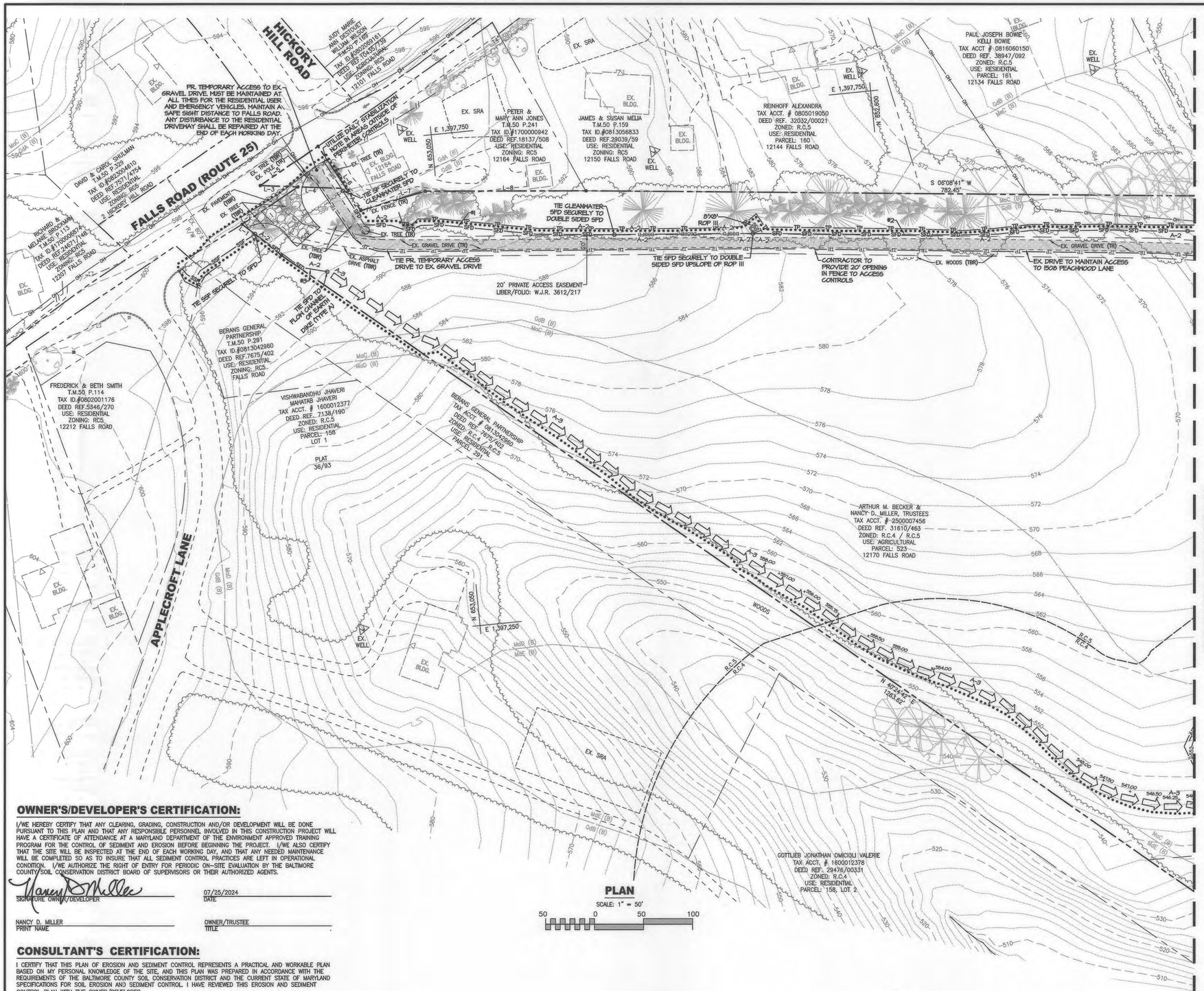


PLAN

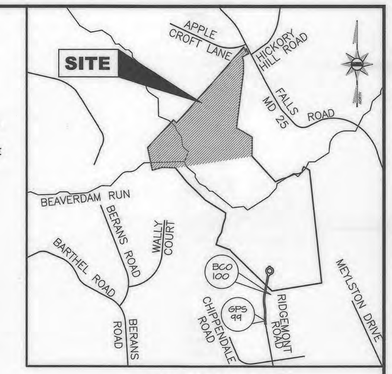
SCALE: 1" = 50'

50 0 50 100

LEGEND

- LIMIT OF DISTURBANCE (LOD)
- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. RIGHT OF WAY LINE
- EX. EASEMENT LINE
- EX. PAVEMENT
- 52 — EX. 2' CONTOUR
- 50 — EX. 10' CONTOUR
- Ur (D) — EX. SOIL BOUNDARY
- EX. BUILDING
- EX. WOODS
- WT — EX. WETLAND
- EX. CONSERVANCY AREA EASEMENT
- FP — EX. FLOODPLAIN
- FB — EX. FOREST BUFFER
- OH — OH — EX. OVER HEAD ELECTRIC
- EX. STEEP SLOPES
- EX. STREAM
- R.C.4 — EX. ZONING
- 6B — EX. PERC TEST LOCATION
- EX. SEPTIC RESERVE AREA (SRA)
- EX. WELL
- SSF — PR. SUPER SILT FENCE
- SF — PR. SILT FENCE
- A-2 / A-2 DSSFD — PR. DOUBLE SIDED SUPER FENCE DIVERSION
- SFD A-2 — PR. SUPER FENCE DIVERSION
- TP — PR. TREE PROTECTION FENCE
- SFCD — PR. SILT FENCE CHECK DAM
- PR. STABILIZED CONSTRUCTION ENTRANCE
- ROP III — PR. ROCK OUTLET PROTECTION
- A-3 — PR. EARTH DIKE (TYPE A)
- PR. MOUNTABLE BERM (TYPE A)
- TEMPORARY GRAVEL ACCESS DRIVE
- X — X — PR. TEMPORARY SAFETY FENCE (FOR TRAPS)

NORTH



VICINITY MAP

SCALE: 1" = 1000'

BENCHMARK

GPS #99 — N 649447.71, ELEV. 588.25, E 1398017.03
DESCRIPTION: PROP. CORNER REBAR W/ MRA CAP

BCO #100 — N 649837.48, ELEV. 589.33, E 1398057.19
DESCRIPTION: REBAR W/ MRA CAP

SOILS CHART

'K'	MAP UNIT SYMBOL	SOIL TYPE	HYDROLOGIC SOIL GROUP
0.24	GdB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B
0.28	MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B
0.28	MdE	MANOR-BRINKLOW COMPLEX, 25 TO 45 PERCENT SLOPES	B
0.24	GdA	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	B
0.28	MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B

SHEET INDEX

NO.	DESCRIPTION
ESC-01	EXISTING CONDITIONS PLAN - 1
ESC-02	EXISTING CONDITIONS PLAN - 2
ESC-03	PROPOSED CONDITIONS PLAN - 1
ESC-04	PROPOSED CONDITIONS PLAN - 2
ESC-05	FINAL GRADING INSET
ESC-06	DETAILS - 1
ESC-07	DETAILS - 2
ESC-08	DETAILS - 3
ESC-09	DETAILS - 4
ESC-10	NOTES AND SEQUENCE OF CONSTRUCTION
ESC-11	NOTES AND SEEDING CHARTS

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL 8-5-24 Date

DISTRICT OFFICIAL 118-1763-24 Plan No.
Technical Review for the District by: Stuart Darley
This plan approval will expire three (3) years from the approval date

OWNER'S/DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THIS CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I/WE ALSO CERTIFY THAT THE SITE WILL BE INSPECTED AT THE END OF EACH WORKING DAY, AND THAT ANY NEEDED MAINTENANCE WILL BE COMPLETED SO AS TO INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

SIGNATURE OWNER/DEVELOPER — DATE 07/25/2024

NANCY D. MILLER — PRINT NAME — OWNER/TRUSTEE — TITLE

CONSULTANT'S CERTIFICATION:

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

SIGNATURE — DATE 07/25/2024

JOSHUA T. SHARON — PRINT NAME — 34479 — MD LICENSE NUMBER

GENERAL NOTE

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

LINE TABLE

LINE	BEARING AND DISTANCE
L-1	N 43°47'52" E 51.11'
L-2	S 27°59'55" E 68.47'
L-3	S 07°42'58" W 38.62'
L-4	S 7°41'58" W 49.02'
L-5	N 28°11'57" W 70.97'
L-6	S 61°46'59" W 78.40'
L-7	S 10°56'27" E 68.44'
L-8	S 05°33'04" W 163.84'

NOTE

THIS PLAN SET IS TO BE USED FOR SEDIMENT CONTROL ONLY.

811 Know what's below. Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

ENGINEER

JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER

ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER

GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION

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. 34479, EXPIRATION DATE: 06/21/2026.

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 01 OF 11 — C-01

MRA

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748
Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND — JOSHUA THOMAS SHARON — No. 34479 — PROFESSIONAL ENGINEER — 07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
EXISTING CONDITIONS PLAN - 1

ELECTION DISTRICT 8 — BALTIMORE COUNTY, MARYLAND — COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	1" = 50'
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	01 OF 38

SEE MATCH LINE SHEET 01

LEGEND

- LIMIT OF DISTURBANCE (LOD)
- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. RIGHT OF WAY LINE
- EX. EASEMENT LINE
- EX. PAVEMENT
- 52 — EX. 2' CONTOUR
- 50 — EX. 10' CONTOUR
- Ur (D) — EX. SOIL BOUNDARY
- EX. BUILDING
- EX. WOODS
- WT — EX. WETLAND
- EX. CONSERVANCY AREA EASEMENT
- FP — EX. FLOODPLAIN
- FB — EX. FOREST BUFFER
- OH — EX. OVER HEAD ELECTRIC
- EX. STEEP SLOPES
- EX. STREAM
- R.C.4 — EX. ZONING
- 6B — EX. PERC TEST LOCATION
- EX. SEPTIC RESERVE AREA (SRA)
- EX. WELL
- SSF — PR. SUPER SILT FENCE
- SF — PR. SILT FENCE
- A-2 — DSSFD — A-2 — PR. DOUBLE SIDED SUPER FENCE DIVERSION
- SFD — PR. SUPER FENCE DIVERSION
- TP — PR. TREE PROTECTION FENCE
- SFCD — PR. SILT FENCE CHECK DAM
- SCE — PR. STABILIZED CONSTRUCTION ENTRANCE
- ROP III — PR. ROCK OUTLET PROTECTION
- EB — A-3 — PR. EARTH DIKE (TYPE A)
- PR. BAFFLE BOARD
- PR. GABION INFLOW PROTECTION
- 2 — PR. MOUNTABLE BERM (TYPE A)
- PR. REMOVABLE PUMPING STATION
- PR. FILTER BAG
- 51 — PR. 1' CONTOUR
- 52 — PR. 2' CONTOUR
- 50 — PR. 10' CONTOUR
- TEMPORARY GRAVEL ACCESS DRIVE
- TAB — PR. TEMPORARY ASPHALT BERM
- x — x — PR. TEMPORARY SAFETY FENCE (FOR TRAPS)

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 02 OF 11

C-02

SEDIMENT TRAP 1
TYPE – ST II

DRAINAGE AREAS		
INITIAL	5.96	AC.
INTERIM	6.37	AC.
PROPOSED	6.37	AC.
STORAGE REQUIRED		
WET	11,466	C.F.
DRY	11,466	C.F.
TOTAL	22,932	C.F.
STORAGE PROVIDED		
WET	12,707	C.F.
DRY	11,861	C.F.
TOTAL	24,568	C.F.
ELEVATIONS		
EMBANKMENT	545.00	
WEIR CREST	544.00	
DRY STORAGE	544.00	
WET STORAGE	542.25	
CLEANOUT	541.00	
BOTTOM	540.00	
EX GRD @		
CL. EMBANKMENT	545.00	
STORAGE DEPTH		
WET	540.00–542.25	
DRY	542.25–544.00	
MAX. EMBANK. HEIGHT	1.00 FT.	
BOTTOM DIM.	50'x98'	
SIDE SLOPE	2:1	
WEIR LENGTH	28 FT.	
TOP OF BAFFLE ELEVATION	543.25	
ELEV / AREA / VOLUME		
540	4,896	0
542	6,117	11,013
544	7,438	24,568
545	8,136	32,355

SEDIMENT TRAP 2
TYPE – ST II

DRAINAGE AREAS		
INITIAL	5.76	AC.
INTERIM	5.32	AC.
PROPOSED	5.32	AC.
STORAGE REQUIRED		
WET	10,368	C.F.
DRY	10,368	C.F.
TOTAL	20,736	C.F.
STORAGE PROVIDED		
WET	10,623	C.F.
DRY	13,133	C.F.
TOTAL	23,756	C.F.
ELEVATIONS		
EMBANKMENT	519.00	
WEIR CREST	518.00	
DRY STORAGE	518.00	
WET STORAGE	516.00	
CLEANOUT	515.00	
BOTTOM	514.00	
EX GRD @		
CL. EMBANKMENT	515.50	
STORAGE DEPTH		
WET	514.00–516.00	
DRY	516.00–518.00	
MAX. EMBANK. HEIGHT	3.50 FT.	
BOTTOM DIM.	48'x98'	
SIDE SLOPE	2:1	
WEIR LENGTH	24 FT.	
TOP OF BAFFLE ELEVATION	517.00	
ELEV / AREA / VOLUME		
514	4,700	0
516	5,923	10,623
518	7,210	23,756
519	7,900	31,311

PLAN
SCALE: 1" = 50'
50 0 50 100

GENERAL NOTE

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

811
Know what's **below.**
Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

ENGINEER

JOSHUA T. SHARON, P.E.
1220–B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821–1690
EMAIL: JSHARON@MRAGTA.COM

DATUM

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

OWNER

ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE–TIMMONIUM, MD 21093
PHONE: (410) 560–0061
EMAIL: CNMILLER30@VERIZON.NET

DEVELOPER

GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456–1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

PROFESSIONAL CERTIFICATION

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. 34479, EXPIRATION DATE: 06/21/2026.

STATE OF MARYLAND — JOSHUA THOMAS SHARON — No. 34479 — PROFESSIONAL ENGINEER
07/23/2024

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

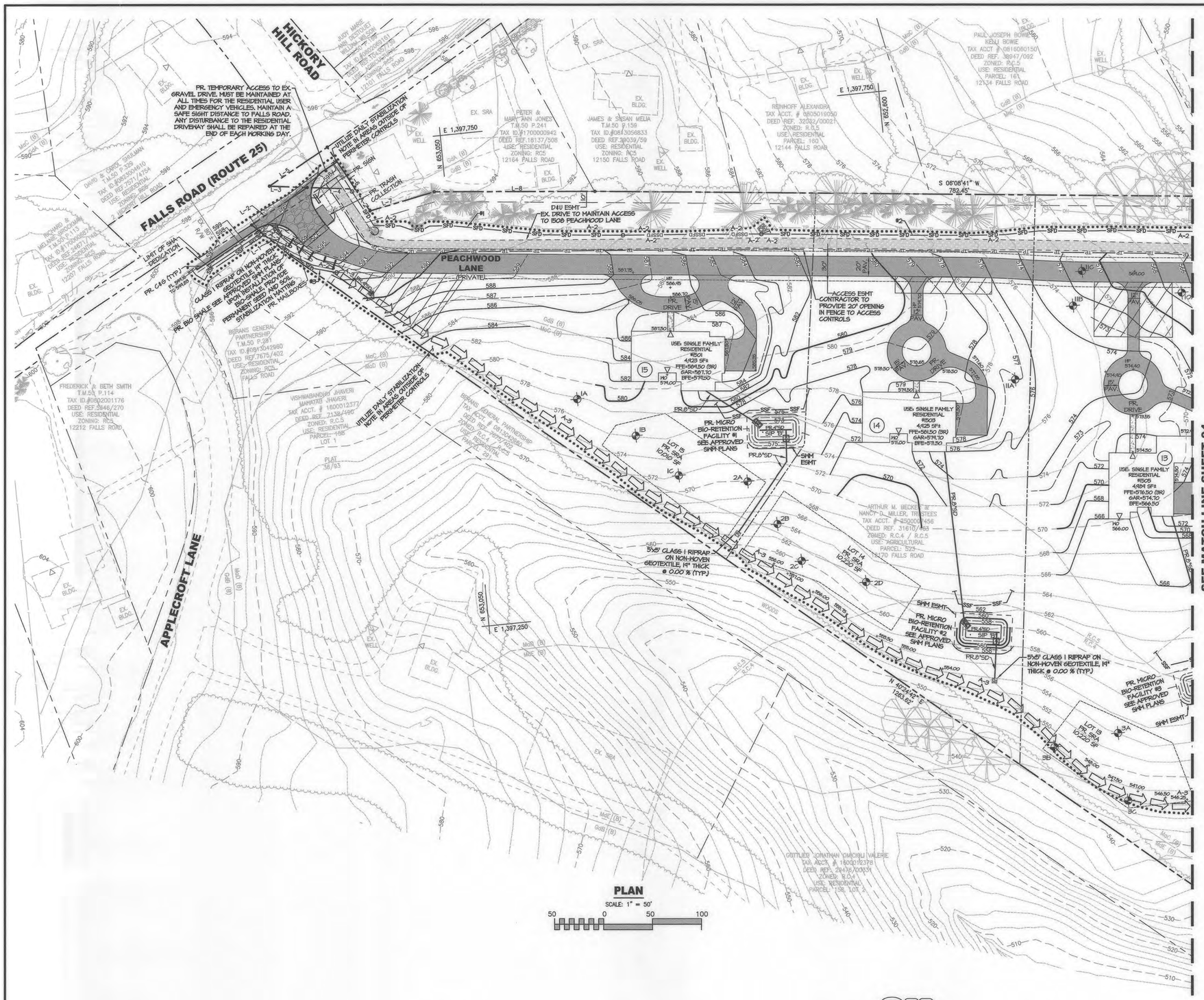
Copyright 2024 Morris & Ritchie Associates, Inc.

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
EXISTING CONDITIONS PLAN - 2

ELECTION DISTRICT 8 BALTIMORE COUNTY, MARYLAND COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	1" = 50'
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	02 OF 38



PLAN

SCALE: 1" = 50'

50 0 50 100

LEGEND

- LIMIT OF DISTURBANCE (LOD)
- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. RIGHT OF WAY LINE
- EX. EASEMENT LINE
- EX. PAVEMENT
- 52 — EX. 2' CONTOUR
- 50 — EX. 10' CONTOUR
- Ur (D) — EX. SOIL BOUNDARY
- EX. BUILDING
- EX. WOODS
- WT — EX. WETLAND
- EX. CONSERVANCY AREA EASEMENT
- FP — EX. FLOODPLAIN
- FB — EX. FOREST BUFFER
- OH — EX. OVER HEAD ELECTRIC
- EX. STEEP SLOPES
- EX. STREAM
- R.C.4 — EX. ZONING
- 6B — EX. PERC TEST LOCATION
- EX. SEPTIC RESERVE AREA (SRA)
- EX. WELL
- 1A, 1B, 1C — SEPTIC RESERVE AREA 10,000 S.F. MINIMUM WITH PASSED PERC TEST LOCATIONS
- FAILED PERC TEST LOCATION
- DRY WELL LOCATION
- PR. WELL FIELD
- PR. ASPHALT DRIVE
- PR. CONCRETE PAD
- 51 — PR. 1' CONTOUR
- 52 — PR. 2' CONTOUR
- 50 — PR. 10' CONTOUR
- PR. RIP RAP
- PR. CURB AND GUTTER
- PR. BUILDING
- PR.8" SD — PR. STORM DRAIN AND INLET
- SSF — PR. SUPER SILT FENCE
- SF — PR. SILT FENCE
- A-2 — DSSFD — A-2 — PR. DOUBLE SIDED SUPER FENCE DIVERSION
- SFD — PR. SUPER FENCE DIVERSION
- TP — PR. TREE PROTECTION FENCE
- SFCD — PR. SILT FENCE CHECK DAM
- SCE — PR. STABILIZED CONSTRUCTION ENTRANCE
- ROP III — PR. ROCK OUTLET PROTECTION
- A-3 — PR. EARTH DIKE (TYPE A)
- PR. MOUNTABLE BERM (TYPE A)
- PS — PR. REMOVABLE PUMPING STATION
- SP — PR. FILTER BAG
- TEMPORARY GRAVEL ACCESS DRIVE
- SIP 'B' — PR. STANDARD INLET PROTECTION TYPE 'B'
- x — x — PR. TEMPORARY SAFETY FENCE (FOR TRAPS)

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 03 OF 11 | C-03

GENERAL NOTE

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

LINE TABLE

LINE	BEARING AND DISTANCE
L-1	N 43°47'52" E 51.52'
L-2	S 27°08'52" E 68.60'
L-3	S 07°06'00" W 38.99'
L-4	S 61°46'59" W 78.40'
L-5	S 28°48'05" E 71.52'
L-6	S 61°46'59" W 78.40'
L-7	S 10°56'27" E 68.44'
L-8	S 05°33'04" W 163.84'

811 Know what's below. Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DATS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

ENGINEER

JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

DATUM

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

OWNER

ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER

GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

PROFESSIONAL CERTIFICATION

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. 34479, EXPIRATION DATE: 06/21/2026.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER
07/23/2024

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748
Copyright 2024 Morris & Ritchie Associates, Inc.

BECKER PROPERTY

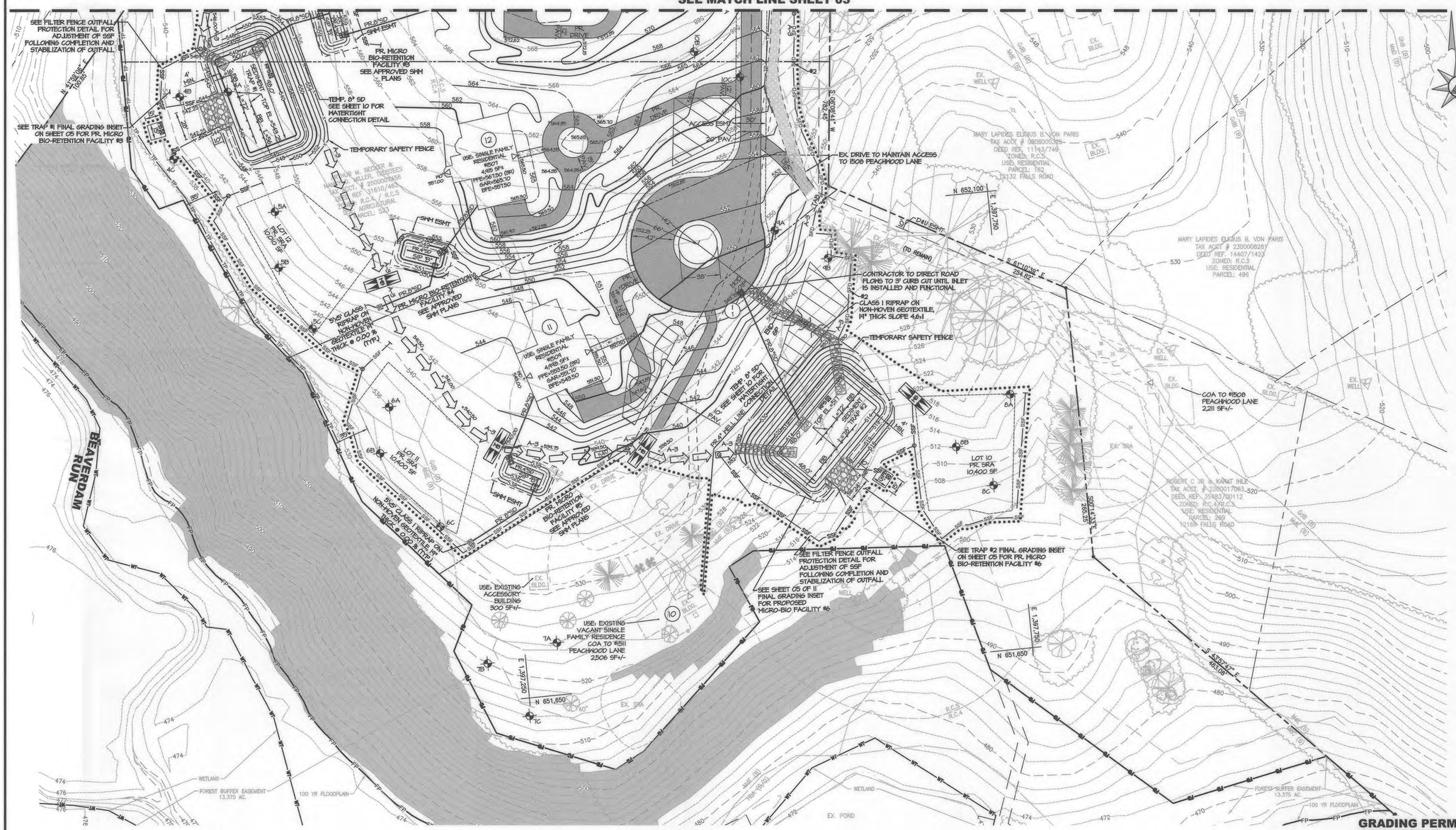
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
PROPOSED CONDITIONS PLAN - 1

ELECTION DISTRICT 8 | BALTIMORE COUNTY, MARYLAND | COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	1" = 50'
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	03 OF 38

SEE MATCH LINE SHEET 03



PLAN

SCALE: 1" = 50'

50 0 50 100

LEGEND

- LIMIT OF DISTURBANCE (LOD)
- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. RIGHT OF WAY LINE
- EX. EASEMENT LINE
- EX. PAVEMENT
- EX. 2' CONTOUR
- EX. 10' CONTOUR
- EX. SOIL BOUNDARY
- EX. BUILDING
- EX. WOODS
- EX. WETLAND
- EX. CONSERVANCY AREA EASEMENT
- EX. FLOODPLAIN
- EX. FOREST BUFFER
- EX. OVER HEAD ELECTRIC
- EX. STEEP SLOPES
- EX. STREAM
- EX. ZONING
- EX. PERC TEST LOCATION
- EX. SEPTIC RESERVE AREA (SRA)
- EX. WELL
- SEPTIC RESERVE AREA 10,000 S.F. MINIMUM WITH PASSED PERC TEST LOCATIONS
- FAILED PERC TEST LOCATION
- DRY WELL LOCATION
- PR. WELL FIELD
- PR. ASPHALT DRIVE
- PR. CONCRETE PAD
- PR. 1' CONTOUR
- PR. 2' CONTOUR
- PR. 10' CONTOUR
- PR. RIP RAP
- PR. CURB AND GUTTER
- PR. BUILDING
- PR. STORM DRAIN AND INLET
- PR. SUPER SILT FENCE
- PR. SILT FENCE
- PR. DOUBLE SIDED SUPER FENCE DIVERSION
- PR. SUPER FENCE DIVERSION
- PR. TREE PROTECTION FENCE
- PR. SILT FENCE CHECK DAM
- PR. STABILIZED CONSTRUCTION ENTRANCE
- PR. ROCK OUTLET PROTECTION
- PR. EARTH DIKE (TYPE A)
- PR. BAFFLE BOARD
- PR. GABION INFLOW PROTECTION
- PR. MOUNTABLE BERM (TYPE A)
- PR. MODIFIED COMBINATION INLET PROTECTION
- PR. REMOVABLE PUMPING STATION
- PR. FILTER BAG
- TEMPORARY GRAVEL ACCESS DRIVE
- PR. STANDARD INLET PROTECTION TYPE 'B'
- PR. TEMPORARY ASPHALT BERM
- PR. TEMPORARY SAFETY FENCE (FOR TRAPS)

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. Wentz 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 04 OF 11

C-04

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748
Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER
07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
PROPOSED CONDITIONS PLAN - 2

ELECTION DISTRICT 8 BALTIMORE COUNTY, MARYLAND COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	1" = 50'
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	04 OF 38

GENERAL NOTE

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

811
Know what's **below.**
Call before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

ENGINEER

JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

DATUM

DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

OWNER

ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER

GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

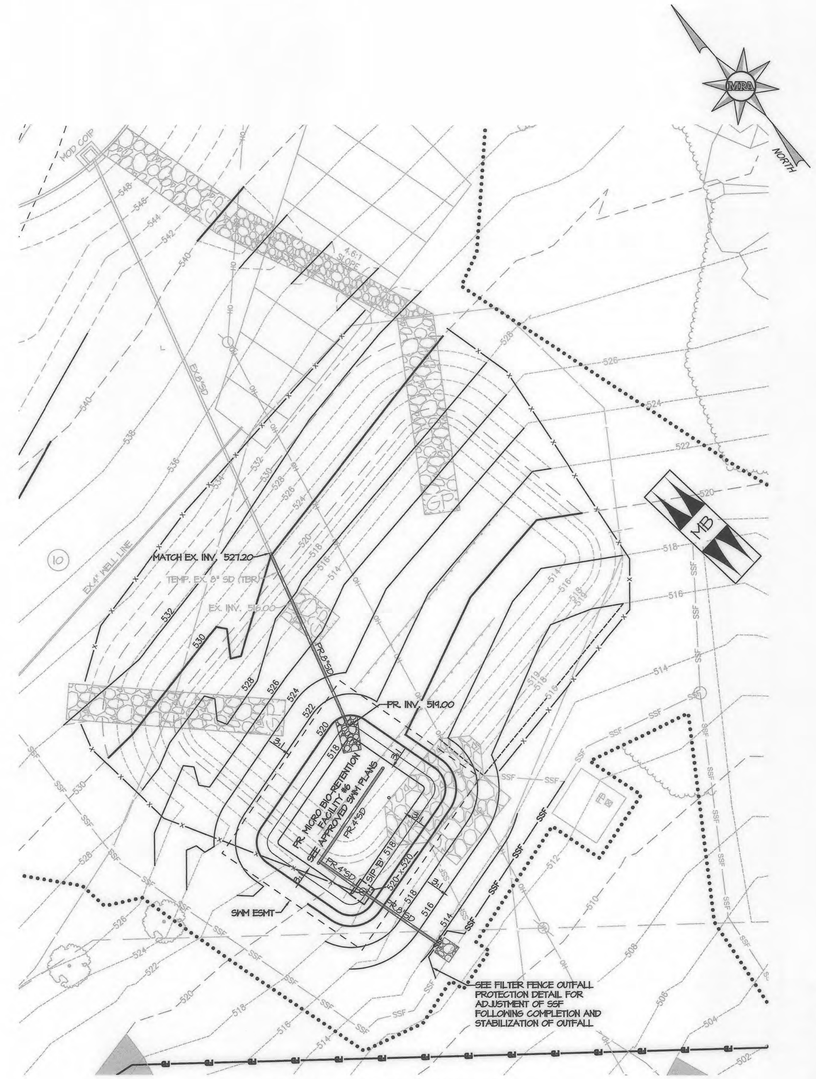
PROFESSIONAL CERTIFICATION

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. 34479, EXPIRATION DATE: 06/21/2026.

TRAP #1 FINAL GRADING INSET

SCALE: 1" = 20'

20 0 20 40



TRAP #2 FINAL GRADING INSET

SCALE: 1" = 20'

20 0 20 40

NOTE

SEE APPROVED STORMWATER MANAGEMENT PLANS FOR NOTES, DETAILS AND SPECIFICATIONS FOR THE MICRO BIO-RETENTION FACILITY INSTALLATIONS

LEGEND

- LIMIT OF DISTURBANCE (LOD)
- EX. PROPERTY LINE
- EX. ADJACENT PROPERTY LINE
- EX. RIGHT OF WAY LINE
- EX. EASEMENT LINE
- EX. PAVEMENT
- 52 — EX. 2' CONTOUR
- 50 — EX. 10' CONTOUR
- Ur (D) — EX. SOIL BOUNDARY
- EX. BUILDING
- EX. WOODS
- WT — EX. WETLAND
- EX. CONSERVANCY AREA EASEMENT
- FP — EX. FLOODPLAIN
- FB — EX. FOREST BUFFER
- OH — EX. OVER HEAD ELECTRIC
- EX. STEEP SLOPES
- EX. STREAM
- R.C.4 — EX. ZONING
- 6B — EX. PERC TEST LOCATION
- EX. SEPTIC RESERVE AREA (SRA)
- EX. WELL
- 1A, 1B, 1C — SEPTIC RESERVE AREA 10,000 S.F. MINIMUM WITH PASSED PERC TEST LOCATIONS
- FAILED PERC TEST LOCATION
- DRY WELL LOCATION
- PR. WELL FIELD
- PR. ASPHALT DRIVE
- 52 — PR. 2' CONTOUR
- 50 — PR. 10' CONTOUR
- EX. STORM DRAIN
- PR. STORM DRAIN
- PR. RIP RAP
- SSF — PR. SUPER SILT FENCE
- SIP 'B' — PR. STANDARD INLET PROTECTION TYPE 'B'

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey R. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 05 OF 11

C-05

GENERAL NOTE

THE CORRECTNESS OR COMPLETENESS OF EXISTING INFORMATION SHOWN ON THE DRAWINGS IS NOT WARRANTED OR GUARANTEED. THE CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITIES AND UNDERGROUND FACILITIES, BY TEST PITS OR OTHER METHODS APPROVED BY THE OWNER'S REPRESENTATIVE, AS REQUIRED TO VERIFY EXACT LOCATIONS AND DEPTHS WITHIN THE LIMIT OF DISTURBANCE. ALL DISCREPANCIES BETWEEN INFORMATION SHOWN ON THE DRAWINGS AND THAT VERIFIED IN THE FIELD SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.

811 Know what's **below.** **Call** before you dig.

PROTECT YOURSELF, GIVE THREE WORKING DAYS NOTICE

THIS DRAWING DOES NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY. ALL CONSTRUCTION MUST BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 AND ALL RULES AND REGULATIONS THERE TO APPURTENANT.

ENGINEER
JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION
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. 34479, EXPIRATION DATE: 06/21/2026.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER
07/23/2024

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.

BECKER PROPERTY
PEACHWOOD LANE

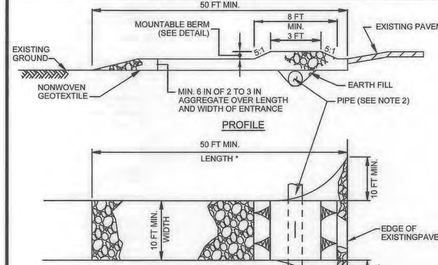
EROSION AND SEDIMENT CONTROL
FINAL GRADING INSET

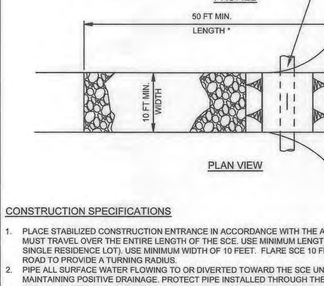
ELECTION DISTRICT 8 BALTIMORE COUNTY, MARYLAND COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	1" = 20'
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	05 OF 38

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL SCE





CONSTRUCTION SPECIFICATIONS

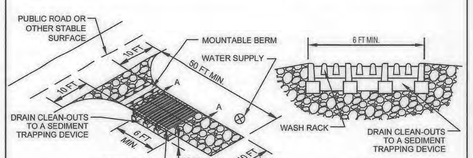
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

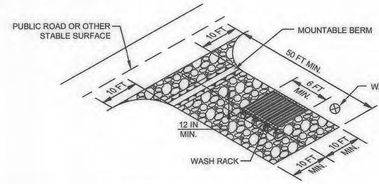
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-2 WASH RACK OPTION

STANDARD SYMBOL WR



ISOMETRIC VIEW - WASH RACK IN SCE



ISOMETRIC VIEW- WASH RACK ALONG SCE

CONSTRUCTION SPECIFICATIONS

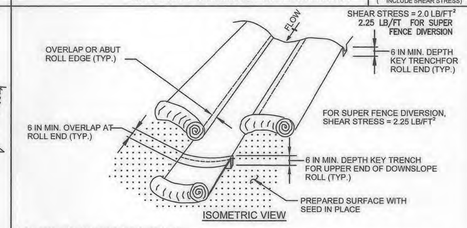
1. USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIBS AS SHOWN ON THE DETAIL.
2. INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.
3. DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

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

DETAIL B-4-6-A TEMPORARY SOIL STABILIZATION MATTING CHANNEL APPLICATION

STANDARD SYMBOL TSSMC - * lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

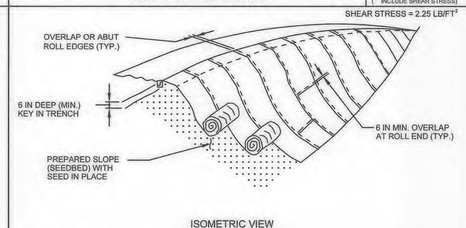
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO ½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
7. OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

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

DETAIL B-4-6-B TEMPORARY SOIL STABILIZATION SLOPE APPLICATION

STANDARD SYMBOL TSSMS - * lb/ft² (* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

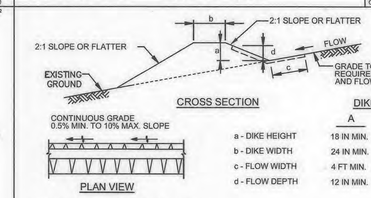
1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO ½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
5. UNROLL MATTING DOWNSLOPE. LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

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

DETAIL C-1 EARTH DIKE

STANDARD SYMBOL A-1 PLACE DESIGNATION (e.g. A-1) ON FLOW CHANNEL SIDE OF DIKE.



DIKE TYPE	A	B
a - DIKE HEIGHT	18 IN MIN.	30 IN MIN.
b - DIKE WIDTH	24 IN MIN.	36 IN MIN.
c - FLOW WIDTH	4 FT MIN.	6 FT MIN.
d - FLOW DEPTH	12 IN MIN.	24 IN MIN.

FLOW CHANNEL STABILIZATION

A-1	SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)
A-2/B-2	SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.
A-3/B-3	4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

CONSTRUCTION SPECIFICATIONS

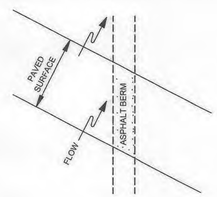
1. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
2. EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
3. COMPACT FILL.
4. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
5. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
6. STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
8. UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

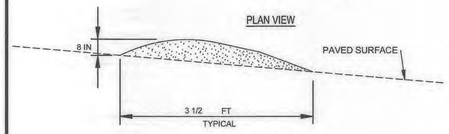
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-5 TEMPORARY ASPHALT BERM

STANDARD SYMBOL TAB





CONSTRUCTION SPECIFICATIONS

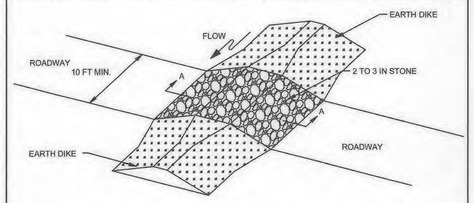
1. CONSTRUCT BERM ON AN UNINTERRUPTED, CONTINUOUS GRADE.
2. INSTALL BERM TO CONFORM TO CROSS SECTION DIMENSIONS OF A UNIFORM HEIGHT OF 8 INCHES MINIMUM AND APPROXIMATE WIDTH OF 3½ FEET.
3. PROVIDE OUTLET PROTECTION AS REQUIRED ON PLAN.
4. COMPACT ASPHALT BERM.
5. REPAIR DAMAGED ASPHALT. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.
6. UPON REMOVAL OF ASPHALT BERM, RETURN TO ORIGINAL CONDITIONS OR AS SPECIFIED ON APPROVED PLAN.

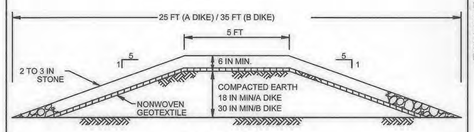
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-8 MOUNTABLE BERM

STANDARD SYMBOL MB





CONSTRUCTION SPECIFICATIONS

1. USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.
2. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE EARTH MOUND PRIOR TO PLACING STONE.
3. PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE MOUNTABLE BERM.
4. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.

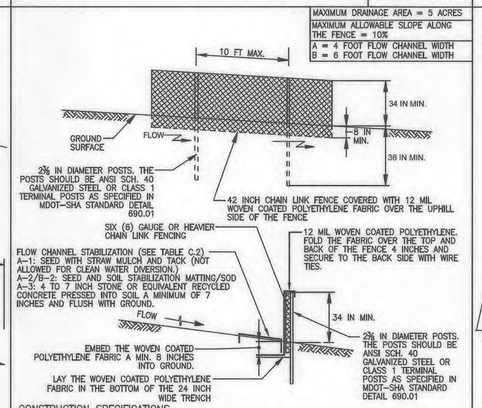
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL C-9 SUPER FENCE DIVERSION

STANDARD SYMBOL SFD

MAXIMUM DRAINAGE AREA = 5 ACRES
MAXIMUM ALLOWABLE SLOPE ALONG THE FENCE = 10%
A = 4 FOOT FLOW CHANNEL WIDTH
B = 6 FOOT FLOW CHANNEL WIDTH



CONSTRUCTION SPECIFICATIONS

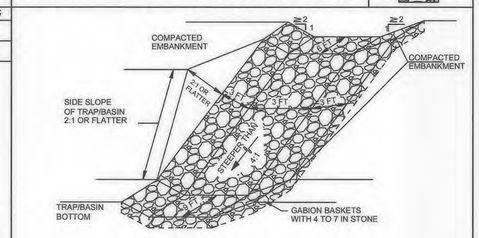
1. USE 42 INCH HIGH, 6 GAUGE OR HEAVIER CHAIN LINK FENCING (2⅜ INCH MAXIMUM OPENING).
2. USE 2⅜ INCH DIAMETER, GALVANIZED STEEL POSTS. THE POSTS SHALL BE SIX FEET IN LENGTH, SPACED NO FURTHER THAN TEN FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
4. SECURE THE WOVEN COATED POLYETHYLENE FABRIC TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, 18 INCHES BELOW THE TOP AND BELOW GROUND.
5. EMBED THE WOVEN COATED POLYETHYLENE FABRIC A MINIMUM OF 8 INCHES INTO THE GROUND. LAY THE WOVEN COATED POLYETHYLENE FABRIC IN THE BOTTOM OF THE 24 INCH WIDE TRENCH AND PROVIDE THE DESIGNATED FLOW CHANNEL STABILIZATION.
6. WHEN TWO SECTIONS OF WOVEN COATED POLYETHYLENE FABRIC ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
7. KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND RE-ESTABLISH THE DESIGNATED VEGETATIVE STABILIZATION OR PROVIDE CLEAN STONE. MAINTAIN POSITIVE DRAINAGE. REPLACE WOVEN COATED POLYETHYLENE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

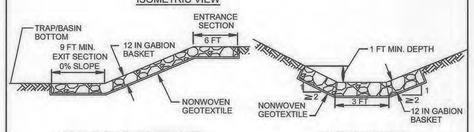
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	REVISED – 2020	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL D-3-2 GABION INFLOW PROTECTION

STANDARD SYMBOL GP





CONSTRUCTION SPECIFICATIONS

1. PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL GABION BASKETS.
2. USE BASKETS MADE OF MINIMUM 11 GAUGE WIRE.
3. CONSTRUCT GABION INFLOW PROTECTION BY ARRANGING 9 X 3 X 1 FOOT GABION BASKETS TO FORM A TRAPEZOIDAL SECTION WITH A 3 FOOT BOTTOM WIDTH, 1 FOOT MINIMUM DEPTH, 3 FOOT SIDE WALLS, AND 2:1 OR FLATTER SIDE SLOPES. FILL GABION BASKETS WITH 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE WITHOUT REBAR OR WEIR MESH.
4. INSTALL ENTRANCE AND EXIT SECTIONS AS SHOWN ON THE PROFILE.
5. INSTALL GABIONS IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
6. BLEND GABIONS INTO EXISTING GROUND.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION.

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

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 06 OF 11

C-06

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER
07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
DETAILS - 1

ELECTION DISTRICT 8 BALTIMORE COUNTY, MARYLAND COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	N/A
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	06 OF 38

ENGINEER
JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

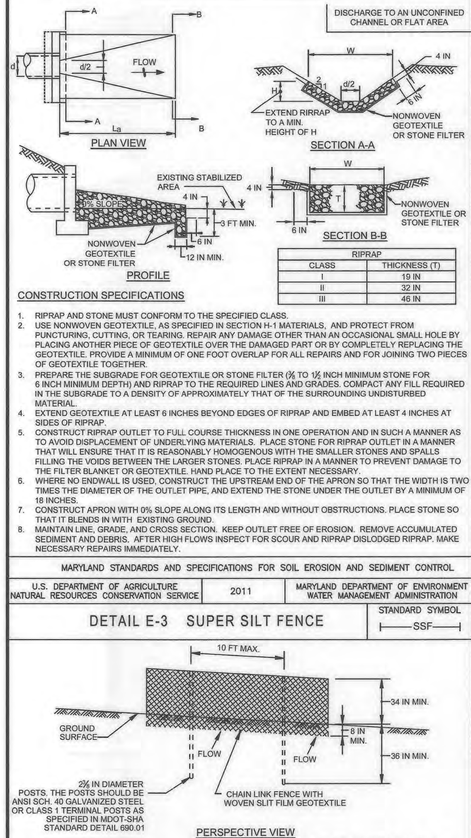
DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION
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. 34479, EXPIRATION DATE: 06/21/2026.

DETAIL D-4-1-C ROCK OUTLET PROTECTION III

STANDARD SYMBOL ROPIII



RIPRAP	
CLASS	THICKNESS (T)
I	19 IN
II	32 IN
III	46 IN

CONSTRUCTION SPECIFICATIONS

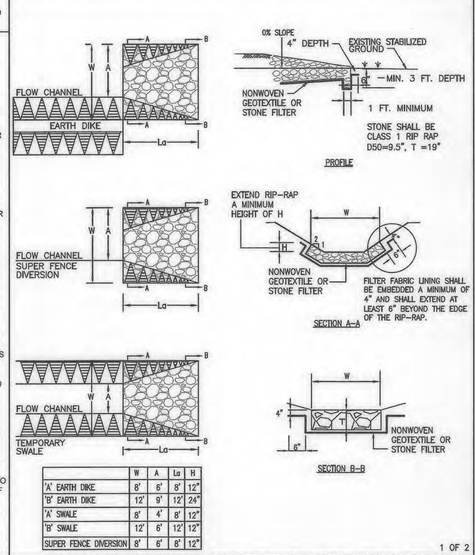
1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 1½ INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
7. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
8. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

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

DETAIL D-4-1-C ROCK OUTLET PROTECTION III

STANDARD SYMBOL ROPIII



	W	A	La	H
'A' EARTH DIKE	8'	6'	8'	12"
'B' EARTH DIKE	12'	9'	12'	24"
'A' SWALE	8'	4'	8'	12"
'B' SWALE	12'	6'	12'	12"
SUPER FENCE DIVERSION	8'	6'	8'	12"

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL D-4-1-C ROCK OUTLET PROTECTION III

STANDARD SYMBOL ROPIII

CONSTRUCTION SPECIFICATIONS

1. RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
2. USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
3. PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (⅜ TO 1½ INCH MINIMUM STONE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
4. EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
5. CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
6. CONSTRUCT APRON WITH 0% SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
7. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

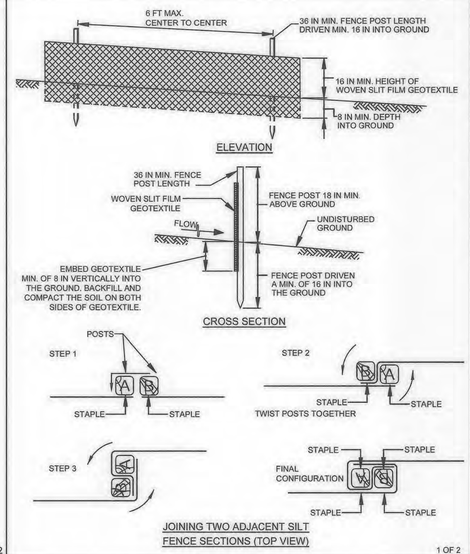
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL SF



1 OF 2

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

DETAIL E-1 SILT FENCE

STANDARD SYMBOL SF

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/16 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

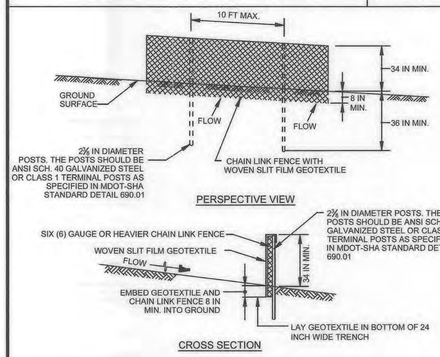
2 OF 2

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

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL SSF



CONSTRUCTION SPECIFICATIONS

1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.15 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HOG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND. LAY THE GEOTEXTILE IN BOTTOM OF 24 INCH WIDE TRENCH.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BYPASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE UPHILL A MINIMUM OF 3 VERTICAL FEET TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

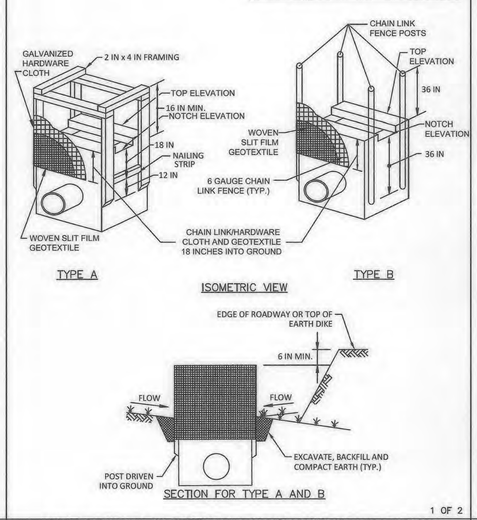
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 REVISED–5/2023 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL SIP

TYPE A MAXIMUM DRAINAGE AREA = ¼ ACRE
TYPE B MAXIMUM DRAINAGE AREA = 1 ACRE



1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL SIP

CONSTRUCTION SPECIFICATIONS

1. USE WOVEN GEOTEXTILE (SLIT FILM AS INDICATED ON THE STANDARD INLET PROTECTION DETAIL) AS SPECIFIED IN SECTION H-1 MATERIALS.
2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
3. FOR TYPE A, USE NOMINAL 2 X 4 INCH CONSTRUCTION GRADE LUMBER POSTS, DRIVEN 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2X4 INCH FRAME AS SHOWN. STRETCH 1/4 INCH GALVANIZED HARDWARE CLOTH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEIR CREST. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.

   FOR TYPE B, USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.15 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 6 GAUGE OR HEAVIER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE WEIR CREST.
4. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
5. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

2 OF 2

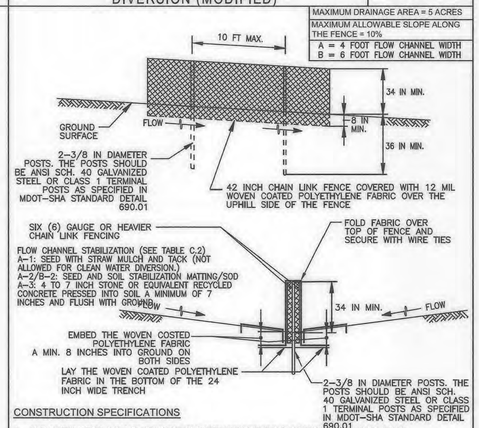
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 REVISED 06/2023 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL DOUBLE SIDED SUPER FENCE DIVERSION (MODIFIED)

STANDARD SYMBOL DSFD

MAXIMUM DRAINAGE AREA = 5 ACRES
MAXIMUM ALLOWABLE SLOPE ALONG THE FENCE = 10%
A = 4 FOOT FLOW CHANNEL WIDTH B = 6 FOOT FLOW CHANNEL WIDTH



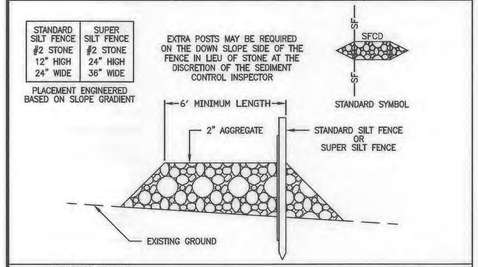
CONSTRUCTION SPECIFICATIONS

1. USE 42 INCH HIGH, 6 GAUGE OR THICKER CHAIN LINK FENCING (2-3/8 INCH MAXIMUM OPENING).
2. USE 2-3/8 INCH DIAMETER GALVANIZED STEEL POSTS. THE POSTS SHALL BE SIX FEET IN LENGTH SPACED NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
4. SECURE THE WOVEN COATED POLYETHYLENE FABRIC TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, 18 INCHES BELOW THE TOP AND BELOW THE GROUND.
5. EMBED THE WOVEN COATED POLYETHYLENE FABRIC A MINIMUM OF 8 INCHES INTO THE GROUND ON BOTH SIDES. LAY THE WOVEN COATED POLYETHYLENE FABRIC IN BOTTOM OF THE 24 INCH WIDE TRENCH AND PROVIDE THE DESIGNATED FLOW CHANNEL STABILIZATION ON BOTH SIDES.
6. WHEN TWO SECTIONS OF WOVEN COATED POLYETHYLENE FABRIC ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
7. KEEP FLOW SURFACE ALONG BOTH SIDES OF THE FENCE AND POINTS OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND RE-ESTABLISH THE DESIGNATED VEGETATIVE STABILIZATION OR PROVIDE CLEAN STONE. MAINTAIN POSITIVE DRAINAGE. REPLACE WOVEN COSATED POLYETHYLENE FABRIC IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL - SILT FENCE CHECK DAM



BALTIMORE COUNTY SOIL CONSERVATION DISTRICT | APPENDIX 18

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 07 OF 11

C-07

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER
07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
DETAILS - 2

ELECTION DISTRICT 8 | BALTIMORE COUNTY, MARYLAND | COUNCILMANIC DISTRICT 2

ENGINEER
JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

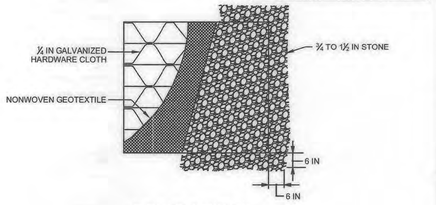
PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 34479, EXPIRATION DATE: 08/21/2026.

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	N/A
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	07 OF 38

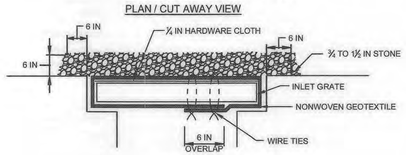
DETAIL E-9-2 AT-GRADE INLET PROTECTION

STANDARD SYMBOL AGIP

MAXIMUM DRAINAGE AREA = 1 ACRE



PLAN / CUT AWAY VIEW



CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
3. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

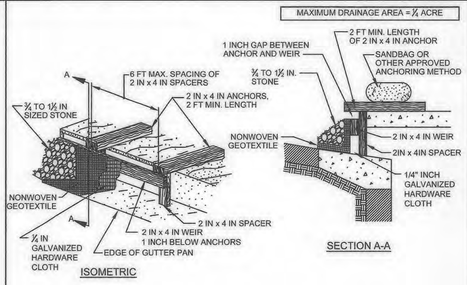
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | 2011 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-3 CURB INLET PROTECTION

STANDARD SYMBOL CIP

MAXIMUM DRAINAGE AREA = ¼ ACRE



CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER.
2. ATTACH A CONTINUOUS PIECE OF ¼ INCH GALVANIZED HARDWARE CLOTH, MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 INCH WEIR, EXTENDING 2 FEET BEYOND THROAT ON EACH SIDE.
3. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 INCH WEIR.
4. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
5. NAIL THE 2X4 INCH WEIR (1 INCH BELOW THE ANCHORS) TO 9 INCH LONG VERTICAL SPACERS (MAX. 6 FEET APART).
6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 INCH ANCHORS (MIN. 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
8. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
9. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

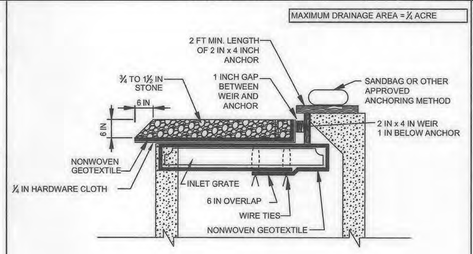
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

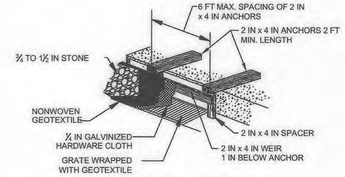
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL COIP

MAXIMUM DRAINAGE AREA = ¼ ACRE





1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL COIP

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. LIFT GRATE, AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS, THEN SET GRATE BACK IN PLACE.
4. ATTACH A CONTINUOUS PIECE OF 1/4 INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2 INCH BY 4 INCH WEIR, EXTENDING 2 FEET BEYOND THROAT ON EACH SIDE.
5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH IT TO THE WEIR.
6. NAIL THE 2 X 4 INCH WEIR (1 INCH BELOW THE ANCHORS) TO THE 9 INCH LONG VERTICAL SPACERS, LOCATED BETWEEN THE WEIR AND THE INLET FACE, (MAXIMUM 4 FEET APART).
7. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO THE 2 X 4 INCH ANCHORS (MINIMUM 2 FOOT LENGTHS) AT THE SPACER LOCATIONS. EXTEND 2 X 4 INCH ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
8. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
9. FORM THE ¼ INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE OVER THE HARDWARE CLOTH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
10. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
11. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN OR REPLACE GEOTEXTILE AND STONE.

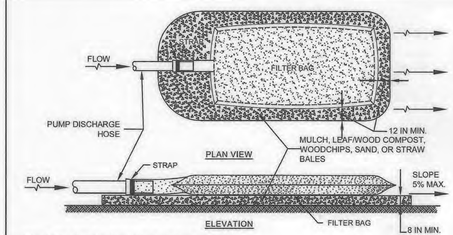
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL F-4 FILTER BAG

STANDARD SYMBOL FB



CONSTRUCTION SPECIFICATIONS

1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:

GRAB TENSILE	250 LB	ASTM D-4632
PUNCTURE	150 LB	ASTM D-4833
FLOW RATE	70 GAL/MIN/FT^2	ASTM D–4491
PERMITTIVITY (SEC^{-1})	1.2 SEC^{-1}	ASTM D–4491
UV RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D–4355
APPARENT OPENING SIZE (AOS)	0.15–0.18 MM	ASTM D–4751
SEAM STRENGTH	90%	ASTM D–4632

6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

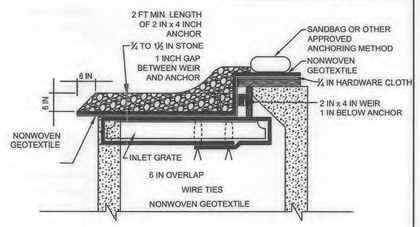
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

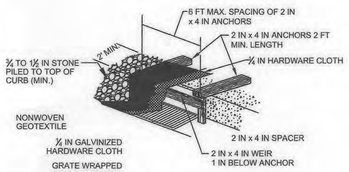
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | 2011 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL MOD COIP

MAXIMUM DRAINAGE AREA = 1 ACRE





NOTE: HARDWARE CLOTH, GEOTEXTILE, AND STONE SHALL EXTEND 2 FEET BEYOND THROAT ON EACH SIDE

MODIFIED FOR SUMP

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL MOD COIP

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER.
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. LIFT GRATE, AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS, THEN SET GRATE BACK IN PLACE.
4. NAIL THE 2x4 WEIR (1 INCH BELOW THE ANCHORS) TO THE TOP OF A 9 INCH LONG VERTICAL SPACER, LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAXIMUM 4 FEET APART)
5. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2X4 ANCHORS (MINIMUM 2 FOOT LENGTHS) AT SPACER LOCATIONS. EXTEND 2X4 ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
6. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
7. ATTACH A CONTINUOUS PIECE OF 1/4 INCH GALVANIZED HARDWARE CLOTH WITH A MINIMUM WIDTH OF 60 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO 2 FEET BEYOND THE TOP OF CURB, EXTENDING 2 FEET BEYOND THROAT ON EACH SIDE.
8. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH.
9. FORM THE ¼ INCH HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE OVER THE HARDWARE CLOTH AND GEOTEXTILE IN SUCH A MANNER TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MODIFIED FOR SUMP

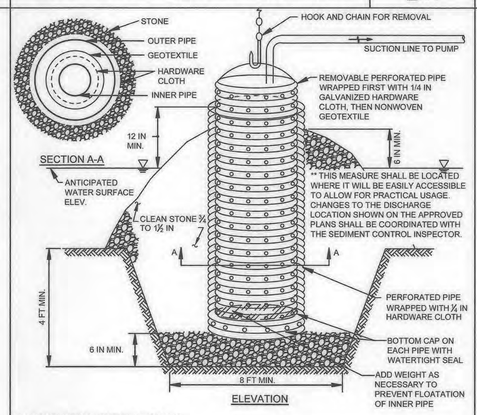
2 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL F-1 REMOVABLE PUMPING STATION

STANDARD SYMBOL RPS



CONSTRUCTION SPECIFICATIONS

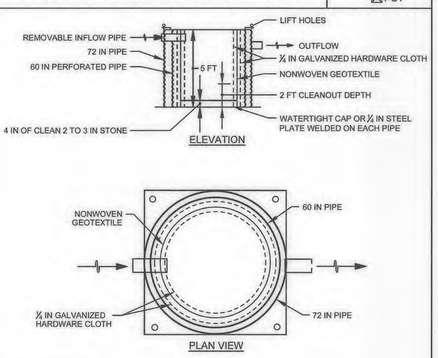
1. USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.
2. USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATERTIGHT SEAL.
3. WRAP EACH PIPE WITH ¼ INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
4. EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
5. SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION (OR RISER CREST ELEVATION WHEN DEWATERING A BASIN).
6. BACKFILL PIT AROUND THE OUTER PIPE WITH ¾ TO 1½ INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
7. DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A REMOVABLE PUMPING STATION REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, PULL OUT INNER PIPE AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL F-3 PORTABLE SEDIMENT TANK

STANDARD SYMBOL PST



CONSTRUCTION SPECIFICATIONS

1. PROVIDE 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP CAPACITY. REQUIRED STORAGE VOLUME MAY BE ATTAINED BY PLACEMENT OF TANKS IN PARALLEL WITH INFLOW EVENLY DISTRIBUTED AMONG TANKS. OVERTOPPING OF TANKS IS NOT PERMITTED.
2. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, SANDWICHED BETWEEN, AND ATTACHED TO, ¼ INCH HARDWARE CLOTH.
3. OVERLAP GEOTEXTILE 6 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
4. ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
5. USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE
6. INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
7. PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A PORTABLE SEDIMENT TANK REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT FROM INNER PIPE WHEN IT REACHES TWO FEET IN DEPTH. IF SYSTEM CLOGS, PULL OUT INNER PIPE, REMOVE ACCUMULATED SEDIMENT, AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE | MODIFIED – 2012 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 08 OF 11

C-08

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER 07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
DETAILS - 3

ELECTION DISTRICT 8 | BALTIMORE COUNTY, MARYLAND | COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	N/A
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	08 OF 38

ENGINEER
JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

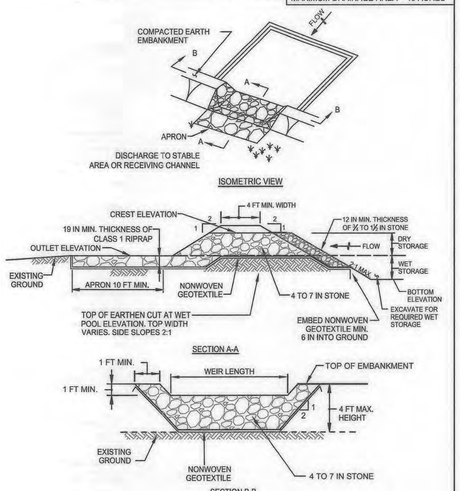
DATUM
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION
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. 34479, EXPIRATION DATE: 06/21/2026.

DETAIL G-1-2 STONE / RIPRAP OUTLET SEDIMENT TRAP ST-II

STANDARD SYMBOL ST-II

MAXIMUM DRAINAGE AREA = 10 ACRES



1 OF 3

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED FOR USE IN BALTIMORE COUNTY	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-1-2 STONE / RIPRAP OUTLET SEDIMENT TRAP ST-II

STANDARD SYMBOL ST-II

CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.
2. CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.
3. USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
4. CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST. COMPACT THE EMBANKMENT BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
5. MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
6. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
7. USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR. USE CLASS I RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.
8. PLACE 1 FOOT OF CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR.
9. CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
10. STABILIZE THE EMBANKMENT AND INTERIOR SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
11. REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (50% OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF THE TRAP FREE FROM EROSION, AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION.
12. WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.
13. UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.

2 OF 3

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

DETAIL G-1-2 STONE / RIPRAP OUTLET SEDIMENT TRAP ST-II

STANDARD SYMBOL ST-II

STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II, TRAP NO.		1 AND 2
DRAINAGE AREA - INITIAL		ACRES
DRAINAGE AREA - INTERIM		ACRES
DRAINAGE AREA - FINAL		ACRES
TOTAL STORAGE REQUIRED		CF
TOTAL STORAGE PROVIDED		CF
WET STORAGE REQUIRED		CF
WET STORAGE PROVIDED		CF
DRY STORAGE REQUIRED		CF
DRY STORAGE PROVIDED		CF
EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION)		FT
TRAP BOTTOM ELEVATION		FT
TRAP BOTTOM DIMENSIONS		FT x FT
WEIR LENGTH		FT
WEIR CREST (DRY STORAGE) ELEVATION		FT
CLEANOUT ELEVATION		FT
TOP OF EMBANKMENT ELEVATION		FT
SIDE SLOPE		H:V RATIO
EMBANKMENT TOP WIDTH		FT
OUTLET PROTECTION - LENGTH		FT
OUTLET PROTECTION - DEPTH		IN

NOTE: SEE SHEET ESC-02 FOR TRAP INFORMATION

3 OF 3

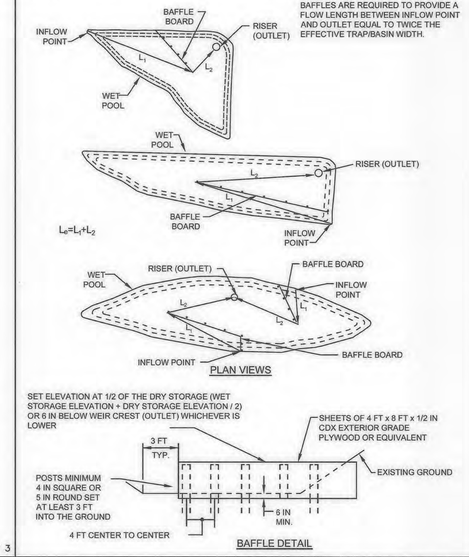
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL G-2-4 BAFFLE BOARDS

STANDARD SYMBOL BB

BAFFLES ARE REQUIRED TO PROVIDE A FLOW LENGTH BETWEEN INFLOW POINT AND OUTLET EQUAL TO TWICE THE EFFECTIVE TRAP/BASIN WIDTH.



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

Table H.2: Stone Size

TYPE	SIZE RANGE	d_{50}	d_{100}	AASHTO	MIDSIZE WEIGHT[3]
NUMBER 57[1]	3/8 to 1 ½ inch	½ in	1 ½ in	M-43	N/A
NUMBER 1	2 to 3 inch	2 ½ in	3 in	M-43	N/A
RIPRAP[2] (CLASS 0)	4 to 7 inch	5 ½ in	7 in	N/A	N/A
CLASS I	N/A	9 ½ in	15 in	N/A	40 lb
CLASS II	N/A	16 in	24 in	N/A	200 lb
CLASS III	N/A	23 in	34 in	N/A	600 lb

[1] This classification is to be used on the upstream face of stone outlets and check dams.

[2] This classification is to be used for gabions.

[3] Optimum gradation is 50 percent of the stone being above and 50 percent below the midsize.

Stone must be composed of a well graded mixture of stone sized so that fifty (50) percent of the pieces by weight are larger than the size determined by using the charts. A well graded mixture, as used herein, is defined as a mixture composed primarily of larger stone sizes but with a sufficient mixture of other sizes to fill the smaller voids between the stones. The diameter of the largest stone in such a mixture must not exceed the respective d_{100} selected from Table H.2. The d_{50} refers to the median diameter of the stone. This is the size for which 50 percent, by weight, will be smaller and 50 percent will be larger.

Note: Recycled concrete equivalent may be substituted for all stone classifications for temporary control measures only. Concrete broken into the sizes meeting the appropriate classification, containing no steel reinforcement, and having a minimum density of 150 pounds per cubic foot may be used as an equivalent.

H.2

H-1 STANDARDS AND SPECIFICATIONS FOR MATERIALS

Table H.1: Geotextile Fabrics

PROPERTY	TEST METHOD	WOVEN SLIT FILM GEOTEXTILE (MINIMUM AVERAGE ROLL VALUE[1]) MD	CD	WOVEN MONOFILAMENT GEOTEXTILE MD	CD	NONWOVEN GEOTEXTILE MD	CD
GRAB TENSILE STRENGTH	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
GRAB TENSILE ELONGATION	ASTM D-4632	15%	10%	15%	15%	50%	50%
TRAPEZOIDAL TEAR STRENGTH	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
PUNCTURE STRENGTH	ASTM D-6241	450 lb		900 lb		450 lb	
APPARENT OPENING SIZE[2]	ASTM D-4751	US SIEVE 30 (0.59 mm)		US SIEVE 70 (0.21 mm)		US SIEVE 70 (0.21 mm)	
PERMITTIVITY	ASTM D-4491	0.05 SEC^{-1}		0.28 SEC^{-1}		1.1 SEC^{-1}	
ULTRAVIOLET RESISTANCE RETAINED AT 500 HOURS	ASTM D-4355	70% STRENGTH		70% STRENGTH		70% STRENGTH	

1. ALL NUMERIC VALUES EXCEPT APPARENT OPENING SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION; CD IS CROSS DIRECTION.
2. VALUES FOR AOS REPRESENT THE AVERAGE MAXIMUM OPENING

GEOTEXTILES MUST BE EVALUATED BY THE NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTPEP) AND CONFORM TO THE VALUES IN TABLE H.1.

THE GEOTEXTILE MUST BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS AND MUST BE ROT AND MILDEW RESISTANT. THE GEOTEXTILE MUST BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS AND COMPOSED OF A MINIMUM OF 95 PERCENT BY WEIGHT OF POLYOLEFINS OR POLYESTERS, AND FORMED INTO A STABLE NETWORK SO THE FILAMENTS OR YARNS RETAIN THEIR DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING SELVAGES.

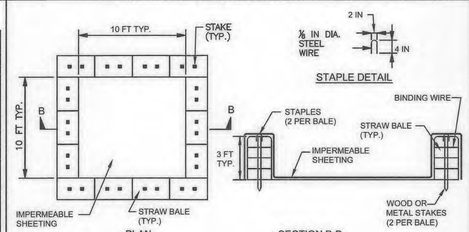
WHEN MORE THAN ONE SECTION OF GEOTEXTILE IS NECESSARY, OVERLAP THE SECTIONS BY AT LEAST ONE FOOT. THE GEOTEXTILE MUST BE PULLED TAUT OVER THE APPLIED SURFACE. EQUIPMENT MUST NOT RUN OVER THE EXPOSED FABRIC. WHEN PLACING RIPRAP ON GEOTEXTILE, DO NOT EXCEED A ONE FOOT DROP HEIGHT.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE		MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL CWS



NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

2 OF 2

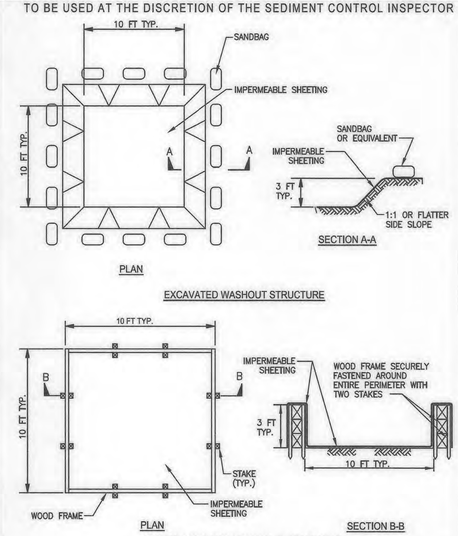
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL CWS

TO BE USED AT THE DISCRETION OF THE SEDIMENT CONTROL INSPECTOR

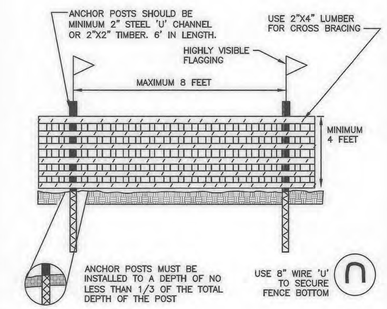


1 OF 2

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

DETAIL - BLAZE ORANGE FENCE

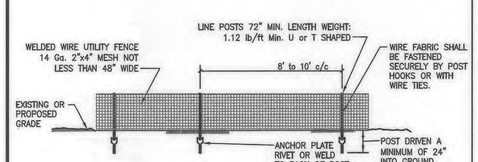


NOTES:

1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

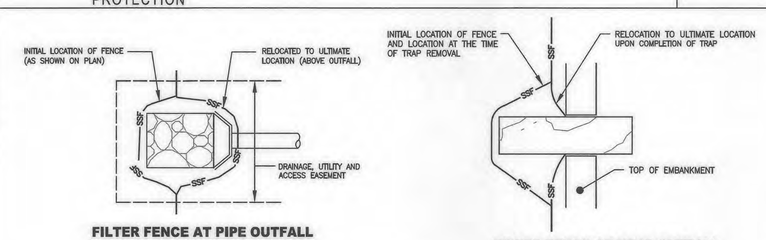
DETAIL - TEMPORARY SAFETY FENCE

FOR SEDIMENT TRAPPING DEVICES



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE		MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL - FILTER FENCE OUTFALL PROTECTION



FILTER FENCE AT PIPE OUTFALL

FILTER FENCE AT TRAP OUTFALL

BALTIMORE COUNTY SOIL CONSERVATION DISTRICT		

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 09 OF 11

C-09

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND JOSHUA THOMAS SHARON No. 34479 PROFESSIONAL ENGINEER
07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
DETAILS - 4

ELECTION DISTRICT 8 BALTIMORE COUNTY, MARYLAND COUNCILMANIC DISTRICT 2

ENGINEER
JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION
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. 34479, EXPIRATION DATE: 06/21/2026.

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	N/A
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	09 OF 38

FOREST BUFFER AND FOREST CONSERVATION FENCE NOTE

BLAZE ORANGE SAFETY FENCE SHALL BE INSTALLED AT THE LIMIT OF DISTURBANCE (LOD) WHERE THE LOD IS 50 FEET OR LESS FROM ANY FOREST BUFFER, FOREST RETENTION AREA OR FOREST CONSERVATION EASEMENT. THE ACCURACY OF THIS FENCE LOCATION SHALL BE APPROVED BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AT THE TIME OF THE PRECONSTRUCTION MEETING.

FOREST PROTECTION PLAN AND ALTERNATIVE ANALYSIS NOTES

1. ANY FOREST CONSERVATION EASEMENT (FCE) AND FOREST BUFFER EASEMENT SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF BALTIMORE COUNTY AND WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT AND FOREST BUFFER EASEMENT, EXCEPT AS PERMITTED BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY (DEPS).
3. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS OR AS FOREST BUFFER EASEMENTS.

STEEP SLOPE CONSTRUCTION

TO DISPEL SLIDING WHEN WORK IS IN PROXIMITY TO STEEP SLOPES THE CONTRACTOR SHALL GRADE BENCHES AS NEEDED.

STANDARD NONDISTURBANCE NOTE

THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT/RESERVATION OR OTHER FOREST RETENTION AREAS, EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.

GRADING NOTE

THE PROPOSED GRADING SHOWN ON THIS PLAN MEETS THE REQUIREMENTS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO THE BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED. ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.

DAILY STABILIZATION NOTE

THIS NOTE SHOULD BE USED FOR MINIMAL AREAS WITHIN THE LIMITS OF DISTURBANCE THAT DO NOT DRAIN TO A SEDIMENT CONTROL MEASURE AND/OR WHERE THE INSTALLATION OF CONTROLS IS NOT FEASIBLE. (ROAD WIDENING, SIDEWALK INSTALLATION, WELL LINE INSTALLATION ETC.). THE CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:

1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
   a. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS, OR SWALES.
   b. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS. ANY AREAS WHICH CANNOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.

SUPER SILT FENCE MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT THE SUPER SILT FENCE (SSF) AFTER EACH STORM EVENT AND PERFORM MAINTENANCE. MAINTENANCE SHALL CONSIST OF, BUT NOT LIMITED TO, REMOVAL OF ANY ACCUMULATED SEDIMENT ALONG AND/OR ABOVE THE FENCE LOCATION WHICH WILL RESTRICT ITS FUNCTION. IN ADDITION, ANY PORTION OF SSF DAMAGED SHALL BE REPAIRED AND/OR REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS. IN THE EVENT THAT THE SSF IS TEMPORARILY REMOVED FOR CONTRACTOR TO CONDUCT WORK; SUCH AS, FOR RETAINING WALL CONSTRUCTION, THE SSF SHALL BE REPAIRED AND/OR REPLACED BY THE END OF THE WORK DAY OR PRIOR TO A STORM EVENT; WHICHEVER COMES FIRST.

STABILIZED CONSTRUCTION ENTRANCE NOTE

1. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO THE PUBLIC RIGHT–OF–WAY MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING AND/OR SWEEPING. WASHING THE ROADWAY TO REMOVE SEDIMENT TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE.
2. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

INLET PROTECTION NOTE

THE CONTRACTOR IS REQUIRED TO INSTALL INLET PROTECTION ON ALL STORM DRAIN INLETS WITH THE EXCEPTION OF THE FOLLOWING:

*1. ANY INLET OUT–FALLING DIRECTLY INTO A SEDIMENT TRAPPING DEVICE.

2. INLETS ON PRIVATE OR PUBLIC PAVED ROADWAYS OPEN TO THE PUBLIC.

ALL INLET PROTECTION WILL BE INSTALLED AS DIRECTED BY THE INSPECTOR IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, PAGE E.23 (OR AS MAY BE AMENDED). THE REMOVAL OF ANY INLET PROTECTION DEVICES WILL REQUIRE APPROVAL FROM THE INSPECTOR.

* STORM DRAIN SHALL BE FLUSHED PRIOR TO TRAPPING DEVICE REMOVAL.

TEMPORARY STOCKPILE NOTES

TEMPORARY STOCKPILES SHALL BE:

1. LOCATED WITHIN THE LIMIT OF DISTURBANCE (LOD).
2. DRAIN TO A FUNCTIONING SEDIMENT CONTROL DEVICE.
3. POSITIONED TO NOT IMPEDE UPON, OR IMPAIR THE FUNCTION OF SAID DEVICE.
4. POSITIONED TO NOT ALTER DRAINAGE DIVIDES.

EROSION AND SEDIMENT CONTROL NOTES

1. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
2. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT.
3. AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
4. FOLLOWING INITIAL SOIL DISTURBANCE OR RE–DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
   A. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROL, DIKES SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND
   B. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
5. ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE–SUBMISSION TO BALTIMORE COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
6. DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", pg. H.22, FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
7. ANY VARIATIONS FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
8. EXCESS CUT OR BORROW MATERIAL SHALL GO TO, OR COME FROM, RESPECTIVELY, A SITE WITH AN OPEN GRADING PERMIT AND APPROVED SEDIMENT CONTROL PLAN.
9. THE FOLLOWING ITEM MAY BE USED AS APPLICABLE: REFER TO "MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION" BY THE WATER MANAGEMENT ADMINISTRATION OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, REVISED NOVEMBER 2000, FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN FOR WATERWAY CONSTRUCTION.
10. PUMPING SEDIMENT–LADEN WATER INTO WATERS OF THE STATE IS STRICTLY PROHIBITED. ANY PORTABLE DEWATERING DEVICE MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE.
11. UPON STABILIZATION OF THE BASE PAVEMENT AND AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR, RELOCATE THE STABILIZED CONSTRUCTION ENTRANCE(S) AND INSTALL ADDITIONAL CONTROL MEASURES (STABILIZED CONSTRUCTION ENTRANCES, SILT FENCES, SUPER SILT FENCES) AS NEEDED TO CONTROL SEDIMENT RUNOFF FROM DISTURBED AREAS. THE ADDITIONAL CONTROLS MUST NOT ALTER DRAINAGE PATTERNS.

SEDIMENT CONTROL TRAFFIC NOTE

ANY TRAVEL LANE CLOSED BEFORE 9:00AM OR AFTER 3:30 PM MUST BE APPROVED BY BALTIMORE COUNTY BUREAU OF TRAFFIC ENGINEERING AND TRANSPORTATION PLANNING AT (410)–887–3554.

UTILITY NOTE

1. CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE OF) THE TRENCH.
2. PLACE ALL EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH.
3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY.

MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL MEASURES AND DEVICES AFTER EVERY STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.

SLOPE STABILIZATION

THE CONTRACTOR SHALL VEGETATIVELY STABILIZE STEEP SLOPES, CHANNELS, OR SWALES BY MEANS OF PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD. THIS MUST BE COMPLIED WITH EVEN IF DISTURBED AREA IS CONTAINED WITHIN EROSION AND SEDIMENT CONTROL MEASURES.

TRUCK WASHING NOTE

WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.

FENCING NOTE

IF REQUIRED BY THE SEDIMENT CONTROL INSPECTOR, FENCING SHALL BE INSTALLED TO PREVENT ACCESS TO THE SITE BY CHILDREN.

TRAP/BASIN FLOW DIVERSION NOTE

TO PREVENT SLOPE EROSION, WITHIN SEDIMENT TRAPPING DEVICES, ADEQUATELY SIZED AND STABILIZED FLOW DIVERSION MEASURES (I.E. EARTH DIKE, TEMPORARY SWALE, PERIMETER DIKE/SWALE, SUPER FENCE DIVERSION, ETC) SHALL BE INSTALLED AT THE UPSLOPE EXTENT OF TRAP, AND BASIN STORAGE AREAS TO DIVERT ALL FLOWS TO APPROPRIATE INFLOW PROTECTION DEVICES. THESE MEASURES WILL BE LOCATED BY THE CONTRACTOR AND THEREFORE NOT SHOWN ON THE PLAN VIEW.

INLET DIVERSION NOTE

TO PREVENT BYPASS OF INLETS, PROVIDE DIVERSION MEASURES (EARTH BERM, STONE BERM OR TEMPORARY ASPHALT BERM) TO DIRECT FLOWS TO INLETS.

NOTE: ALL REQUIRED STATE, FEDERAL, AND LOCAL PERMITS MUST BE OBTAINED PRIOR TO PRECONSTRUCTION MEEETING.

SEQUENCE OF CONSTRUCTION

1. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL, (PAI, SC) (410–887–3226) AT LEAST 48 HOURS PRIOR TO BEGINNING WORK. ESTABLISH A PRE–CONSTRUCTION MEETING DATE. NOTIFY THE ENGINEER IN CHARGE (410–821–1690) AT LEAST 5 DAYS PRIOR TO COMMENCING CONSTRUCTION.
2. IF APPLICABLE, IMPLEMENT THE FOREST PROTECTION MEASURES DETAILED ON THE APPROVED FOREST CONSERVATION PLAN. ANY DISTURBED AREA OF THE FOREST BUFFER EASEMENT AND FOREST CONSERVATION EASEMENT MUST BE RESTORED IN ACCORDANCE WITH THE APPROVED FOREST CONSERVATION PLAN AS SOON AS PRACTICAL. ORANGE HIGH VISIBILITY FENCE SHALL BE MANUALLY INSTALLED ALONG THE LIMIT OF DISTURBANCE WHEREVER THE LIMIT OF DISTURBANCE IS WITHIN 50 FEET OF THE FOREST BUFFER EASEMENT OR FOREST CONSERVATION EASEMENT. THIS SHALL BE COMPLETED BY AND INSPECTED AT THE PRE–CONSTRUCTION MEETING.
3. AFTER THE PRE–CONSTRUCTION MEETING AND WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL AND THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB AS NECESSARY FOR AND PERFORM INSTALLATION OF THE FOLLOWING SEDIMENT CONTROL MEASURES AND DEVICES (AS SHOWN ON ESC SHEET 01 AND 02 OF 11):
   A. TEMPORARY ACCESS TO EXISTING GRAVEL DRIVE TO PROVIDE ACCESS TO 1508 PEACHWOOD LANE (F.K.A. 12168 FALLS ROAD) AT ALL TIMES FOR THE RESIDENTIAL USER AND EMERGENCY VEHICLES. MAINTAIN A SAFE SIGHT DISTANCE TO FALLS ROAD. ANY DISTURBANCE TO THE RESIDENTIAL DRIVEWAY SHALL BE REPAIRED AT THE END OF EACH WORKING DAY.
   B. TEMPORARY ASPHALT BERM (SEE DETAIL & STMT. 3A ABOVE)
   C. ORANGE HIGH VISIBILITY FENCE ALONG TEMPORARY ACCESS AND EXISTING GRAVEL DRIVE WITH 20' OPENING
   D. STABILIZED CONSTRUCTION ENTRANCE
   E. SUPER SILT FENCE BELOW SEDIMENT TRAPS #1 & #2
   F. SUPER SILT FENCE
   G. SILT FENCE
   H. SUPER FENCE DIVERSION #1
   I. DOUBLE SIDED SUPER FENCE DIVERSION FOR CLEAN WATER DIVERSION AND ASSOCIATED ROCK OUTLET PROTECTION
4. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS, AND INSPECTIONS, SEDIMENT CONTROL, (PAI, SC) UPON COMPLETION OF SAID INSTALLATION.
5. WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, CONSTRUCT SEDIMENT CONTROL TRAPS #1 AND #2:
   A. EXCAVATE TO BOTTOM OF TRAPS #1 AND #2 AND CONSTRUCT EMBANKMENT AREAS INCLUDING STONE WEIRS.
   B. INSTALL GABION INFLOW PROTECTIONS AND BAFFLES AS SHOWN ON ESC SHEET 02 OF 11.
   C. ONCE TRAP #2 OUTLET IS FUNCTIONAL, INSTALL SUPER FENCE DIVERSION #2 CONVEYING TO TRAP #2 AS SHOWN ON ESC SHEET 01 AND 02 OF 11.
   D. COMPLETE GRADING IN THE REMAINDER OF THE SEDIMENT TRAPS SHAPING THE POOL AREA TO DESIGN CONFIGURATIONS EXCESS MATERIAL SHALL BE PLACED UPSLOPE OF THE TRAP, WHERE IT WILL DRAIN TO THE TRAP POOL AREA, OR HAUL TO A SITE WITH AN OPEN GRADING PERMIT AND AN APPROVED EROSION AND SEDIMENT CONTROL PLAN.
   E. INSTALL REMOVABLE PUMPING STATION (RPS) IN THE POOL AREAS AS SHOWN ON ESC SHEET 02 OF 11. INSTALL FILTER BAGS. RPS TO BE USED FOR MAINTENANCE PURPOSES SUCH AS TRAP CLEAN OUT, AND AT THE TIME OF TRAP REMOVAL.
   F. INSTALL EARTH DIKES (TYPE A) AND MOUNTABLE BERMS AS SHOWN ON ESC SHEET 01 AND 02 OF 11. INSTALL SUPER FENCE DIVERSION #3.
   G. STABILIZE ALL DISTURBED AREAS PER SEEDING SPECIFICATIONS OUTLINED ON ESC SHEET 11 OF 11.
   H. ADJUST SUPER SILT FENCE AT TRAP OUTLETS PER FILTER FENCE OUTFALL PROTECTION DETAIL.
6. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS, AND INSPECTIONS, SEDIMENT CONTROL, (PAI, SC) UPON COMPLETION OF SAID INSTALLATION.
7. WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL AND THE SEDIMENT CONTROL INSPECTOR, CLEAR, GRUB AND MASS GRADE THE REMAINDER OF SITE. BEGIN DEMOLITION OF EXISTING FEATURES AS SHOWN ON ESC SHEET 01 AND 02 OF 11. CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL DEVICES AS CALLED FOR IN THE "MAINTENANCE NOTE" ON ESC SHEET 10 OF 11. (ALL CHANNELS AND SLOPES 3:1 OR GREATER WILL REQUIRE PERMANENT SEED WITH TEMPORARY SOIL STABILIZATION MATTING.)
8. GRADE SWM BIO–SWALE AND MICRO BIO–RETENTION FACILITIES #1, #2, #3, #4 AND #5 PER THE APPROVED SWM PLANS. AS SUBGRADES ARE REACHED, INSTALL STORM DRAINS AND SWM OUTFALLS AS SHOWN ON ESC SHEET 03 AND 04 OF 11. INSTALL TEMPORARY STORM DRAINS TO TRAPS #1 AND #2 WITH WATER TIGHT SEAL USING NON–SHRINK EPOXY CEMENT (SEE DETAIL ON ESC SHEET 10 OF 11) INSTALL SSF ABOVE MICRO BIO–RETENTION FACILITIES AND SIP. TYPE B INLET PROTECTIONS AS SHOWN ON ESC SHEET 03 AND 04 OF 11. INSTALL I–1 WITH PROPOSED OUTLET TO GABION PROTECTION WITHIN TRAP #2. INSTALL MOD COIP UPON INSTALLATION OF I–1 AS SHOWN ON ESC SHEET 04 OF 11.

   NOTE: DO NOT INSTALL FILTER MEDIA OR UNDERDRAINS UNTIL SWM FACILITIES ARE MADE ACTIVE. USE PORTABLE SEDIMENT TANKS (PST) AS NEEDED OR DIRECTED BY THE INSPECTOR. PST ARE TO BE USED TO DEWATER FACILITY AREAS AFTER EACH STORM EVENT.
9. INSTALL NEW ROAD (PEACHWOOD LANE) AND DRIVEWAY STONE SUBBASE, BASE COURSE PAVEMENT AND CURB & GUTTER. A SUBSTANTIAL AREA OF STONE SUBBASE SHALL BE INSTALLED TO THE SATISFACTION OF THE S.C. INSPECTOR TO ALLOW FOR PARKING, STAGING, & ACCESS PRIOR TO BUILDING CONSTRUCTION. INSTALL GABION INFLOW PROTECTION, RIPRAP AND 3' CURB CUT (ADJACENT TO I–1) TO DIRECT FLOW TO TRAP #2 AS SHOWN ON ESC SHEET 04 OF 11. DELAY DRIVEWAY SPUR CONSTRUCTION TO 1508 PEACHWOOD LANE.
10. HOUSE CONSTRUCTION, SRA INSTALLATION AND UTILITY CONNECTIONS TO RUN CONCURRENTLY AT THIS TIME.
11. FINE GRADE AND VEGETATIVELY STABILIZE ALL DISTURBED AREAS NOT TO BE PAVED. ALL PROPOSED STEEP SLOPES, 3:1 OR GREATER, SHALL BE STABILIZED WITH PERMANENT SEED AND SOIL STABILIZATION MATTING.
12. UPON COMPLETION AND STABILIZATION OF CONTRIBUTING DRAINAGE AREAS AND WITH THE APPROVAL OF THE S.C. INSPECTOR, INSTALL FILTER MEDIA, UNDERDRAINS AND MAKE SWM FACILITIES ACTIVE. CONVERT OUTLET RIPRAP PADS TO PLUNGE POOLS (SEE APPROVED SWM PLANS).
13. COMPLETE SURFACE COURSE OF PAVING OPERATIONS.
14. UPON COMPLETION OF THE PROPOSED ROAD AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, WITHIN ONE WORK DAY, INSTALL DRIVEWAY STONE SUBBASE, BASE COURSE PAVEMENT AND COMPLETE SURFACE COURSE PAVING OPERATIONS TO TIE EXISTING DRIVEWAY OF 1508 PEACHWOOD LANE TO PROPOSED ROAD AS SHOWN ON ESC SHEET 04 OF 11. REMOVE TEMPORARY ACCESS DRIVE, CLEAR AND GRUB EXISTING GRAVEL DRIVE, AND ORANGE BLAZE FENCE ALONG THE ACCESS TO 1508 PEACHWOOD LANE. RESIDENT OF 1508 PEACHWOOD LANE MUST BE NOTIFIED 24 HOURS PRIOR TO COMMENCING THIS TRANSITION.
15. UPON COMPLETION AND STABILIZATION OF SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL SEDIMENT CONTROL MEASURES WITH THE EXCEPTION OF EARTH DIKES, SFD #2 CONVEYING TO TRAP #2, TAB, AND SSF BELOW TRAPS #1 AND #2 AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS.
16. REMOVE TRAP #1 AND #2 AS FOLLOWS;
   A. WITH A 3–DAY DRY WEATHER FORECAST, REMOVE SUPER FENCE DIVERSIONS AND TAB DRAINING TO TRAPS #1 AND #2. REMOVE EARTH DIKES DRAINING TO TRAP #1 AND #2 AND SFD #2.
   B. ONCE REMOVED, FLUSH STORM DRAINS AND DEWATER TRAPS USING THE REMOVABLE PUMPING STATION AND FILTER BAGS. REMOVE SEDIMENT (INCLUDING SOFT SUB BASE SOIL) FROM THE TRAP AND DISPOSE OF AT A SITE WITH AN APPROVED SEDIMENT CONTROL PLAN AND AN OPEN GRADING PERMIT.
   C. REMOVE TEMPORARY STORM DRAINS, TRAP BAFFLE BOARDS, GP, AND RPS/FB'S.
   D. ADJUST SSF BELOW TRAP #1 AS SHOWN ON ESC SHEET 05 OF 11 (INSETS).
17. GRADE SWM MICRO BIO–RETENTION FACILITIY #6 PER THE APPROVED SWM PLANS. AS SUBGRADES ARE REACHED, REMOVE TEMPORARY STORM DRAINS AT FACILITIES #3 AND #6 AND INSTALL STORM DRAIN AND SWM OUTFALLS AS SHOWN ON ESC SHEET 05 OF 11 & THE APPROVED SWM PLANS. PROPER COORDINATION IS TO BE MAINTAINED BETWEEN REMOVAL OF TRAPS AND CONNECTING PIPE WITH STORMWATER FACILITY INSTALLATION TO ALLOW FOR SWITCHING THE PROPOSED STORM DRAIN TO PERMANENT CONNECTION TO PREVENT SEDIMENT FROM LEAVING THE SITE VIA THE STORM DRAIN. ADJUST SSF AT MICRO BIO–RETENTION OUTLET #6 PER FILTER FENCE OUTFALL PROTECTION DETAIL.
18. NOTE: DO NOT INSTALL FILTER MEDIA OR UNDERDRAINS UNTIL SWM FACILITIES ARE MADE ACTIVE. USE PORTABLE SEDIMENT TANKS (PST) AS NEEDED OR DIRECTED BY THE INSPECTOR. PST ARE TO BE USED TO DEWATER FACILITY AREAS AFTER EACH STORM EVENT.
19. BEGIN FILLING IN TRAPS #1 AND #2 PER FINAL GRADING INSETS AS SHOWN ON ESC SHEET 05 OF 11. ALL PROPOSED SLOPES 3:1 OR GREATER, SHALL BE STABILIZED WITH PERMANENT SEED AND SOIL STABILIZATION MATTING.
20. UPON COMPLETION AND STABILIZATION OF CONTRIBUTING DRAINAGE AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, INSTALL FILTER MEDIA, UNDERDRAINS AND MAKE SWM FACILITIES #3 AND #6 ACTIVE.
21. UPON COMPLETION AND STABILIZATION OF SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE ANY REMAINING SEDIMENT CONTROL MEASURES AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS.
22. INSTALL LANDSCAPING.
23. AS–BUILT SURVEY AND STUDY TO BE COMPLETED AND SUBMITTED TO BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY (DEPS) WITHIN 30 DAYS OF THE COMPLETION OF FACILITIES CONVERSION.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 10 OF 11 | C-10

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.

STATE OF MARYLAND — JOSHUA T. THOMAS — No. 34479 — PROFESSIONAL ENGINEER
07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
NOTES AND SEQUENCE OF CONSTRUCTION

ELECTION DISTRICT 8 | BALTIMORE COUNTY, MARYLAND | COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	N/A
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	10 OF 38

ENGINEER
JOSHUA T. SHARON, P.E.
1220–B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821–1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE–TIMMONIUM, MD 21093
PHONE: (410) 560–0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456–1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM
DESIGN & DRAWING BASED ON MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION
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. 34479, EXPIRATION DATE: 06/21/2026.

DISSIMILAR PIPE COUPLERS

DISSIMILAR PIPE COUPLERS
Technical information

mar mac | CONSTRUCTION PRODUCTS

SPECIFICATIONS
Securing Straps:
- 4"- 24" pipe: 409 stainless steel
- 30"- 60" pipe: High Tensile Polyester Webbing *(1" min width)*

All typical properties are based on ASTM C877-09 and ASTM D3212 test methods.

PERFORMANCE
In a laboratory setting, the coupler has been third party tested to prevent infiltration into the joint when the joint is subjected to 30 feet head pressure *(13 psi)* per ASTM C877-09, as well as hold 22" mercury *(74kPA)* internal vacuum with no leakage detected per ASTM D3212.

Since character of installation can neither be predicted nor controlled by MarMac, we make no claim on the hydrostatic performance of this product in field applications.

STORAGE
DP Couplers should be stored carefully in their original packaging, out of direct sunlight and protected from the elements. Materials should be kept away from direct heat, sparks and open flame. For optimum results, store in a tepid *(60°-80°F)* environment prior to installation.

TYPICAL PROPERTIES

	MIN	MAX
Rubberized Mastic		
Ash-inert matter	8 %	15 %
Volatiles	0.1 %	2.0 %
Softening temp	175 °F	
Specific gravity	0.95	1.05
Penetration	60 dmm	90 dmm
Flow	10 mm	10 mm
Polyethylene Backing		
Tensile strength	4000 psi	
Elongation at break	100 %	
Tear resistance	1500 psi	
Water absorption		0.01 %
Reinforcing Mesh Element		
Tensile strength		
Warp	75 lb/in	
Fill	75 lb/in	
Elongation at break		
Warp	20 %	
Fill	20 %	

CAUTION: Prior to use, please read the Manufacturer Warranty & Disclaimer found at marmac.com/cp/disclaimer.

INSTALLATION
The coupler shall be placed around the pipe, mastic side to the pipe, spanning the joint *(see illustration)*. The protective release film shall be removed and the coupler applied with the overlap at the top of the pipe. The straps shall be secured *(outside straps first)* on the larger outside diameter pipe *(when applicable)* with the proper tools. Then the straps on the outside of the smaller outside diameter pipe shall be secured. The inside straps shall be tightened last. The closing flap shall cover the exposed strap work area, completing the joint.

mar mac | CONSTRUCTION PRODUCTS Quality Matters.
334 N 7th St
McBee, SC 29101
marmac.com
877.962.7622
info@marmac.com
v1.0 0322

2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

B-4-2 STANDARDS AND SPECIFICATIONS FOR
SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION
THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION.

PURPOSE
TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH.

CONDITIONS WHERE PRACTICE APPLIES
WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED.

CRITERIA
A. SOIL PREPARATION
1. TEMPORARY STABILIZATION
a. SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
b. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
c. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
2. PERMANENT STABILIZATION
a. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
i. SOIL PH BETWEEN 6.0 AND 7.0.
ii. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
iii. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
iv. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
v. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
b. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
c. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
d. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
e. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING
1. TOPSOIL IS 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 UNACCEPTABLE SOIL GRADATION.
2. TOPSOIL SALVAGED FROM AN EXISTING SITE MAY BE USED PROVIDED IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-NRCS.
3. TOPSOILING IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:
a. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.
b. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
c. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.
d. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.
4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN.
5. TOPSOIL SPECIFICATIONS: SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING CRITERIA:
a. TOPSOIL MUST BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, OR LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. TOPSOIL MUST NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND MUST CONTAIN LESS THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 ½ INCHES IN DIAMETER.
b. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
c. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
6. TOPSOIL APPLICATION
a. EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL.
b. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. SPREADING IS TO BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
c. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL IS SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.
2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY. FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.
3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED EXCEPT WHEN HYDROSEEDING) WHICH CONTAINS AT LEAST 50 PERCENT TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 50 PERCENT WILL PASS THROUGH A #100 MESH SIEVE AND 98 TO 100 PERCENT WILL PASS THROUGH A #20 MESH SIEVE.
4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

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

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 PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

CRITERIA
A. SEEDING
1. SPECIFICATIONS
a. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
b. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.
c. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
d. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
2. APPLICATION
a. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
i. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1, PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.
ii. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION. ROLL THE SEEDED AREA WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
b. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
i. CULTIPACKER SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST ¼ INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.
ii. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
c. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).
i. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P2O5 (PHOSPHOROUS), 200 POUNDS PER ACRE; K2O (POTASSIUM), 200 POUNDS PER ACRE.
ii. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
iii. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.
iv. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.
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 NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.
b. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.
i. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.
ii. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.
iii. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM AN HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.
iv. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.
v. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENT: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.
2. APPLICATION
a. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.
b. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
c. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
3. ANCHORING
a. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON THE SIZE OF THE AREA AND EROSION HAZARD:
i. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.
ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
iii. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.
iv. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4 TO 15 FEET WIDE AND 300 TO 3,000 FEET LONG.

B-4-4 STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION
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 WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS. FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

CRITERIA
1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY TABLE BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED THEN TABLE B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.
2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.b AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION
TO STABILIZED DISTURBED SOILS WITH PERMANENT VEGETATION.

PURPOSE
TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER ON DISTURBED SOILS.

CONDITIONS WHERE PRACTICE APPLIES
EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE.

CRITERIA

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. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
b. ADDITIONAL PLANTING SPECIFICATIONS FOR EXCEPTIONAL SITES SUCH AS SHORELINES, STREAM BANK, OR DUNES OR FOR SPECIAL PURPOSES SUCH AS WILDLIFE OR AESTHETIC TREATMENT MAY BE FOUND IN USDA-NRCS TECHNICAL FIELD OFFICE GUIDE, SECTION 342- CRITICAL AREA PLANTING.
c. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL TESTING AGENCY.
d. FOR AREAS RECEIVING LOW MAINTENANCE, APPLY UREA FORM FERTILIZER (46-0-0) AT 3 ½ POUNDS PER 1000 SQUARE FEET (150 POUNDS PER ACRE) AT THE TIME OF SEEDING IN ADDITION TO THE SOIL AMENDMENTS SHOWN IN THE PERMANENT SEEDING SUMMARY.
2. TURFGRASS MIXTURES
a. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE.
b. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.
i. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
ii. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.
iii. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND /OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
iv. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 ½ TO 3 POUNDS PER 1000 SQUARE FEET.

NOTES:
SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATION FOR MARYLAND"

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE

c. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES
WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 5B, 6A)
CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B)
SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONES: 7A, 7B)
d. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 ½ INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.
e. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASON, OR ON ADVERSE SITES.

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. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
b. SOD MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF ¾ INCH, PLUS OR MINUS ¼ INCH, AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
c. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
d. SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
e. SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.
2. SOD INSTALLATION
a. DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY IRRIGATE THE SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD.
b. LAY THE FIRST ROW OF SOD IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACE PARALLEL TO IT AND TIGHTLY WEDGED AGAINST EACH OTHER. STAGGER LATERAL JOINTS TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.
c. WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG OR OTHERWISE SECURE THE SOD TO PREVENT SLIPPAGE ON SLOPES. ENSURE SOLID CONTACT EXISTS BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.
d. WATER THE SOD IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN EIGHT HOURS.
3. SOD MAINTENANCE
a. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO PREVENT WILTING.
b. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
c. DO NOT MOW UNTIL THE SOD IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS OTHERWISE SPECIFIED.

PERMANENT SEEDING SUMMARY

HARDINESS ZONE (FROM FIGURE B.3.): 7A SEED MIXTURE (FROM TABLE B.3):					FERTILIZER RATE (10-20-20)			LIME RATE
No.	SPECIES	APPLICATION RATE(lb/Ac)	* SEEDING DATES	SEEDING DEPTHS	N	P_2O_5	K_2O	
6	TALL FESCUE	40	FEB 15 TO APR 30 AUG 15 TO OCT 31	1/4 TO 1/2 INCH	45 LBS PER Ac. 1.0LB/1000 SF	90 LBS PER Ac. 2.0LB/1000 SF	90 LBS PER Ac. 2.0LB/1000 SF	2 TONS/Ac. 90LB/1000 SF
	PERENNIAL RYEGRASS	25						
	WHITE CLOVER	5						
11	CREEPING RED FESCUE	30	FEB 15 TO APR 30 AUG 15 TO OCT 31	1/4 TO 1/2 INCH	45 LBS PER Ac. 1.0LB/1000 SF	90 LBS PER Ac. 2.0LB/1000 SF	90 LBS PER Ac. 2.0LB/1000 SF	2 TONS/Ac. 90LB/1000 SF
	CHEWINGS FESCUE	30						
	KENTUCKY BLUE GRASS	20						

* FOR THE PERIOD MAY 1 TO AUGUST 14 INCLUDE A NURSE CROP WITH THE PERMANENT SEED MIX.
- ADD 4.0 LBS/AC. OF EITHER FOXTAIL OR PEARL MILLET TO MIX NO. 11.
- ADD 3.5 LBS/AC. OF EITHER FOXTAIL OR PEARL MILLET TO MIX NO. 6.

TABLE B.1: TEMPORARY SEEDING FOR SITE STABILIZATION

PLANT SPECIES	SEEDING RATE 1/		SEEDING DEPTH 2/	RECOMMENDED SEEDING DATES BY PLANT HARDINESS ZONE 3/			FERTILIZER RATE (10-20-20)	LIME RATE
	LB/AC	LB/1,000 FT 2	(INCHES)	5B AND 6A	6B	7A AND 7B		
COOL-SEASON GRASSES								
ANNUAL RYEGRASS (LOLIUM PERENNE SSP. MULTIFLORUM)	40	1.0	0.5	MAR 15 TO MAY 31; AUG 1 TO SEPT 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APRIL 30; AUG 15 TO NOV 30	436 LB/AC (10 LB/1000 SF)	2 TONS/AC (90 LB/1000 SF)
BARLEY (HORDEUM VULGARE)	96	2.2	1.0	MAR 15 TO MAY 31; AUG 1 TO SEPT 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APRIL 30; AUG 15 TO NOV 30		
OATS (AVENA SATIVA)	72	1.7	1.0	MAR 15 TO MAY 31; AUG 1 TO SEPT 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APRIL 30; AUG 15 TO NOV 30		
WHEAT (TRITICUM AESTIVUM)	120	2.8	1.0	MAR 15 TO MAY 31; AUG 1 TO SEPT 30	MAR 1 TO MAY 15; AUG 1 TO OCT 15	FEB 15 TO APRIL 30; AUG 15 TO NOV 30		
CEREAL RYE (SECALE CEREALE)	112	2.8	1.0	MAR 15 TO MAY 31; AUG 1 TO OCT 31	MAR 1 TO MAY 15; AUG 1 TO NOV 15	FEB 15 TO APRIL 30; AUG 15 TO DEC 15		
WARM-SEASON GRASSES								
FOXTAIL MILLET (SETARIA ITALICA)	30	0.7	0.5	JUNE 1 TO JULY 31	MAY 16 TO JULY 31	MAY 1 TO AUG 14		
PEARL MILLET (PENNISETUM GLAUCUM)	20	0.5	0.5	JUNE 1 TO JULY 31	MAY 16 TO JULY 31	MAY 1 TO AUG 14		

NOTES:
1/ SEEDING RATES FOR WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED. ADJUSTMENTS ARE USUALLY NOT NEEDED FOR THE COOL-SEASON GRASSES.

SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS, WHEN PLANTED ALONE. WHEN PLANTED AS A NURSE CROP WITH PERMANENT SEED MIXES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS, AND WHEAT. FOR SMALLER-SEEDED GRASSES (ANNUAL RYEGRASS, PEARL MILLET, FOXTAIL MILLET) DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF OVERALL PERMANENT SEEDING MIX. CEREAL RYE GENERALLY SHOULD NOT BE USED AS A NURSE CROP, UNLESS PLANTING WILL OCCUR IN VERY LATE FALL BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS. CEREAL RYE HAS ALLELOPATHIC PROPERTIES THAT INHIBIT THE GERMINATION AND GROWTH OF OTHER PLANTS. IF IT MUST BE USED AS A NURSE CROP, SEED AT 1/3 OF THE RATE LISTED ABOVE.

OATS ARE THE RECOMMENDED NURSE CROP FOR WARM-SEASON GRASSES.

2/ FOR SANDY SOILS, PLANT SEEDS AT TWICE THE DEPTH LISTED ABOVE.
3/ THE PLANTING DATES LISTED ABOVE ARE AVERAGES FOR EACH ZONE AND MAY REQUIRE ADJUSTMENT TO REFLECT LOCAL CONDITIONS, ESPECIALLY NEAR THE BOUNDARIES OF THE ZONE.

ENGINEER
JOSHUA T. SHARON, P.E.
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MD 21286
PHONE: (410) 821-1690
EMAIL: JSHARON@MRAGTA.COM

OWNER
ARTHUR BECKER & NANCY MILLER
33 WALLY CT
LUTHERVILLE-TIMMONIUM, MD 21093
PHONE: (410) 560-0061
EMAIL: CNMILLER3@VERIZON.NET

DEVELOPER
GAYLORD BROOKS REALTY CO.
P.O. BOX 400
14346 JARRETTSVILLE PIKE, SUITE 102
PHOENIX, MD 21131
ATTN.: STEVE SMITH
PHONE: (410) 456-1591
EMAIL: SSMITH@GAYLORDBROOKS.COM

DATUM
DESIGN & DRAWING BASED ON
MARYLAND COORDINATE SYSTEM (MCS):
HORIZONTAL NAD 83 (1991)
VERTICAL NAVD 88

PROFESSIONAL CERTIFICATION
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. 34479, EXPIRATION DATE: 06/21/2026.

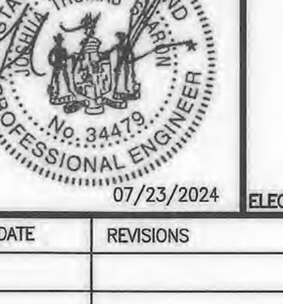
Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
8-5-24
Date

GRADING PERMIT # REN24-000089
SWM PERMIT # REN24-000090
LOD = 620,000 SF (14.23 AC.)
PAI#: VIII-791

ESC 11 OF 11 C-11

MORRIS & RITCHIE ASSOCIATES, INC.
ENGINEERS, PLANNERS, SURVEYORS AND LANDSCAPE ARCHITECTS
1220-B EAST JOPPA ROAD, SUITE 400K
TOWSON, MARYLAND 21286
(410) 821-1690
FAX (410) 821-1748

Copyright 2024 Morris & Ritchie Associates, Inc.



07/23/2024

BECKER PROPERTY
PEACHWOOD LANE

EROSION AND SEDIMENT CONTROL
NOTES AND SEEDING CHARTS

ELECTION DISTRICT 8 BALTIMORE COUNTY, MARYLAND COUNCILMANIC DISTRICT 2

DATE	REVISIONS		
		JOB NO.:	14746X08
		SCALE:	N/A
		DATE:	07/25/2024
		DRAWN BY:	AA
		DESIGN BY:	AA
		REVIEW BY:	JTS
		SHEET:	11 OF 38