERTIFICATION
Note: There is no "AS BUILT" information provided on this sheet.
[Signature] 3/7/20
CHARLES J. CROFT, P.E. NO. 19204 Date
MD DNR QUALIFIED PROFESSIONAL
[Signature] 11/20/15
MASHID TRINGA



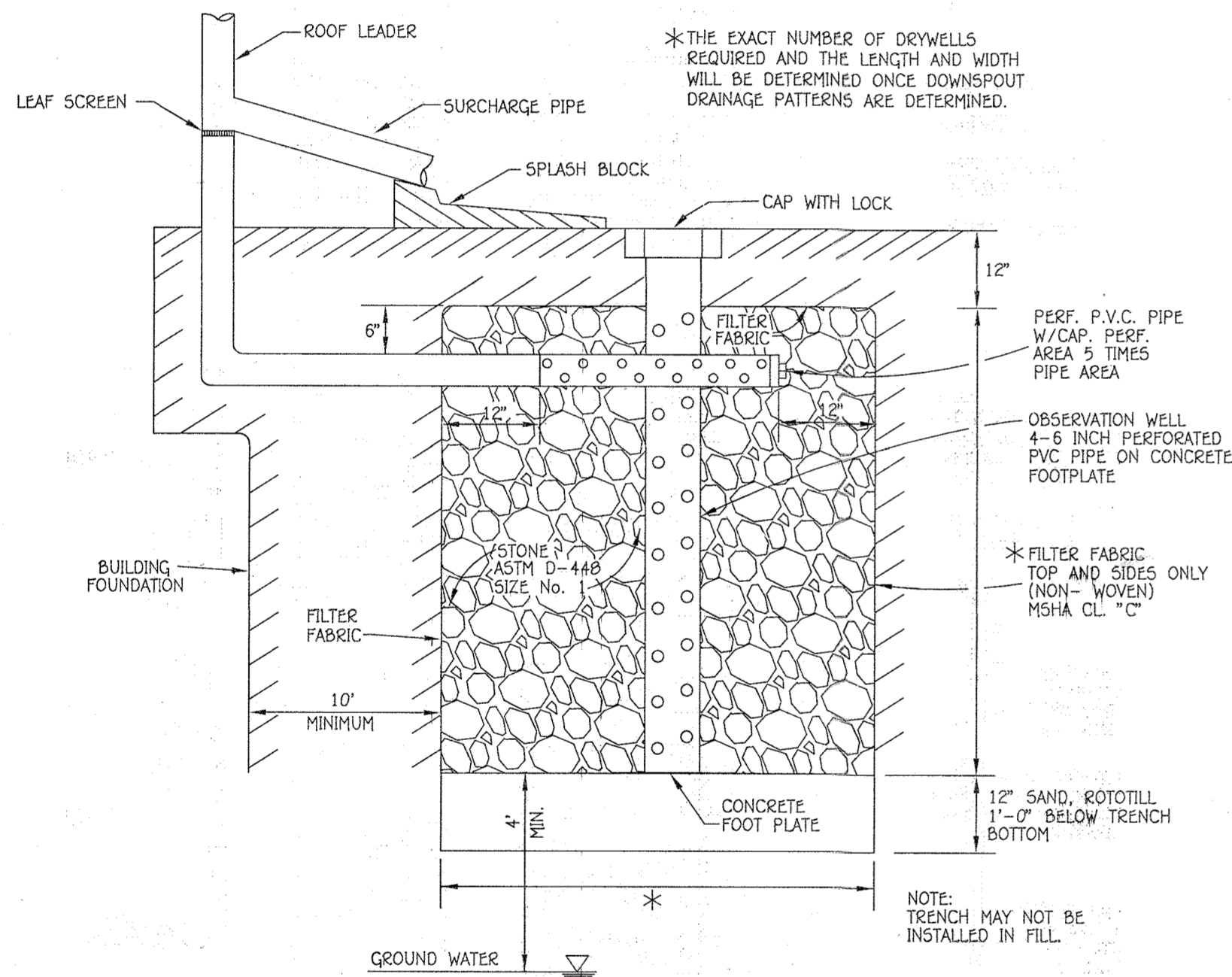
TREE PLANTING DETAIL
CONTAINER GROWN

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

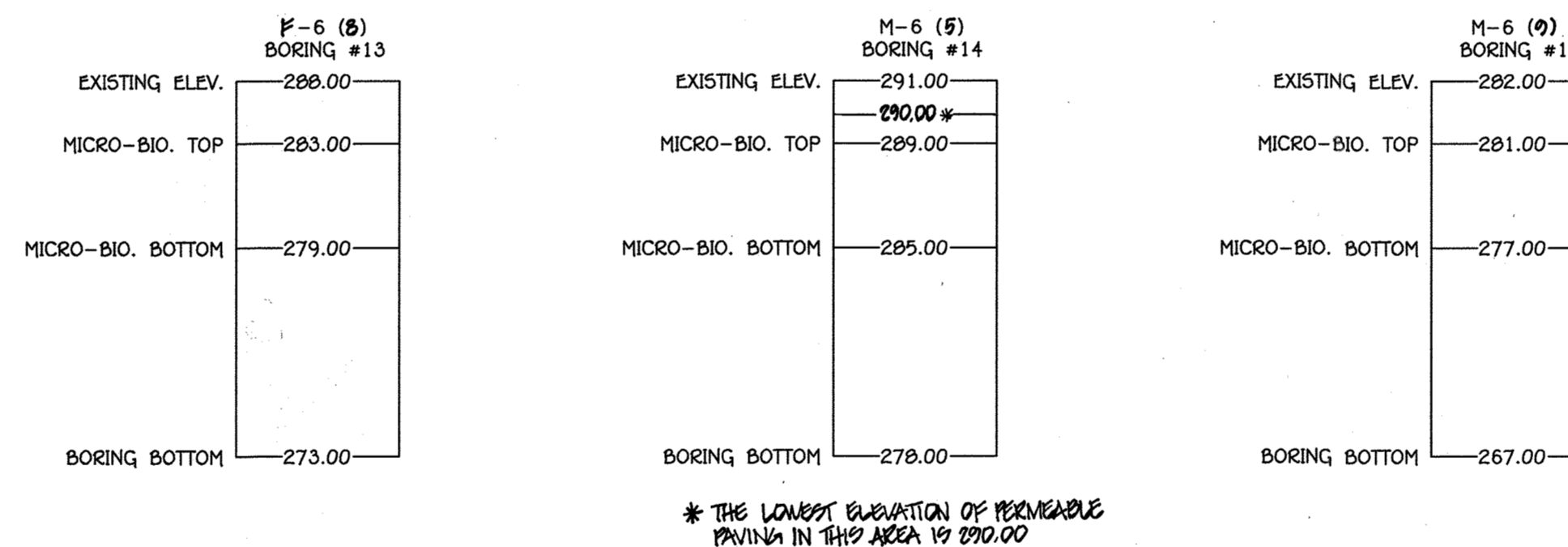
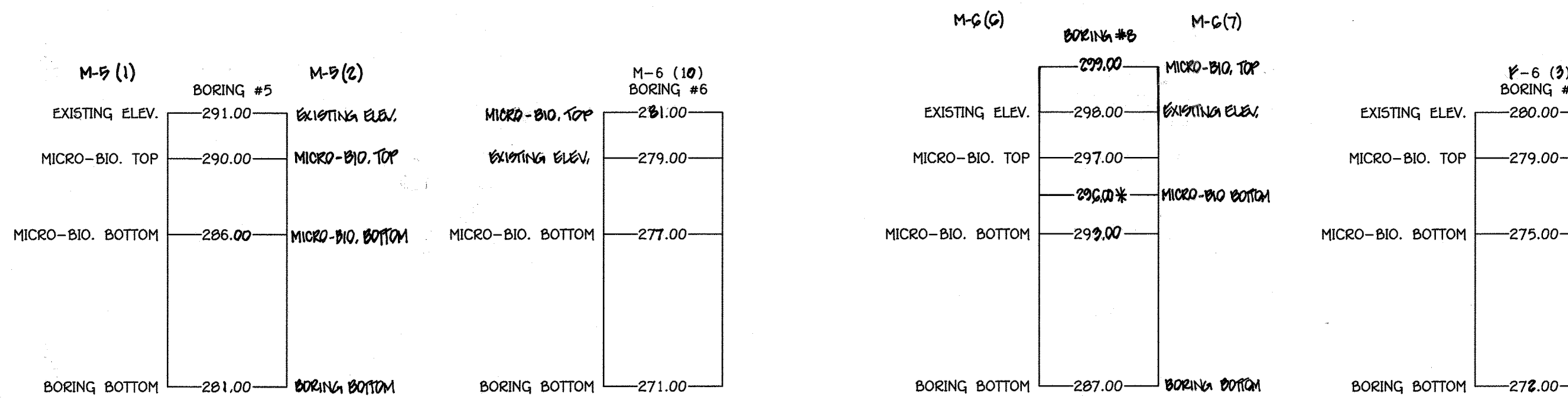
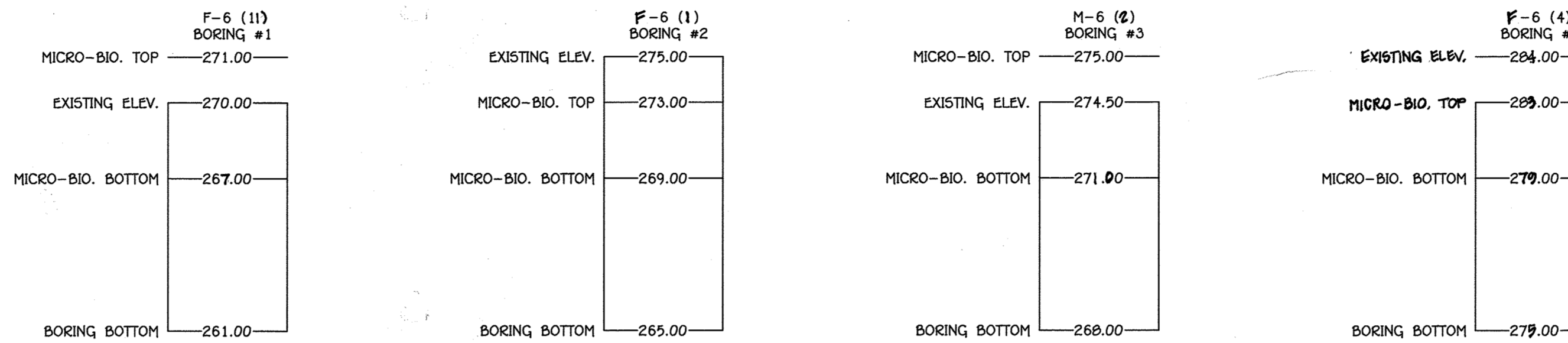
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7350-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Dalt. (410) 997-0298 Fax.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

- A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE.
- C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.



DRY WELL DETAIL
NOT TO SCALE



APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 12/16/2015
 Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 12-31-15
 Chief, Division of Land Development

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 12-31-15
 Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2255

NO.	DESCRIPTION	DATE
1	REMOVE SWM BORING DATA CHANGES & ADD DRYWELL DETAIL & NOTES	12/21/15
2	RENAME TITLE BLOCK	12/21/15

OWNERS

KENNETH ECKER
 LISA MARCELLINO - ECKER
 9120 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

MICHAEL R MARCELLINO
 9131 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

BONNY A MARCELLINO
 THOMAS M MARCELLINO
 9141 RIVER HILL RD
 LAUREL, MARYLAND 20723-1781
 (443)-367-0422

AS-BUILT CERTIFICATION
 Note: There is no "AS BUILT" information provided on this sheet.
[Signature] 3/7/20
 CHARLES J. CARNO, P.E. NO. 19804 Date



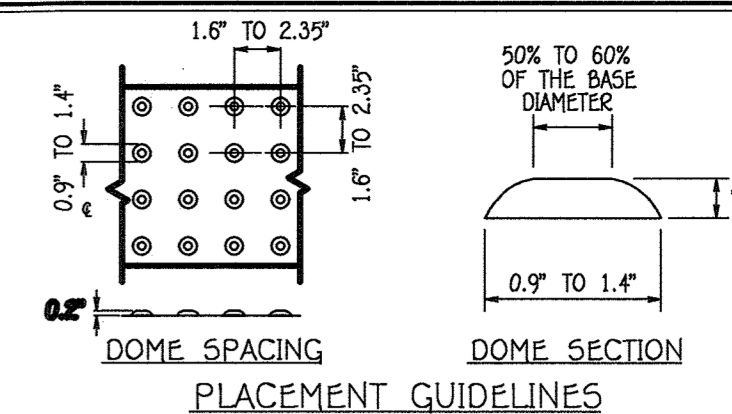
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.
[Signature] 11/15/15
 FRANK JOHN MANALANSAN II
 DATE

SWM NOTES, DETAILS AND SOIL BORINGS FOX WOOD MANOR
 LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55 AND OPEN SPACE LOTS 38, 39, 41 THRU 43 & 56
 PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074, SP-14-003, CONTRACT #24-4849-D
 ZONED: R-SC TAX MAP NO.: 50 GRID NO.: 1
 PARCEL NOS.: 405, 429, 468
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: NOT TO SCALE DATE: NOVEMBER 4, 2015
 SHEET 23 OF 24 F-15-053

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

SIGNING LEGEND			
Size	Description	Size	Color
	R2-1	24" x 30"	Black/White
	R1-1	30" x 30"	Red/White
	WB-1	24" x 24"	Black/Yellow
	W1-1R	30" x 30"	Black/Yellow
	MD 665.02	4" x 3"	White/Orange
	W13-1	18" x 18"	Black/Yellow
	WS-1	30" x 30"	Black/Yellow

* ALONG WITH A SUPPLEMENTAL BLACK ON WHITE SIGN UNDERNEATH THAT READS "END OF COUNTY MAINTENANCE"

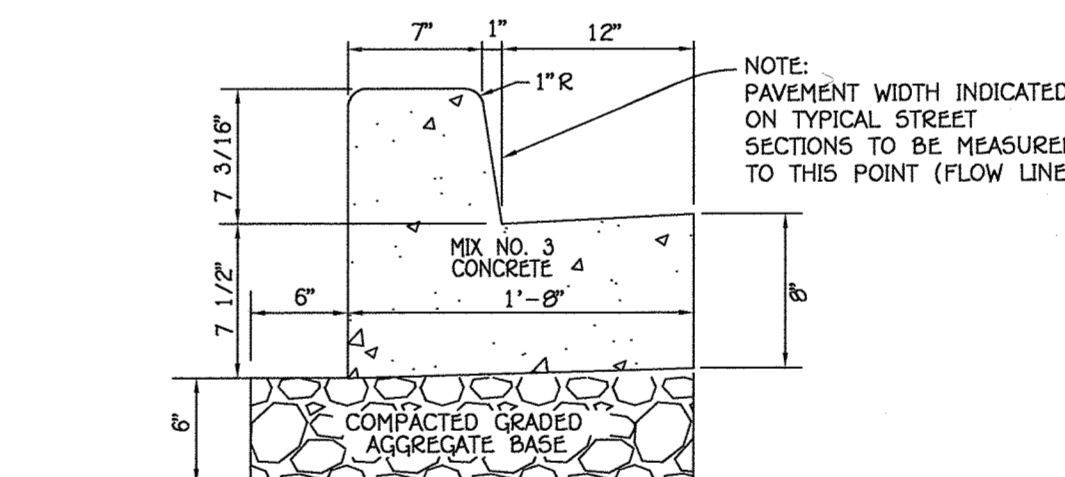
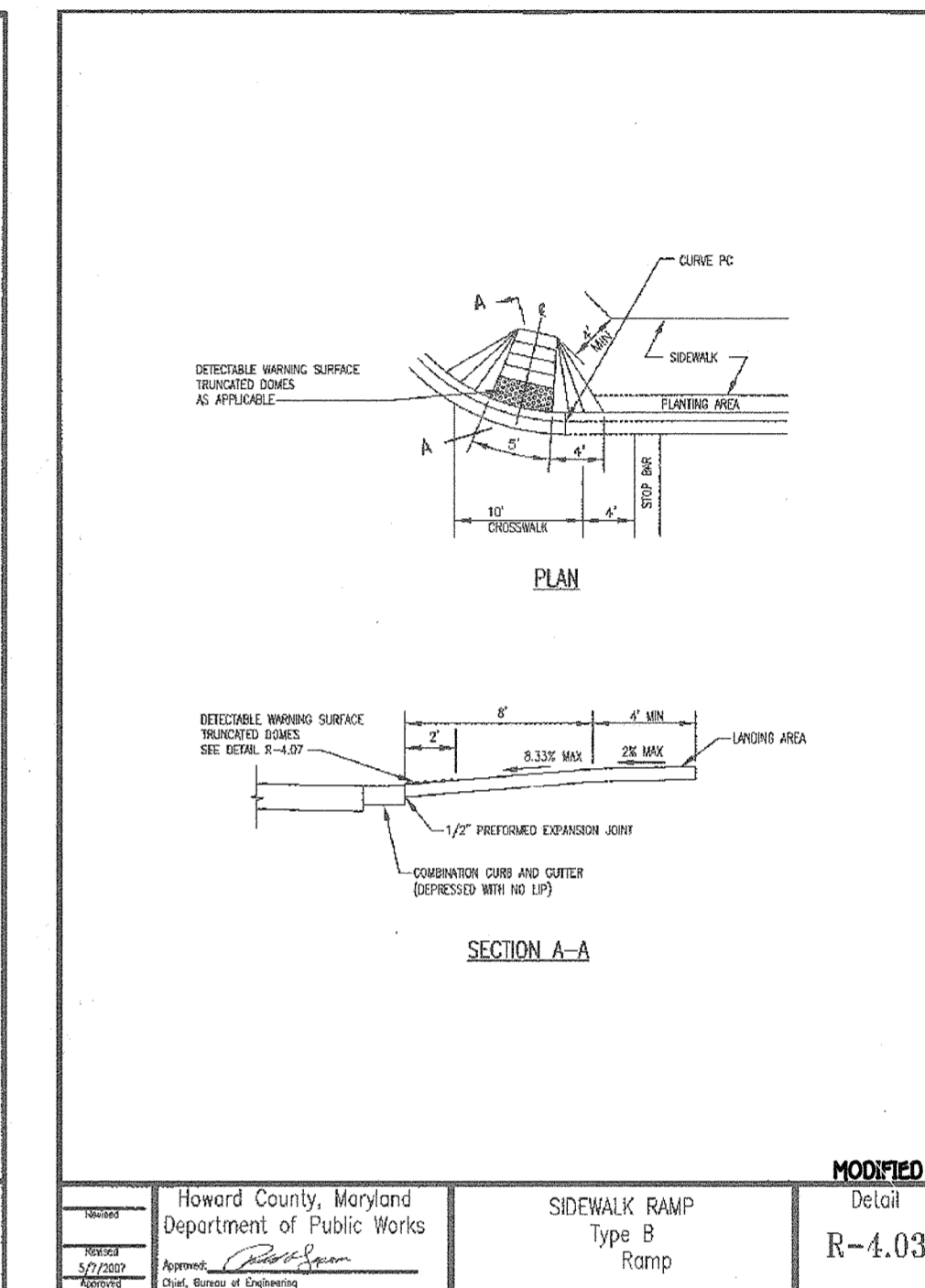
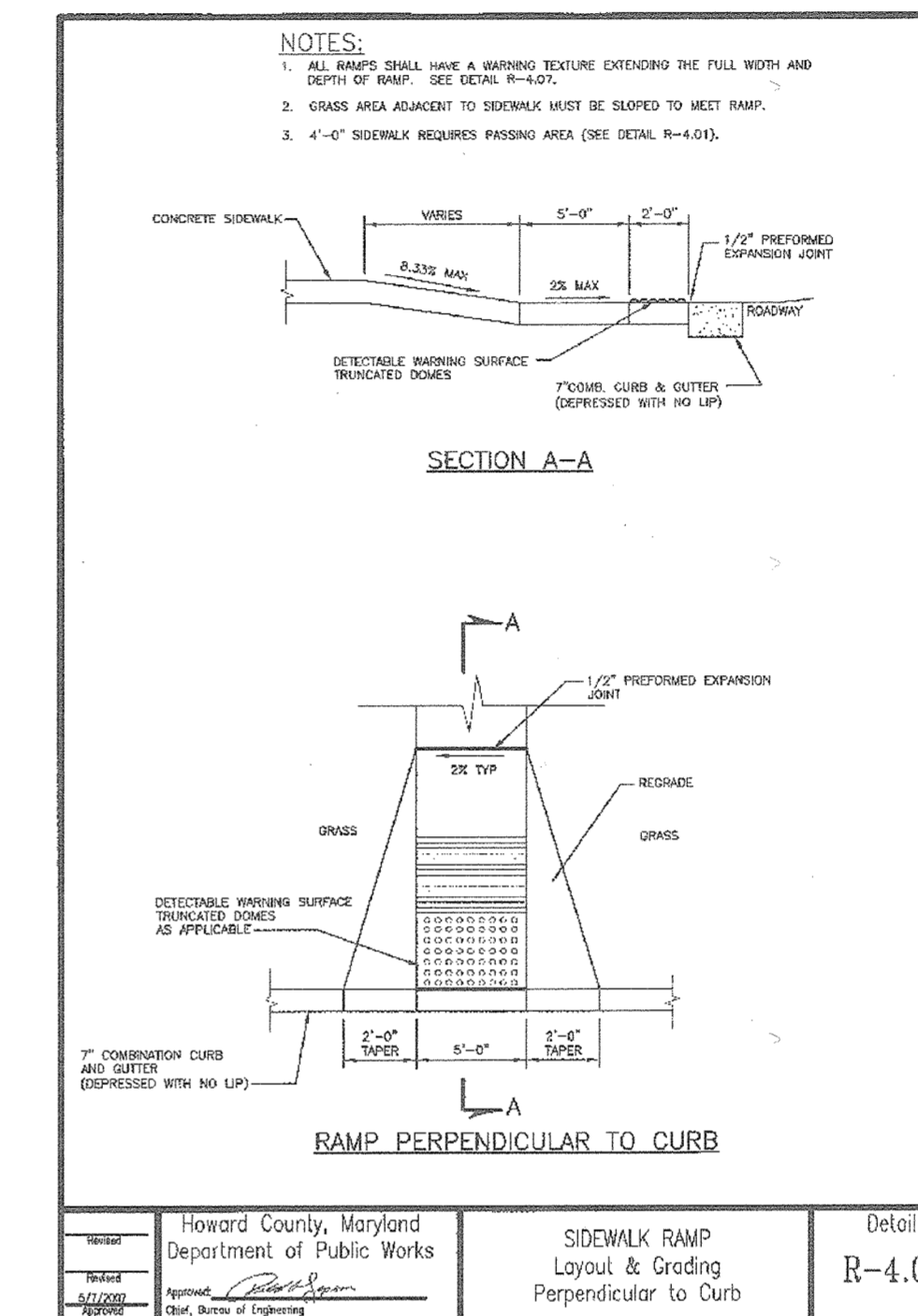


(MATT DETAILS OR OPTIONAL 12"x12" TILE TECH PAVERS(RED))
NO SCALE

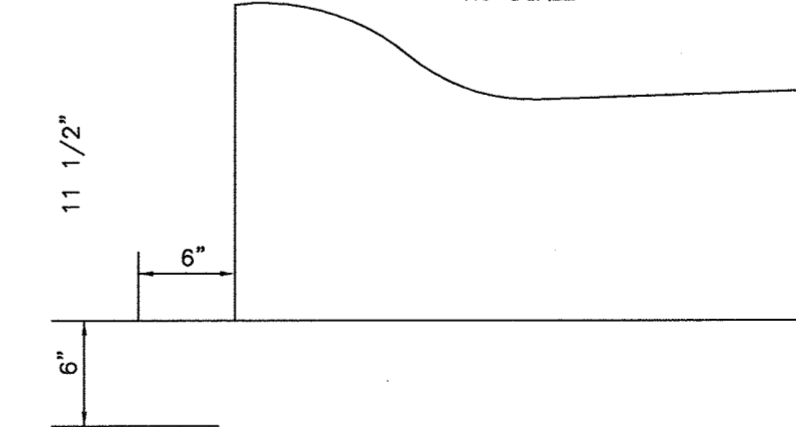
NOTES

1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 TO 8 INCHES FROM THE FACE OF CURB.
2. FOR SKEWED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF CURB ARE NO LESS THAN 0.5" AND NO MORE THAN 3.0" FROM THE BACK OF CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.
3. DETECTABLE WARNING SURFACE SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 611 OF THE SPECIFICATIONS.
4. DETECTABLE WARNING SURFACES ARE REQUIRED AT STREET CROSSING & SIGNALIZED INTERSECTIONS.

DETECTABLE WARNING SURFACE GUIDELINES
STD. DETAIL MD. 655-40



STD. 7" CONC. CURB AND GUTTER
NO SCALE
DETAIL R-3.01

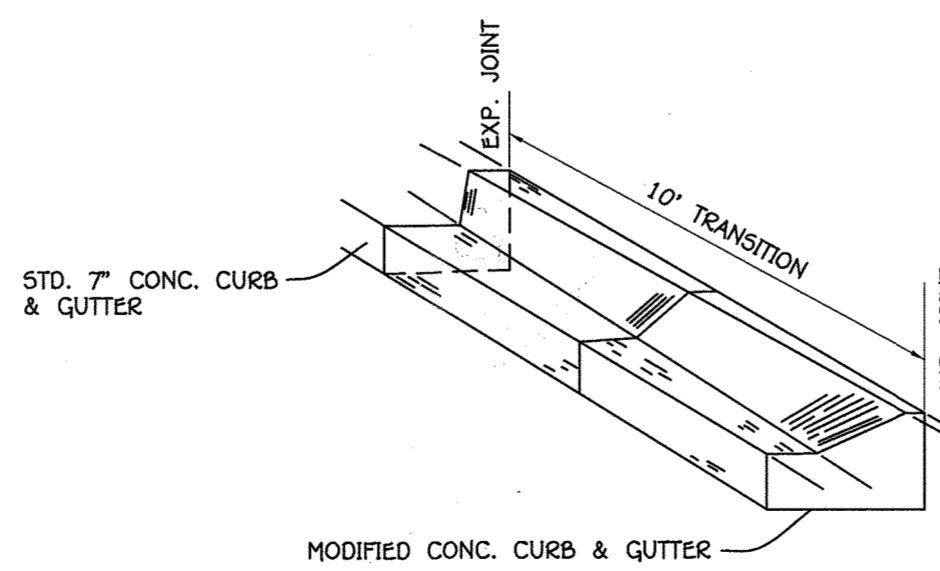


CONCRETE CURB & GUTTER TRANSITION
NO SCALE

PLAN
SCALE: 1" = 50'

DETAIL R-2.01

- NOTES:
- 1) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, (QUICK PUNCH) SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
 - 2) ALL SIGN LOCATIONS AND ALL PAVEMENT MARKINGS SHALL BE APPROVED BY HOWARD COUNTY TRAFFIC PRIOR TO ANY SIGNING OR PAVEMENT MARKING INSTALLATIONS.
 - 3) HOWARD COUNTY TRAFFIC WILL FIELD DETERMINE ALL PAVEMENT MARKINGS, CONTACT TRAFFIC AT 410-313-5752. STARTING AND ENDING POINTS SHOWN ON THESE PLANS ARE APPROXIMATE.



CONCRETE CURB & GUTTER TRANSITION
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 meet the approved plans and specifications.
CHARLES J. CROVO, No. 19204 Date: 3/7/20



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21474, EXPIRATION DATE: 7/14/15.
FRANK JOHN MANALANGAN II DATE: 1/5/15

CURVE TABLE								
CURVE #	ROAD NAME	STATION	STATION	RADIUS	LENGTH	DELTA	TANGENT	CHORD
C1	TWIN FAWN TRAIL	STA 13+52.33	TO STA 14+46.43	60.00'	94.09'	095°29'35"	84.74'	5 66°11'54" W
C2	TWIN FAWN TRAIL	STA 19+59.71	TO STA 20+69.06	1100.00'	109.35'	205°12'31"	109.31'	N 71°43'22" W

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chief, Bureau of Highways
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development
Chief, Development Engineering Division

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21040
(410) 461-2295

REVISIONS		
NO.	DESCRIPTION	DATE
1	ADD I-17 INLET AND TREE MAINTENANCE ENCLOSURES	12/21/16
2	RENAME TITLE BLOCK	6/29/17

OWNERS
KENNETH ECKER
LISA MARCELLINO ECKER
9120 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422
MICHAEL R MARCELLINO
9131 RIVER HILL RD
LAUREL, MARYLAND 20723-1781
(443)-367-0422
BONNY A MARCELLINO
THOMAS N MARCELLINO
SUITE 102
LAUREL, MARYLAND 20723-1781
(443)-367-0422
DEVELOPER
LAND DESIGN & DEVELOPMENT
5300 DORSEY HALL DRIVE
SUITE 102
ELICOTT CITY, MARYLAND 21042
(443)-367-0422

ROAD GEOMETRY AND SIGNAGE
PLAN AND DETAILS
FOX WOOD MANOR
LOTS 1 THRU 6, 8 THRU 12, 14 THRU 20, 22 THRU 26, 44 THRU 55
AND OPEN SPACE LOTS 36, 37, 41 THRU 43 & 56
PREVIOUS FILE NUMBERS: SDP-05-067, ECP-13-074,
SP-14-003, CONTRACT #24-4849-D
ZONED: R-5C TAX MAP NO.: 50 GRID NO.: 1
PARCEL NOS.: 405, 429, 468
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: NOVEMBER 4, 2015
SHEET 24 OF 24 F-15-053

AS-BUILT