MATCHLINE (SHEET 23)

MATCHLINE (SHEET 21)

MATCHLINE (SHEET 24)

THE OAKS AT BRIDLE CRE
PLAT BOOK 199 PAGE 1

TM 27-18-111

P/O NON-BUILDABLE PRES. PARCEL - F 405,243 S.F. OR 9.30 AC.

NON-BUILDABLE BULK PARCEL - J 2516 SF. OR 0.06 AC.

LANDS N/F CLINTON B. SIMPSON, SR. AND KAREN L. SIMPSON NON-BUILDABLE BULK PARCEL - I 2386 SF. OR 0.05 AC.

TRACT TWO

N56°48'37"W 1215.32'

PERIMETER #4 (844 LF)

PERIMETER #4 EXISTING VEGETATION (635 LF)

N82°44'56"W 577.20'

605°08'32" 51.00'

NON-BUILDABLE PRES. PARCEL - C 150,769 S.F. OR 3.46 AC.

NON-BUILDABLE PRES. PARCEL - P 6,084 S.F. OR 0.14 AC.

PROP. 24' PAVEMENT

PROP. 50' R.O.W.

PROP. DEPOND BULB PAD

PROP. MOD COMB. CURB & GUTTER

PROP. 50' R.O.W.

PROP. 24' PAVEMENT

PROP. LED-100 COLONIAL POST-TOP STREET LIGHT

PROP. STOP SIGN (R1-1)

PROP. STOP SIGN (R1-1)

PROP. PUBLIC ROAD 'A' (C ACCESS STREET) 50' R.O.W.

111 ARC

114 ARC

PROP. MOD COMB. CURB & GUTTER

PROP. 24' PAVEMENT

PROP. 50' R.O.W.

PROP. 10'X6' TRASH PAD FOR LOTS 24-26

PROP. 20' PUBLIC SWM, DRAINAGE & UTILITY EASEMENT

PROP. PUBLIC SWM. DRAINAGE & UTILITY EASEMENT

PROP. 24' USE-IN-COMMON ACCESS EASEMENT FOR LOT 24 - 26.

PROP. 15' WIDE SWM ACCESS DRIVE

PROP. 10' STREET TREE ESMT.

PROP. PUBLIC SWM. DRAINAGE & UTILITY EASEMENT

PROP. 15' WIDE SWM ACCESS DRIVE

PUBLIC SWM. DRAINAGE & UTILITY EASEMENT

CRITICAL ROOT ZONE (CRZ)

CRITICAL ROOT ZONE (CRZ)

50' STREAM BUFFER

50' STREAM BUFFER

100' STREAM BUFFER

EX. CL OF INTERMITTENT STREAM

EX. CL OF PERENNIAL STREAM

PERIMETER #3 (976 LF)

LOT 41 40,100 SF FF 514.00 BF 504.00

LOT 42 34,469 SF SHARED SEPTIC FF 518.00 BF 508.00

LOT 43 43,749 SF FF 510.00 BF 500.00

LOT 44 41,469 SF FF 501.00 BF 491.00

LOT 45 47,077 SF FF 492.00 BF 482.00

LOT 30 46,679 SF FF 522.50 BF 512.50

LOT 29 44,270 SF FF 521.50 BF 511.50

LOT 28 40,788 SF FF 518.00 BF 508.00

LOT 27 46,396 SF FF 512.50 BF 502.50

LOT 26 46,488 SF FF 505.00 BF 495.00

LOT 25 41,612 SF * FF 492.00 BF 482.00

LOT 24 44,052 SF FF 492.00 BF 482.00

LOT 23 55,798 SF SHARED SEPTIC FF 498.00 BF 488.00

LOT 22 54,972 SF FF 510.00 BF 500.00

LOT 21 40,218 SF FF 510.00 BF 500.00

LOT 20 40,461 SF FF 510.00 BF 500.00

LOT 19 40,461 SF FF 507.00 BF 497.00

LOT 18 40,443 SF FF 496.50 BF 486.50

LOT 17 40,003 SF FF 486.50 BF 476.50

LOT 16 49,860 SF FF 470.00 BF 460.00

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR
- LIMIT OF DISTURBANCE
- WETLAND BUFFER LIMITS
- FOREST CONSERVATION EASEMENT
- TREE PROTECTION FENCE
- ROOT PRUNING
- 6' HIGH CHAIN LINK FENCE
- SPECIMEN TREE (TO BE REMOVED)
- CRITICAL ROOT ZONE (CRZ)
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- SOIL LABEL
- FOREST CONSERVATION EASEMENT

50 25 12.5 0 50
1"= 50'

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE

I/WE CERTIFY THAT HE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S / OWNER'S NAME — DATE

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR — DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05888/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

OWNERS:	PARCEL 111
PARCEL 36	DENNIS A LEAF
SHERRY ROTHSTEIN	LENORE D. SINES
DARLENE THOMPSON	5226 GREEN BRIDGE ROAD
HARRY SIMPSON	DAYTON, MD 21036
DEBBIE RIPPEON	TEL.
PEGGY SIMPSON	PARCEL 112
5232 GREEN BRIDGE ROAD	DANA G DENAULT
DAYTON, MD 21036	THOMAS C. DENAULT
TEL.	5222 GREEN BRIDGE ROAD
PARCEL 34	DAYTON, MD 21036
THOMAS H. SIMPSON	TEL
5300 GREEN BRIDGE ROAD	PARCEL 98
DAYTON, MD 21036	JERRY MAUCK
TEL.	JANET BURKE J/T
	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036
	TEL

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
WARREN, NJ
OFFICES:
SOUTHBOROUGH, MA
ALBANY, NY
ROANOKE/NEW CASTLE, VA
CENTER VALLEY, PA
TAMPA, FL
BOWIE, MD
GAINESVILLE, VA
STERLING, VA
MARTINSBURG, WV
FORT LAUDERDALE, FL
PHILADELPHIA, PA

THE DRAWINGS, SPECIFICATIONS AND DESIGNS CONTAINED IN THESE PLANS ARE THE PROPERTY OF BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER ENGINEERING. ANY UNAUTHORIZED USE OF THESE PLANS AND DESIGNS SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO BOHLER ENGINEERING. THE USER SHALL INDEMNIFY AND HOLD HARMLESS BOHLER ENGINEERING FROM AND AGAINST ALL LIABILITY, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	LS4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111 & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

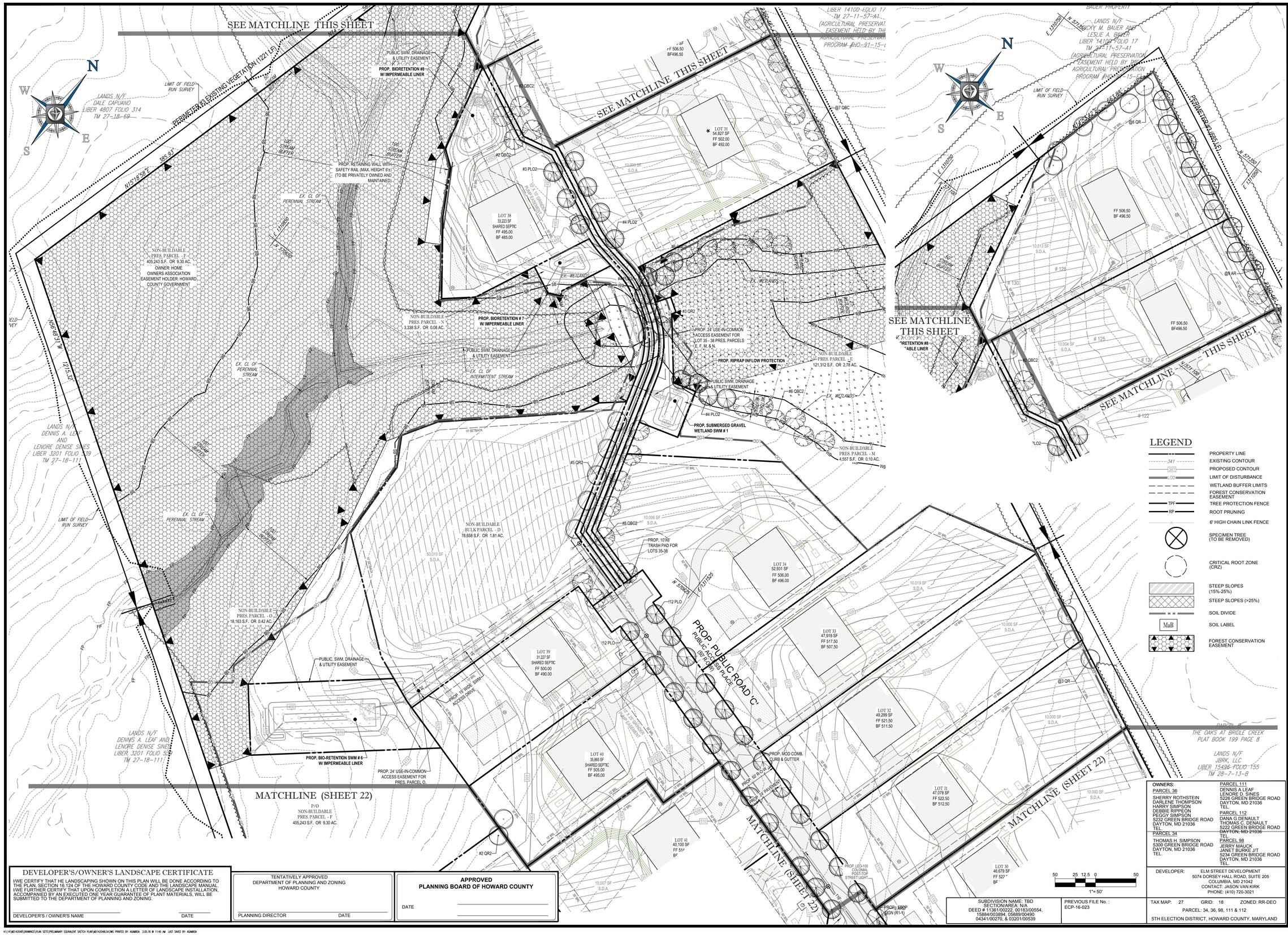
E.R. McWILLIAMS
REGISTERED LANDSCAPE ARCHITECT
MARYLAND LICENSE No. 3697
PROFESSIONAL CERTIFICATION
I, ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3697, EXPIRATION DATE: 9/20/2018

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
22 OF 42

SP-17-002

H:\142\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048LS4.DWG PRINTED BY: AGAMBOA 2:05:18 @ 11:45 AM LAST SAVED BY: AGAMBOA



DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE

I/WE CERTIFY THAT HE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S / OWNER'S NAME _____ DATE _____

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR _____ DATE _____

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE _____

OWNERS:	
PARCEL 36	PARCEL 111
SHERRY ROTHSTEIN	DENNIS A LEAF
DARLENE THOMPSON	LENORE D. SINES
HARRY SIMPSON	5226 GREEN BRIDGE ROAD
DEBBIE RIPPEON	DAYTON, MD 21036
PEGGY SIMPSON	TEL.
5232 GREEN BRIDGE ROAD	PARCEL 112
DAYTON, MD 21036	DANA G DENAULT
TEL.	THOMAS C. DENAULT
PARCEL 34	5222 GREEN BRIDGE ROAD
THOMAS H. SIMPSON	DAYTON, MD 21036
5300 GREEN BRIDGE ROAD	TEL.
DAYTON, MD 21036	PARCEL 98
TEL.	JERRY MAUCK
	JANET BURKE J/T
	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036
	TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/00389, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
CORPORATE OFFICE: ◆ WARREN, NJ
OFFICES: ◆ BOWIE, MD ◆ CHESTERFIELD, MO ◆ DENVER, CO ◆ FORT LAUDERDALE, FL ◆ PHILADELPHIA, PA ◆ SOUTHBOROUGH, MA ◆ RONKONKOMA, NY ◆ STERLING, VA ◆ WILLISTON, VT ◆ CENTERVALLEY, PA ◆ TAMPA, FL

THESE PLANS AND DESIGNS ARE COPYRIGHTED BY BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY BOHLER ENGINEERING FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO BOHLER ENGINEERING. ALL RIGHTS RESERVED. UNAUTHORIZED USE OF THESE PLANS AND DESIGNS IN VIOLATION OF THIS NOTICE IS PROHIBITED AND TO THE FULLEST EXTENT PERMITTED BY LAW, WILL BE SUBJECT TO LEGAL ACTION.

REVISIONS

REV	DATE	COMMENT	BY

MISS UTILITY OF DELMARVA
CALL 811 OR 1-800-282-8555
CONSTRUCTION EXCAVATION
THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE: IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	LS-4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN FOR SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

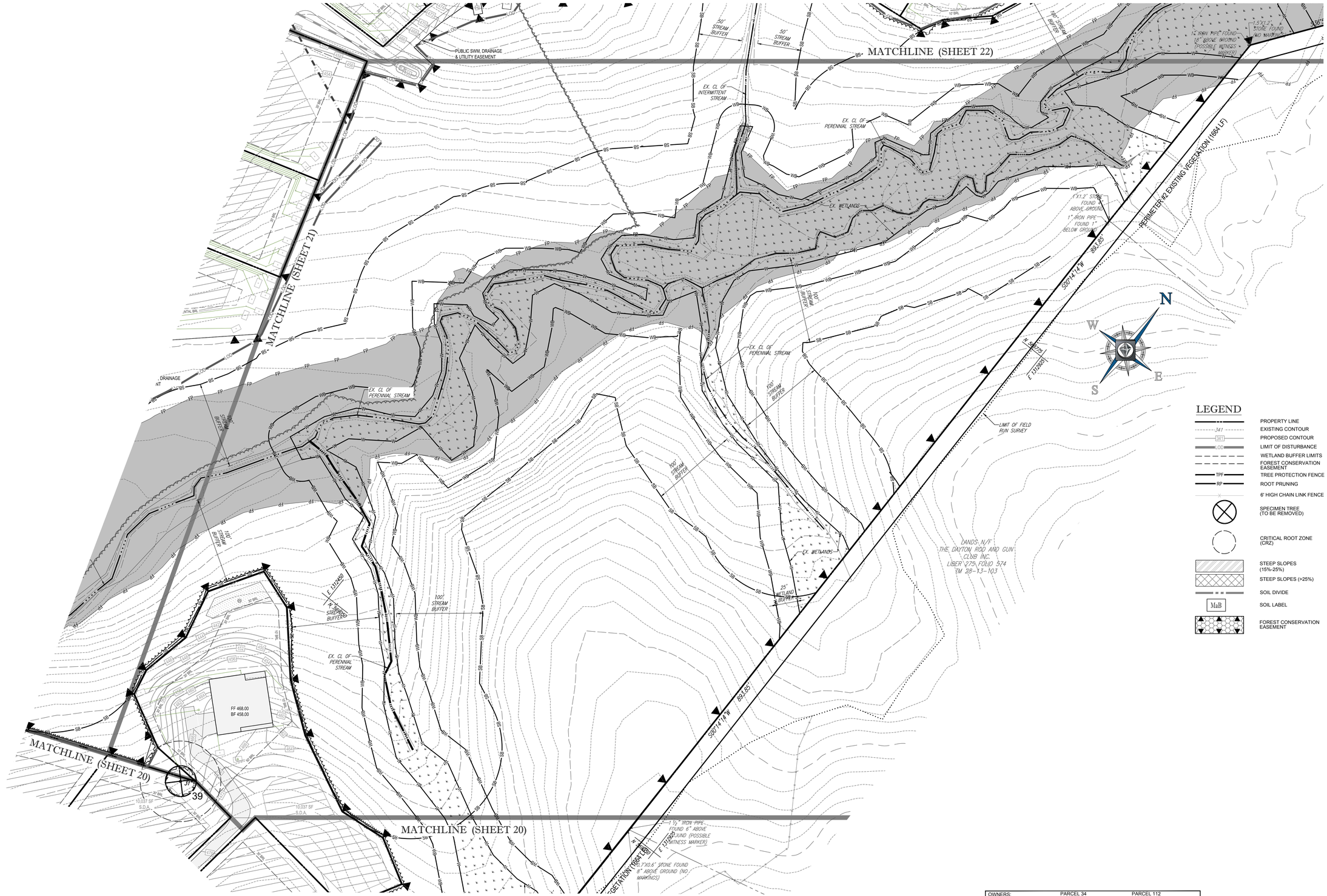
E.R. McWILLIAMS
REGISTERED LANDSCAPE ARCHITECT
MARYLAND LICENSE No. 3000

PROFESSIONAL CERTIFICATION
I, ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3000, EXPIRATION DATE: 9/20/2018

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
23 OF 42

SP-17-002



LEGEND

- PROPERTY LINE
- 341 EXISTING CONTOUR
- 341 PROPOSED CONTOUR
- LOD LIMIT OF DISTURBANCE
- WETLAND BUFFER LIMITS
- FOREST CONSERVATION EASEMENT
- TPF TREE PROTECTION FENCE
- RP ROOT PRUNING
- 6' HIGH CHAIN LINK FENCE
- SPECIMEN TREE (TO BE REMOVED)
- CRITICAL ROOT ZONE (CRZ)
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB SOIL LABEL
- FOREST CONSERVATION EASEMENT

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE

I/WE CERTIFY THAT HE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

DEVELOPER'S / OWNER'S NAME _____ DATE _____

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR _____ DATE _____

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE _____

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON	DANA G DENAULT
SHERRY ROTHSTEIN	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
DARLENE THOMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
HARRY SIMPSON	TEL.	DAYTON, MD 21036
DEBBIE RIPPEON		TEL.
PEGGY SIMPSON	PARCEL 111	PARCEL 98
5232 GREEN BRIDGE ROAD	DENNIS A LEAF	JERRY MAUCK
DAYTON, MD 21036	LENORE D. SINES	JANET BURKE J/T
TEL.	5226 GREEN BRIDGE ROAD	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036	DAYTON, MD 21036
	TEL.	TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 0018/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING

CORPORATE OFFICE:
◆ WARREN, NJ

OFFICES
◆ BOWIE, MD
◆ CHANTILLY, VA
◆ FREDERICK, MD
◆ SOUTHBOROUGH, MA
◆ RONKONKOMA, NY
◆ STERLING, VA
◆ WILKES-BARRE, PA
◆ CENTER VALLEY, PA
◆ FORT LAUDERDALE, FL
◆ TAMPA, FL
◆ PHILADELPHIA, PA

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THESE DRAWINGS ARE THE PROPERTY OF BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER ENGINEERING. ANY REUSE WITHOUT SUCH PERMISSION WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO BOHLER ENGINEERING.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	LS4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

E.R. McWILLIAMS
REGISTERED LANDSCAPE ARCHITECT
MARYLAND LICENSE No. 3697

PROFESSIONAL CERTIFICATION
I, ERIC R. McWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3697, EXPIRATION DATE: 9/20/2018

SHEET TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
24 OF 42

SP-17-002

H:\142\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048LS4.DWG PRINTED BY: AGAMBOA 2.05.18 @ 11:46 AM LAST SAVED BY: AGAMBOA

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS
A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES.
1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE-PEST FREE WITH A UNIFORM THICKNESS.
1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

E. FERTILIZER
1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
1.4. TREES WITH ABRASIONS OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED.PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
1.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES
A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS
A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION
A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS
A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
1.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
1.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING
A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING
A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):
1.1. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL
1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING
A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
1.1. PLANTS: MARCH 15 TO DECEMBER 15
1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULOUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBER STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
  - A) 2 TABLETS PER 1 GALLON PLANT
  - B) 3 TABLETS PER 5 GALLON PLANT
  - C) 4 TABLETS PER 15 GALLON PLANT
  - D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

M. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)
A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING
A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE
A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

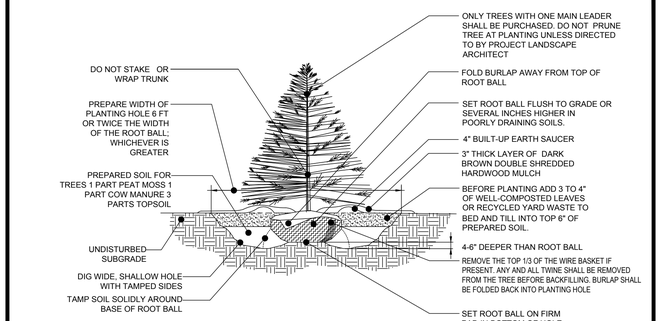
D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP
A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

APPROVED
PLANNING BOARD OF HOWARD COUNTY

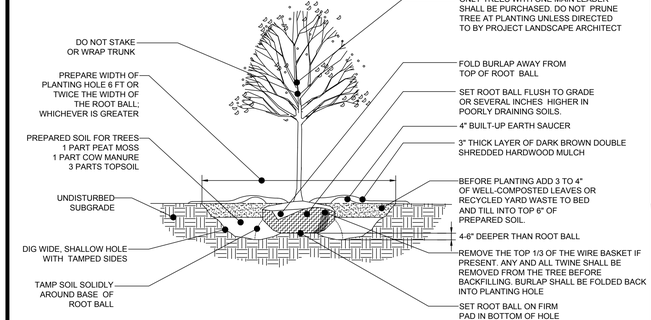
DATE _____



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

EVERGREEN TREE PLANTING DETAIL

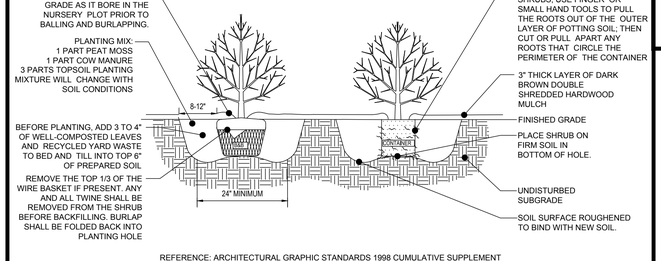
NOT TO SCALE



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

DECIDUOUS TREE PLANTING DETAIL

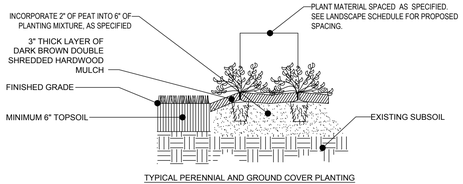
NOT TO SCALE



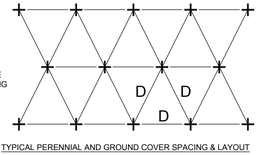
REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE



TYPICAL PERENNIAL AND GROUND COVER PLANTING

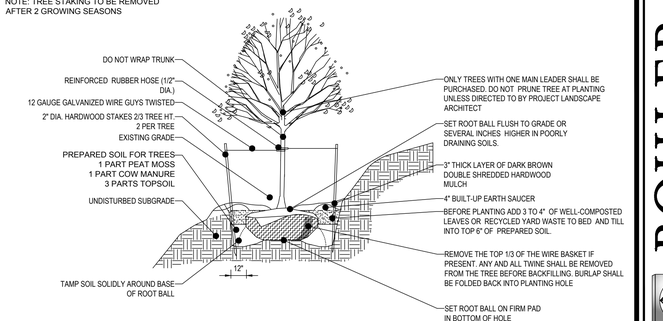


TYPICAL PERENNIAL AND GROUND COVER SPACING & LAYOUT

PERENNIAL/GROUND COVER PLANTING DETAIL

NOT TO SCALE

NOTE: TREE STAKING TO BE REMOVED AFTER 2 GROWING SEASONS



TREE PLANTING ON SLOPE DETAIL

NOT TO SCALE

SEEDING SPECIFICATIONS

1. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.

2. PRIOR TO SEEDING, CONSULT MANUFACTURER'S RECOMMENDATIONS AND INSTRUCTIONS.

3. SEEDING RATES:

PERENNIAL RYEGRASS	1/2 LB/1,000 SQ FT
KENTUCKY BLUEGRASS	1 LB/1,000 SQ FT
RED FESCUE	1 1/2 LBS/1,000 SQ FT
SPREADING FESCUE	1 1/2 LBS/1,000 SQ FT
FERTILIZER (20:10:10)	14 LBS/1,000 SQ FT
MULCH	90 LBS/1,000 SQ FT

4. GERMINATION RATES WILL VARY AS TO TIME OF YEAR FOR SOWING. CONTRACTOR TO IRRIGATE SEEDED AREA UNTIL AN ACCEPTABLE STAND OF COVER IS ESTABLISHED BY OWNER.

OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL

LEGEND :

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- TPF — TREE PROTECTION FENCE
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (TO BE REMOVED)
- FOREST CONSERVATION EASEMENT
- GEOTEXTILE STABILIZATION MATTING
- AREAS OF SAME DAY STABILIZATION

STONE OUTLET SEDIMENT TRAP - ST-II				
TRAP NO.	WIDTH	LENGTH	BOTTOM ELEV.	D.A.
1	50'	101'	416.00	5.0 AC.

MATCHLINE (SHEET 27)

MATCHLINE (SHEET 30)

RIPRAP OUTLET SEDIMENT TRAP ST-II NO. 1

TEMPORARY STOCK PILE AREA

TEMPORARY STOCK PILE AREA

PROP. PUBLIC ROAD "A" PUBLIC ACCESS PLACE (50' R.O.W.)

PROP. PUBLIC ROAD PUBLIC ACCESS PLACE (50' R.O.W.)

CONTRACTORS STAGING AREA

SAME DAY STABILIZATION REQUIRED

SAME DAY STABILIZATION REQUIRED

DISTURBED AREA ASSOCIATED WITH PAVEMENT REMOVAL TO BE STABILIZED SAME DAY

GREEN BRIDGE ROAD
VARIABLE WIDTH RIGHT-OF-WAY
(MINOR COLLECTOR)

PROP. 24' USE-IN-COMMON ACCESS EASEMENT FOR LOT 4 - 5.

PROP. 20' PUBLIC DRAINAGE & UTILITY EASEMENT

PROP. 5' STREET TREE EASEMENT

PROP. DRY WELL (M-5) (8 EA. TYP.)

PROP. DRY WELL (M-5) (7 EA. TYP.)

PROP. 4-ED-100 POLES W/ POST TOP LIGHT

PROP. DRY WELL

EX. 30' ACCESS EASEMENT TO BE EXTINGUISHED

EX. WELL (TBR)

EX. WETLANDS

EX. WETLANDS BUFFER

EX. SEPTIC RESERVE AREA

EX. SEPTIC TRENCH

EX. DRY WELL

EX. SHED

EX. GARAGE

EX. DWELLING

EX. TELE CABLE

LIMIT OF FIELD RUN SURVEY

LIMIT OF YIELD RUN SURVEY

PROP. SAWCUT LINE

WIRE FENCE IS 3.08' SOUTH OF PROPERTY LINE

4.5' POST & WIRE FENCE IS 0.72' EAST OF PROPERTY LINE

OWNER: HOME OWNERS ASSOCIATION
EASEMENT HOLDER: HOWARD COUNTY GOVERNMENT

NON-BUILDABLE PRES. PARCEL - A
103,257 S.F. OR 2.37 AC.

NON-BUILDABLE PRES. PARCEL - L
8,831 S.F. OR 0.20 AC.
OWNER: HOME OWNERS ASSOCIATION
EASEMENT HOLDER: HOWARD COUNTY GOVERNMENT

NON-BUILDABLE BULK PARCEL - K
4,790 S.F. OR 0.11 AC.

NON-BUILDABLE PRES. PARCEL - J
9,889 S.F. OR 0.23 AC.

LOT 1 — 55,025 SF — FF 484.50 — BF 474.50
LOT 2 — 59,641 SF — FF 471.50 — BF 461.50
LOT 3 — 55,018 SF — FF 460.00 — BF 450.00
LOT 4 — 41,925 SF — FF 446.50 — BF 436.50
LOT 5 — 40,840 SF — FF 441.00 — BF 431.00
LOT 6 — 55,788 SF — FF 476.00 — BF 466.00
LOT 7 — 55,833 SF — FF 476.00 — BF 466.00
LOT 8 — 45,774 SF — FF 492.50 — BF 482.50
LOT 9 — 42,992 SF — FF 490.00 — BF 480.00
LOT 10 — 44,020 SF — FF 488.00 — BF 478.00
LOT 11 — 42,068 SF — FF 475.00 — BF 465.00
LOT 12 — 40,362 SF — FF 468.00 — BF 458.00
LOT 13 — 41,330 SF — FF 456.00 — BF 446.00

LOT 13, HARLEY JOHNSON LIBER 8 PG. 29

LANDS N/F JOHN A. BAUR AND WENDY BAUR LIBER 10663 FOLIO 655 TM 27-24-42

LANDS N/F SHANNON DOYLE AND TRACEY LYN ZAMPINI LIBER 7510 FOLIO 606 TM 37-24-15

LANDS N/F ROBERT A. AND HELEN M. LIBER 371 FOLIO TM 28-13-106

LANDS N/F ERIC F. SNYDER AND TY JEAN M. SNYDER LIBER 11978 FOLIO 30 TM 28-13-125

LANDS N/F WILLIAM J. TAYLOR AND TERRI L. TAYLOR LIBER 3309 FOLIO 465 TM 28-13-122

LANDS N/F SUSAN L. FELOW LIBER 9582 FOLIO 536 TM 28-13-91

LANDS N/F MARY SOBHANI AND RACHEL MARGARET SOBHANI LIBER 13587 FOLIO 499 PLAT BOOK 6 FOLIO 72 TM 28-13-90

LOT 3 DOROTHY HUNGERFORD PLAT NO. 5258 - EX. DWELLING
LANDS N/F THOMAS ALBERT PETERS AND MARY FLATHER PETERS LIBER 2584 FOLIO 604 TM 28-13-102-3
LANDS N/F DOROTHY E. HUNGERFORD LIBER 195 FOLIO 118
(50' R/W FOR USE IN COMMON WITH OTHERS) PLAT NO 5258 P.B. 6 FOLIO 72

LANDS N/F JOHN A. BAUR AND WENDY BAUR LIBER 10663 FOLIO 655 TM 27-24-42

LANDS N/F SHANNON DOYLE AND TRACEY LYN ZAMPINI LIBER 7510 FOLIO 606 TM 37-24-15

LANDS N/F FIRST LANDS OF SHERRY-ROTHSTEIN DARLENE PROMPSON HARRY PHILIPSON DEBBIE RIPPEON AND PEGGY SIMPSON LIBER 11361 FOLIO 222

LANDS N/F SHERRY-ROTHSTEIN DARLENE PROMPSON HARRY PHILIPSON DEBBIE RIPPEON AND PEGGY SIMPSON LIBER 11361 FOLIO 222

LANDS N/F THOMAS H. SIMPSON LIBER 10663 FOLIO 655 TM 27-24-42

LANDS N/F JOHN A. BAUR AND WENDY BAUR LIBER 10663 FOLIO 655 TM 27-24-42

N 49°20'14" W 586.65'

S40°59'23"W 125.26'

S55°03'30"E 486.20'

S81°11'20"E 102.71'

S00°03'28"W 5.68'

S00°03'28"W 10.12'

S30°22'57"W 671.89'

N 39°57'30" E 137.67'

S 39°57'30" W 254.86'

EROSION AND SEDIMENT CONTROL NOTES

1. TEMPORARY DIVERSION DIKES SHALL HAVE A MIN. SLOPE OF 0.50%.
2. CONTRACTOR TO ACCOUNT FOR BASEMENT CUT BY LOWERING ELEVATIONS OF LOTS AS REQUIRED. GENERAL GRADING DESIGN SHOULD REMAIN THE SAME. LOTS SHOULD BE BROUGHT TO FINAL GRADE AFTER SDP APPROVAL WHEN HOUSES ARE BUILT AND CUT IN BASEMENTS IS AVAILABLE.
3. SEQUENCE OF CONSTRUCTION, SEDIMENT CONTROL NOTES, AND SEDIMENT CONTROL DETAILS WILL BE PROVIDED DURING FINAL PLAN PHASE OF THE PROJECT.
4. ALL PROPOSED WORK OUTSIDE OF PERIMETER CONTROLS SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
5. PROPOSED SILT FENCE IS TO BE CHANGED TO SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
6. ALL EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY - SAME DAY.
7. EITHER TEMPORARY OR PERMANENT SEEDING IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE RESTRICTIVE.
8. CONTRACTOR TO INSTALL SOIL STABILIZATION MATTING IN ALL SWALES AND ON ALL SLOPES 3:1 OR GREATER.
9. IF A STOCKPILE EXCEEDS 15 FEET IN HEIGHT, IT MUST BE BENCHED.
10. IF A UTILITY CROSSES A PHASING LINE, THAT SECTION OF PIPE OR STRUCTURE CANNOT BE INSTALLED UNTIL THE LATER PHASE.

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

CUT/FILL ANALYSIS

TOTAL CUT = 61,613 CY
TOTAL FILL = 184,136 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 122,523 CY

LIMIT OF DISTURBANCE: 65.42 AC.

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
2. ALL BIO-RETENTION FACILITIES LEADING TO THEIR OWN OUTFALL POINT WILL HAVE OUTFALL PIPES SIZED TO HANDLE THE 10-YR STORM EVENT.
3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 3 SUBMERGED GRAVEL WETLANDS, FACILITIES AND 294 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

OWNERS:	PARCEL 111
PARCEL 36	DENNIS A LEAF
SHERRY ROTHSTEIN	LENORE D. SINES
DARLENE THOMPSON	5226 GREEN BRIDGE ROAD
HARRY SIMPSON	DAYTON, MD 21036
DEBBIE RIPPEON	TEL
PEGGY SIMPSON	PARCEL 112
5232 GREEN BRIDGE ROAD	DANA G DENAULT
DAYTON, MD 21036	THOMAS C. DENAULT
TEL	5222 GREEN BRIDGE ROAD
PARCEL 34	DAYTON, MD 21036
THOMAS H. SIMPSON	TEL
5300 GREEN BRIDGE ROAD	PARCEL 98
DAYTON, MD 21036	JERRY MALICK
TEL.	JANET BURKE J/T
	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036
	TEL.

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05888/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

1" = 50'

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
◆ WARREN, NJ

OFFICES:
◆ BOWIE, MD
◆ CHANTILLY, VA
◆ SOUTHBOROUGH, MA
◆ HUNTINGTON, NY
◆ ROANOKE, VA
◆ ROANOKE, VA
◆ STERLING, VA
◆ WILLIAMSBURG, VA
◆ CENTER VALLEY, PA
◆ FORT LAUDERDALE, FL
◆ TAMPA, FL
◆ PHILADELPHIA, PA

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE MARYLAND STATE HIGHWAY ADMINISTRATION (MSHA) REQUIREMENTS. PRIOR TO COMMENCEMENT OF WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL OBTAIN A ROAD CLOSURE AND/OR ROAD OCCUPANCY PERMIT FROM THE APPROPRIATE AUTHORITY. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF TRAFFIC ENGINEERING AT LEAST 48 HOURS PRIOR TO THE START OF ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	EP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & I - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40868
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40868, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
26 OF 42

SP-17-002

N:\141\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048EP4.DWG PRINTED BY: ADAMSKA 2:25:18 @ 11:47 AM LAST SAVED BY: ADAMSKA

STONE OUTLET SEDIMENT TRAP - ST-I				
TRAP NO.	WIDTH	LENGTH	BOTTOM ELEV.	D.A.
2	35'	150'	426.00	5.0 AC.

STONE OUTLET SEDIMENT TRAP - ST-III				
TRAP NO.	WIDTH	LENGTH	BOTTOM ELEV.	D.A.
3	50'	150'	422.00	8.0 AC.

EROSION AND SEDIMENT CONTROL NOTES

1. TEMPORARY DIVERSION DIKES SHALL HAVE A MIN. SLOPE OF 0.50%.
2. CONTRACTOR TO ACCOUNT FOR BASEMENT CUT BY LOWERING ELEVATIONS OF LOTS AS REQUIRED. GENERAL GRADING DESIGN SHOULD REMAIN THE SAME. LOTS SHOULD BE BROUGHT TO FINAL GRADE AFTER SDP APPROVAL WHEN HOUSES ARE BUILT AND CUT IN BASEMENTS IS AVAILABLE.
3. SEQUENCE OF CONSTRUCTION, SEDIMENT CONTROL NOTES, AND SEDIMENT CONTROL DETAILS WILL BE PROVIDED DURING FINAL PLAN PHASE OF THE PROJECT.
4. ALL PROPOSED WORK OUTSIDE OF PERIMETER CONTROLS SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
5. PROPOSED SILT FENCE IS TO BE CHANGED TO SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
6. ALL EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY - SAME DAY.
7. EITHER TEMPORARY OR PERMANENT SEEDING IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE RESTRICTIVE.
8. CONTRACTOR TO INSTALL SOIL STABILIZATION MATTING IN ALL SWALES AND ON ALL SLOPES 3:1 OR GREATER.
9. IF A STOCKPILE EXCEEDS 15 FEET IN HEIGHT, IT MUST BE BENCHED.
10. IF A UTILITY CROSSES A PHASING LINE, THAT SECTION OF PIPE OR STRUCTURE CANNOT BE INSTALLED UNTIL THE LATER PHASE.

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

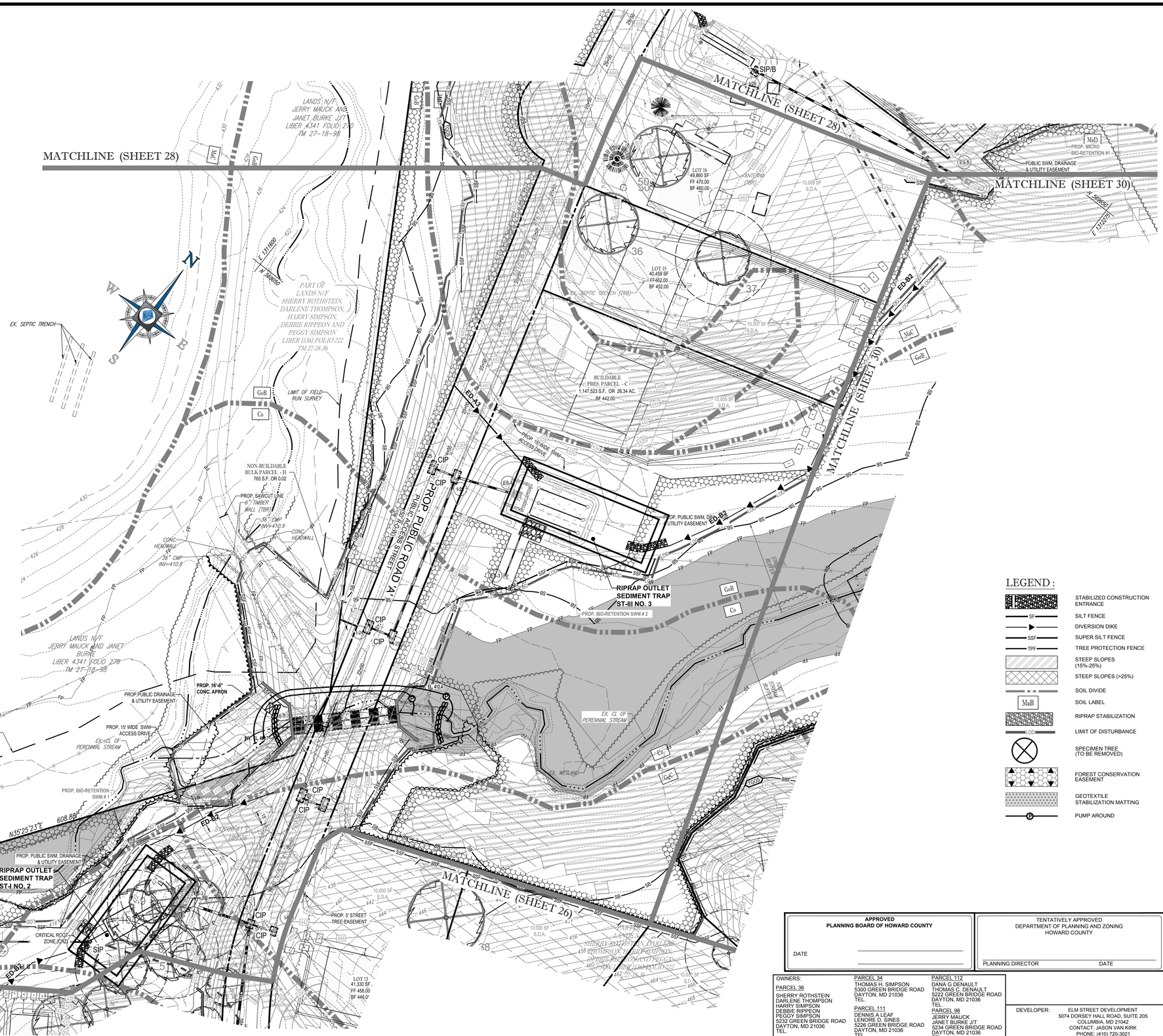
CUT/FILL ANALYSIS

TOTAL CUT = 61,613 CY
TOTAL FILL = 184,136 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 122,523 CY

LIMIT OF DISTURBANCE: 65.42 AC.

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
2. ALL BIO-RETENTION FACILITIES LEADING TO THEIR-OWN OUTFALL POINT WILL HAVE OUTFALL PIPES SIZED TO HANDLE THE 10-YR STORM EVENT.
3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 3 SUBMERGED GRAVEL WETLANDS, FACILITIES AND 294 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.



50 25 12.5 0 50
1"= 50'

LEGEND :

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- TPF — TREE PROTECTION FENCE
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (TO BE REMOVED)
- FOREST CONSERVATION EASEMENT
- GEOTEXTILE STABILIZATION MATTING
- P — PUMP AROUND

APPROVED PLANNING BOARD OF HOWARD COUNTY	TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
DATE	PLANNING DIRECTOR DATE

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON	DANA G DENAULT
SHERRY ROTHSTEIN	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
DARLENE THOMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
HARRY SIMPSON	TEL.	DAYTON, MD 21036
DEBBIE RIPPEON		TEL.
PEGGY SIMPSON	PARCEL 111	PARCEL 98
5232 GREEN BRIDGE ROAD	DENNIS A LEAF	JERRY MAUCK
DAYTON, MD 21036	LENORE D. SINES	JANET BURKE JJT
TEL.	5226 GREEN BRIDGE ROAD	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036	DAYTON, MD 21036
	TEL.	TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
◆ WARREN, NJ
OFFICES
◆ BOWIE, MD
◆ CHARLOTTE, NC
◆ FORT LAUDERDALE, FL
◆ HARRISBURG, PA
◆ PHILADELPHIA, PA
◆ SOUTHBOROUGH, MA
◆ STERLING, VA
◆ RONKONKOMA, NY
◆ WILKES-BARRE, PA
◆ CENTER VALLEY, PA
◆ TAMPA, FL

THESE DRAWINGS ARE THE PROPERTY OF BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED AND DEVELOPED WITHOUT THE WRITTEN CONSENT OF BOHLER ENGINEERING. ALL RIGHTS RESERVED. COPYRIGHT © 2018 BOHLER ENGINEERING

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE: IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	EP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

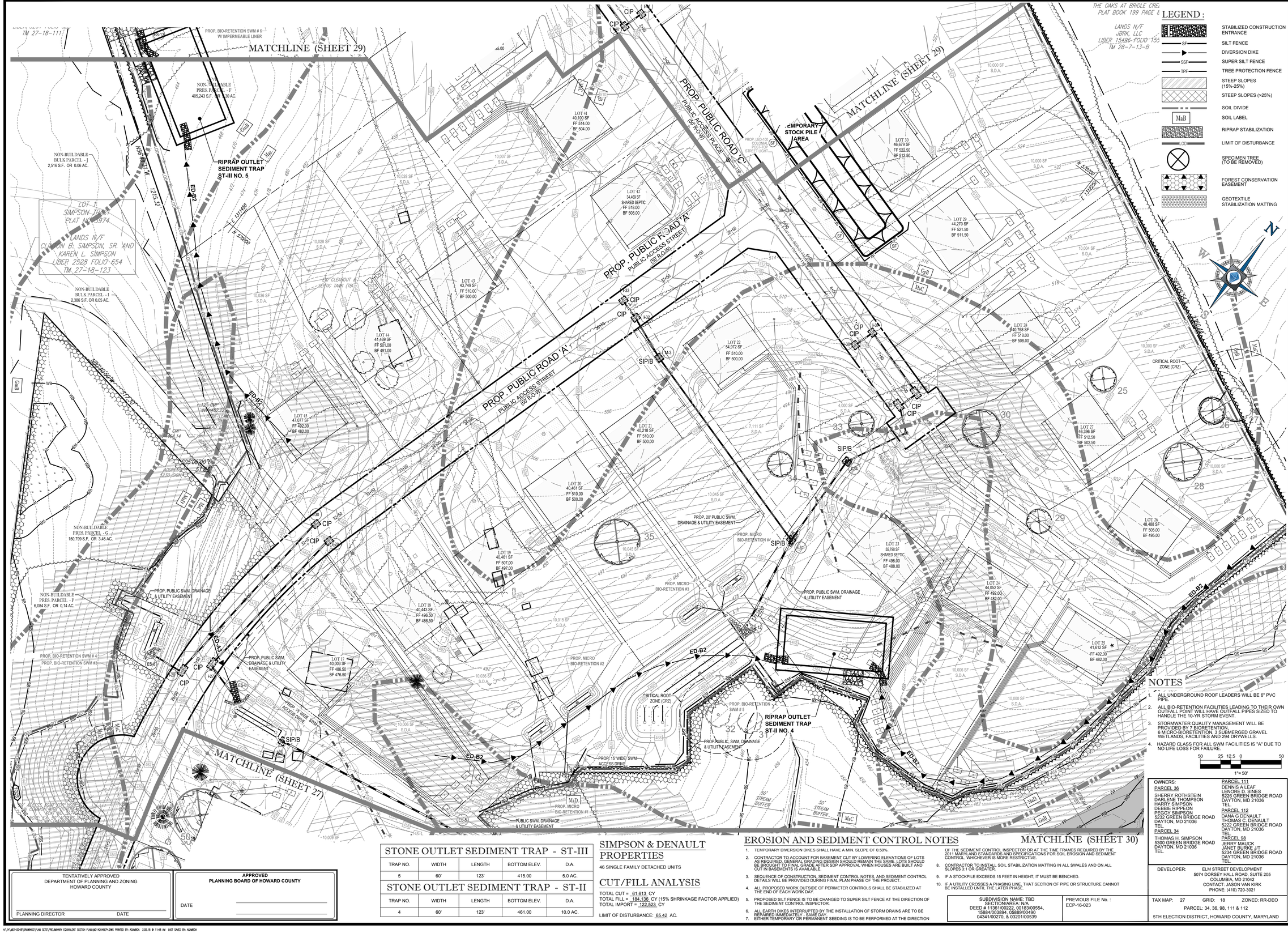
B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808

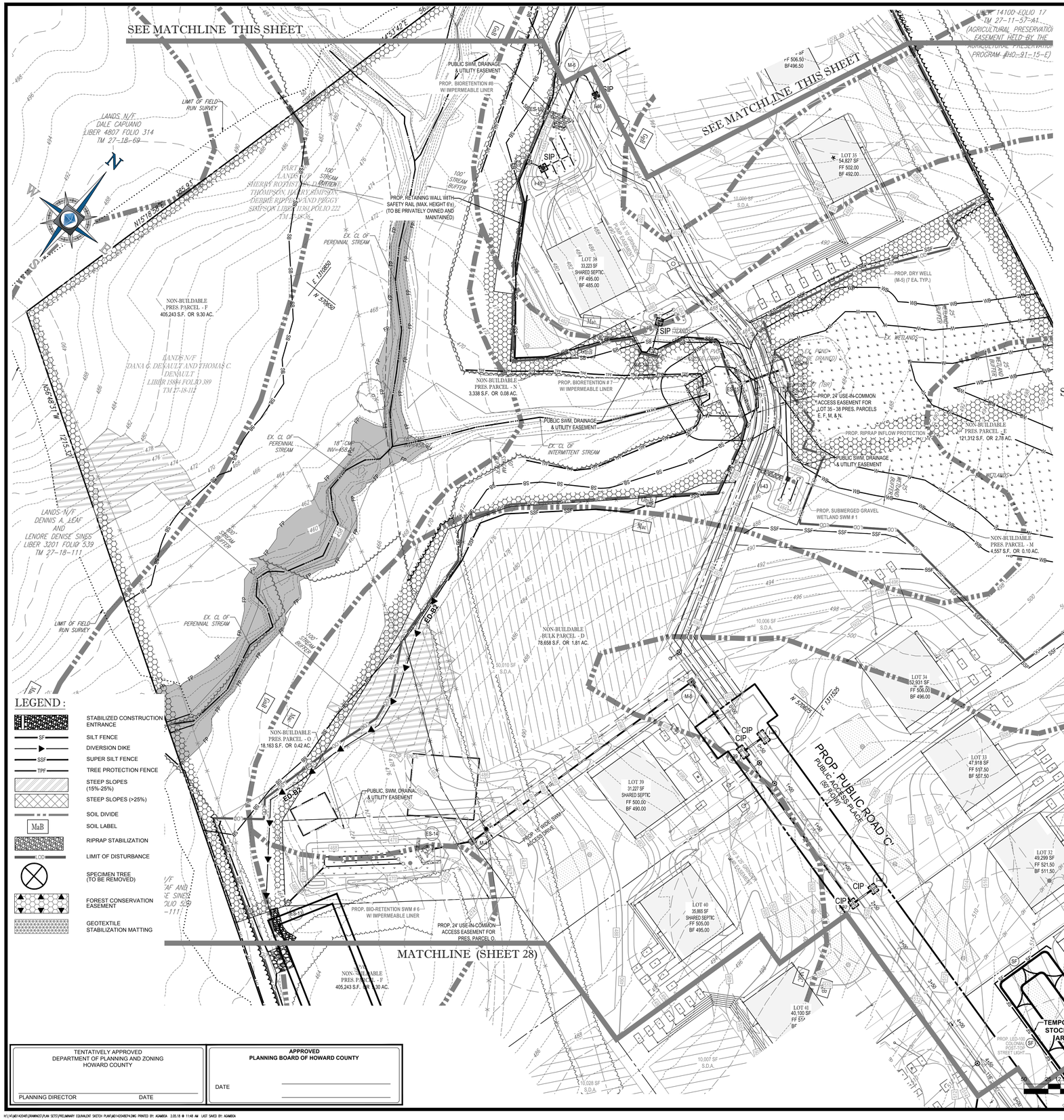
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
27 OF 42

SP-17-002


MATCHLINE (SHEET 29)
MATCHLINE (SHEET 27)
MATCHLINE (SHEET 30)
PROP. PUBLIC ROAD 'A'
PUBLIC ACCESS STREET
(60' R.O.W.)
PROP. PUBLIC ROAD 'C'
PUBLIC ACCESS PLACE
(50' R.O.W.)
TEMPORARY STOCK PILE AREA
RIPRAP OUTLET SEDIMENT TRAP ST-III NO. 5
RIPRAP OUTLET SEDIMENT TRAP ST-II NO. 4
PROP. BIO-RETENTION SWM # 6 W/ IMPERMEABLE LINER
PROP. BIO-RETENTION SWM # 4
PROP. BIO-RETENTION SWM #3
PROP. BIO-RETENTION SWM # 5
PROP. MICRO BIO-RETENTION #1
PROP. MICRO BIO-RETENTION #2
PROP. MICRO BIO-RETENTION #3
PROP. MICRO BIO-RETENTION #4
PROP. PUBLIC SWM, DRAINAGE & UTILITY EASEMENT
PROP. 20' PUBLIC SWM, DRAINAGE & UTILITY EASEMENT
PROP. 15' WIDE SWM ACCESS DRIVE
PUBLIC SWM, DRAINAGE & UTILITY EASEMENT
PROP. LED-100 COLONIAL POST-TOP STREET LIGHT
CRITICAL ROOT ZONE (CRZ)
50' STREAM BUFFER
LOT 1, SIMPSON TRACT PLAT NO. 3974
LANDS N/F CLYDE B. SIMPSON, SR. AND KAREN L. SIMPSON LIBER 2528 FOLIO 654 TM 27-18-123
LANDS N/F JERK, LLC LIBER 15496 FOLIO 155 TM 28-7-13-B
THE OAKS AT BRIDLE CREEK PLAT BOOK 199 PAGE 8
NON-BUILDABLE PRES. PARCEL - F 405,243 S.F. OR 9.30 AC.
NON-BUILDABLE BULK PARCEL - J 2,516 S.F. OR 0.06 AC.
NON-BUILDABLE BULK PARCEL - I 2,386 S.F. OR 0.05 AC.
NON-BUILDABLE PRES. PARCEL - G 150,799 S.F. OR 3.46 AC.
NON-BUILDABLE PRES. PARCEL - P 6,084 S.F. OR 0.14 AC
LOT 41 40,100 SF FF 574.00 BF 504.00
LOT 42 34,489 SF SHARED SEPTIC FF 518.00 BF 508.00
LOT 43 43,749 SF FF 510.00 BF 500.00
LOT 44 41,469 SF FF 501.00 BF 491.00
LOT 45 47,077 SF FF 492.00 BF 482.00
LOT 22 54,972 SF FF 510.00 BF 500.00
LOT 21 40,218 SF FF 510.00 BF 500.00
LOT 30 40,461 SF FF 510.00 BF 500.00
LOT 19 40,461 SF FF 507.00 BF 497.00
LOT 18 40,443 SF FF 496.50 BF 486.50
LOT 17 40,003 SF FF 486.50 BF 476.50
LOT 30 46,679 SF FF 522.50 BF 512.50
LOT 29 44,270 SF FF 521.50 BF 511.50
LOT 28 40,768 SF FF 518.00 BF 508.00
LOT 27 46,396 SF FF 512.50 BF 502.50
LOT 26 48,488 SF FF 505.00 BF 495.00
LOT 24 44,052 SF FF 492.00 BF 482.00
LOT 25 41,612 SF * FF 492.00 BF 482.00
CIP
SIP/B
ES-5
ES-6
ED-B2
ED-A2
WB
MaB
MaC
GnB
GaB
MaD
N 56°16'41" W 1215.32'
S 60°40'39" W 377.20'
S 05°05'10" E 51.44'
N 30°00'00" E 1311.450'
N 30°00'00" E 1312.200'
N 30°00'00" E 1305.65'
N 30°00'00" E 1305.65'
CMP Witness 0.22' Witness 0.22'
CMP Witness 0.14'
ADDRESS ASSIGNED BY DPW FOR COMMON ACCESS DRIVE
5230 SIMPSON TRACT
5232 GREEN BRIDGE ROAD
5234 GREEN BRIDGE ROAD
5236 GREEN BRIDGE ROAD
5238 GREEN BRIDGE ROAD
5240 GREEN BRIDGE ROAD
5242 GREEN BRIDGE ROAD
5244 GREEN BRIDGE ROAD
5246 GREEN BRIDGE ROAD
5248 GREEN BRIDGE ROAD
5250 GREEN BRIDGE ROAD



LEGEND :

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- TPF — TREE PROTECTION FENCE
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (TO BE REMOVED)
- FOREST CONSERVATION EASEMENT
- GEOTEXTILE STABILIZATION MATTING

EROSION AND SEDIMENT CONTROL NOTES

1. TEMPORARY DIVERSION DIKES SHALL HAVE A MIN. SLOPE OF 0.50%.
2. CONTRACTOR TO ACCOUNT FOR BASEMENT CUT BY LOWERING ELEVATIONS OF LOTS AS REQUIRED. GENERAL GRADING DESIGN SHOULD REMAIN THE SAME. LOTS SHOULD BE BROUGHT TO FINAL GRADE AFTER SDP APPROVAL WHEN HOUSES ARE BUILT AND CUT IN BASEMENTS IS AVAILABLE.
3. SEQUENCE OF CONSTRUCTION, SEDIMENT CONTROL NOTES, AND SEDIMENT CONTROL DETAILS WILL BE PROVIDED DURING FINAL PLAN PHASE OF THE PROJECT.
4. ALL PROPOSED WORK OUTSIDE OF PERIMETER CONTROLS SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
5. PROPOSED SILT FENCE IS TO BE CHANGED TO SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
6. ALL EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY - SAME DAY.
7. EITHER TEMPORARY OR PERMANENT SEEDING IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE RESTRICTIVE.
8. CONTRACTOR TO INSTALL SOIL STABILIZATION MATTING IN ALL SWALES AND ON ALL SLOPES 3:1 OR GREATER.
9. IF A STOCKPILE EXCEEDS 15 FEET IN HEIGHT, IT MUST BE BENCHED.
10. IF A UTILITY CROSSES A PHASING LINE, THAT SECTION OF PIPE OR STRUCTURE CANNOT BE INSTALLED UNTIL THE LATER PHASE.

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

CUT/FILL ANALYSIS

TOTAL CUT = 61,613 CY
TOTAL FILL = 184,136 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 122,523 CY

LIMIT OF DISTURBANCE: 65.42 AC.

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
2. ALL BIO-RETENTION FACILITIES LEADING TO THEIR OWN OUTFALL POINT WILL HAVE OUTFALL PIPES SIZED TO HANDLE THE 10-YR STORM EVENT.
3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 3 SUBMERGED GRAVEL WETLANDS, FACILITIES AND 294 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

OWNERS:

SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

BOHLER ENGINEERING

CORPORATE OFFICE: WARREN, NJ
OFFICES: BOWIE, MD; CHANTILLY, VA; STERLING, VA; WILMINGTON, DE; FORT LAUDERDALE, FL; PHILADELPHIA, PA; SOUTHBOROUGH, MA; ROANOKE, VA; NEW YORK, NY; CENTER VALLEY, PA; TAMPA, FL

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BOHLER ENGINEERING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BOHLER ENGINEERING IS PROHIBITED. ANY USE OF THIS DRAWING WITHOUT THE SPECIFIC WRITTEN CONSENT OF BOHLER ENGINEERING SHALL BE AT THE RECIPIENT'S SOLE RISK AND WITHOUT LIABILITY TO BOHLER ENGINEERING.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	EP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40868

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40868, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
29 OF 42

SP-17-002

NOTES

1. ALL UNDERGROUND ROOF LEADERS WILL BE 6" PVC PIPE.
2. ALL BIO-RETENTION FACILITIES LEADING TO THEIR OWN OUTFALL POINT WILL HAVE OUTFALL PIPES SIZED TO HANDLE THE 10-YR STORM EVENT.
3. STORMWATER QUALITY MANAGEMENT WILL BE PROVIDED BY 7 BIORETENTION, 6 MICRO-BIORETENTION, 3 SUBMERGED GRAVEL WETLANDS, FACILITIES AND 294 DRYWELLS.
4. HAZARD CLASS FOR ALL SWM FACILITIES IS "A" DUE TO NO LIFE LOSS FOR FAILURE.

SIMPSON & DENAULT PROPERTIES

46 SINGLE FAMILY DETACHED UNITS

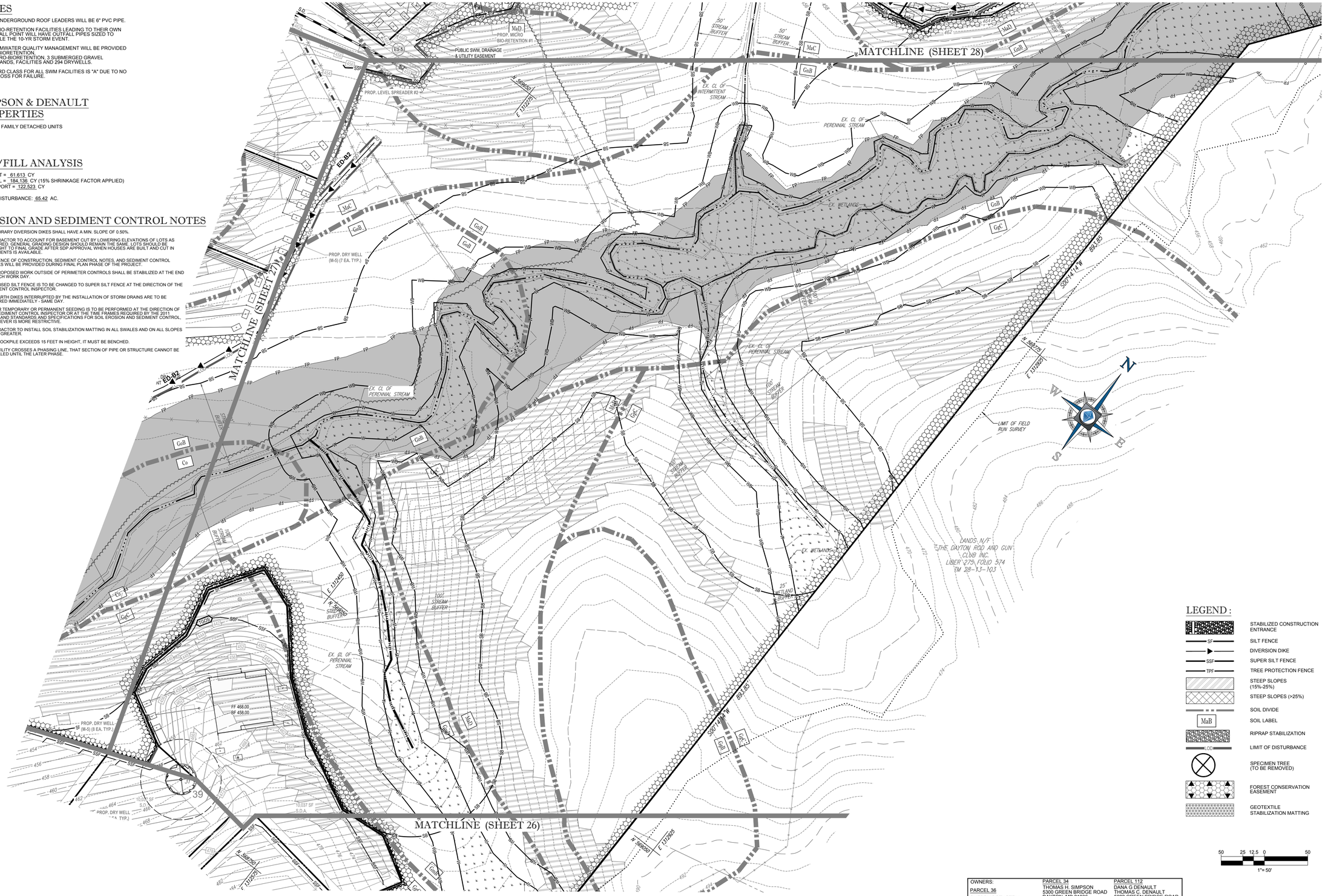
CUT/FILL ANALYSIS

TOTAL CUT = 61,613 CY
TOTAL FILL = 184,136 CY (15% SHRINKAGE FACTOR APPLIED)
TOTAL IMPORT = 122,523 CY

LIMIT OF DISTURBANCE: 65.42 AC.

EROSION AND SEDIMENT CONTROL NOTES

1. TEMPORARY DIVERSION DIKES SHALL HAVE A MIN. SLOPE OF 0.50%.
2. CONTRACTOR TO ACCOUNT FOR BASEMENT CUT BY LOWERING ELEVATIONS OF LOTS AS REQUIRED. GENERAL GRADING DESIGN SHOULD REMAIN THE SAME. LOTS SHOULD BE BROUGHT TO FINAL GRADE AFTER SDP APPROVAL WHEN HOUSES ARE BUILT AND CUT IN BASEMENTS IS AVAILABLE.
3. SEQUENCE OF CONSTRUCTION, SEDIMENT CONTROL NOTES, AND SEDIMENT CONTROL DETAILS WILL BE PROVIDED DURING FINAL PLAN PHASE OF THE PROJECT.
4. ALL PROPOSED WORK OUTSIDE OF PERIMETER CONTROLS SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
5. PROPOSED SILT FENCE IS TO BE CHANGED TO SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.
6. ALL EARTH DIKES INTERRUPTED BY THE INSTALLATION OF STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY - SAME DAY.
7. EITHER TEMPORARY OR PERMANENT SEEDING IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE TIME FRAMES REQUIRED BY THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, WHICHEVER IS MORE RESTRICTIVE.
8. CONTRACTOR TO INSTALL SOIL STABILIZATION MATTING IN ALL SWALES AND ON ALL SLOPES 3:1 OR GREATER.
9. IF A STOCKPILE EXCEEDS 15 FEET IN HEIGHT, IT MUST BE BENCHED.
10. IF A UTILITY CROSSES A PHASING LINE, THAT SECTION OF PIPE OR STRUCTURE CANNOT BE INSTALLED UNTIL THE LATER PHASE.



LEGEND :

- STABILIZED CONSTRUCTION ENTRANCE
- SF — SILT FENCE
- DIVERSION DIKE
- SSF — SUPER SILT FENCE
- TPF — TREE PROTECTION FENCE
- STEEP SLOPES (15%-25%)
- STEEP SLOPES (>25%)
- SOIL DIVIDE
- MaB — SOIL LABEL
- RIPRAP STABILIZATION
- LOD — LIMIT OF DISTURBANCE
- SPECIMEN TREE (TO BE REMOVED)
- FOREST CONSERVATION EASEMENT
- GEOTEXTILE STABILIZATION MATTING

50 25 12.5 0 50
1"= 50'

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	DANA G DENAULT THOMAS C. DENAULT 5222 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.
SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	PARCEL 111 DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	PARCEL 98 JERRY MAUCK JANET BURKE JIT 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

H:\14\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048EP4.DWG PRINTED BY: AGAMBOA 2:05:18 @ 11:48 AM LAST SAVED BY: AGAMBOA

BOHLER ENGINEERING

CORPORATE OFFICE:
◆ WARREN, NJ

OFFICES:
◆ SOUTHBOROUGH, MA
◆ ALBANY, NY
◆ ROANOKE/OMA, NY
◆ ALLENTOWN, PA
◆ CENTER VALLEY, PA
◆ TAMPA, FL
◆ BOWIE, MD
◆ ASHBURN, VA
◆ STERLING, VA
◆ CHARLOTTESVILLE, VA
◆ FORT LAUDERDALE, FL
◆ PHILADELPHIA, PA

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THESE PLANS ARE COPYRIGHTED BY BOHLER ENGINEERING AND ARE NOT TO BE REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER WHATSOEVER NOR ARE THEY TO BE ASSIGNED TO ANY THIRD PARTY WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF BOHLER ENGINEERING. IN THE EVENT OF UNAUTHORIZED REUSE, THE USER WILL HOLD HARMLESS AND INDEMNIFY BOHLER ENGINEERING AGAINST ANY DAMAGES, LIABILITIES OR COSTS ARISING FROM SUCH REUSE AND WILL DEFEND BOHLER ENGINEERING AGAINST ANY CLAIMS OR ACTIONS ARISING FROM UNAUTHORIZED REUSE OF THESE PLANS.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 50'
CAD I.D.:	EP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

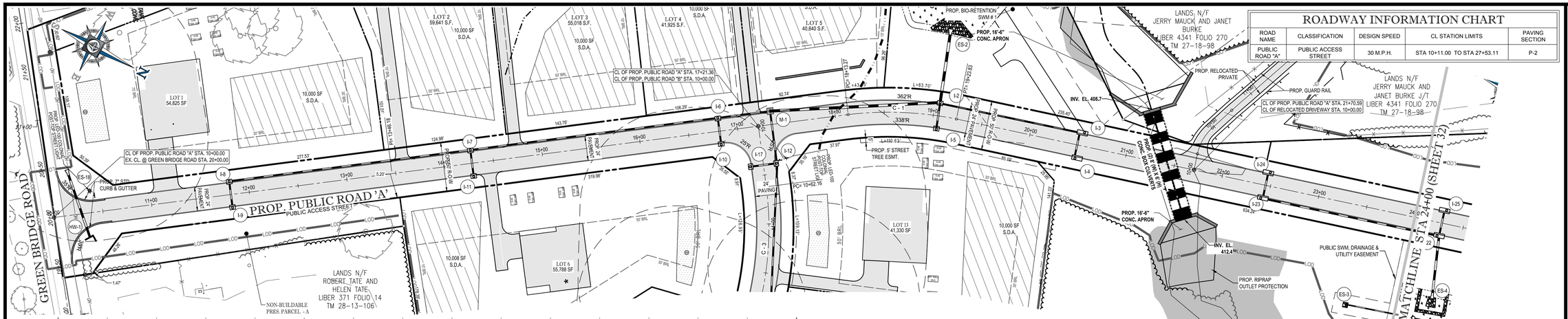
BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
SEDIMENT CONTROL AND ENVIRONMENTAL CONCEPT PLAN

SHEET NUMBER:
30 OF 42

SP-17-002

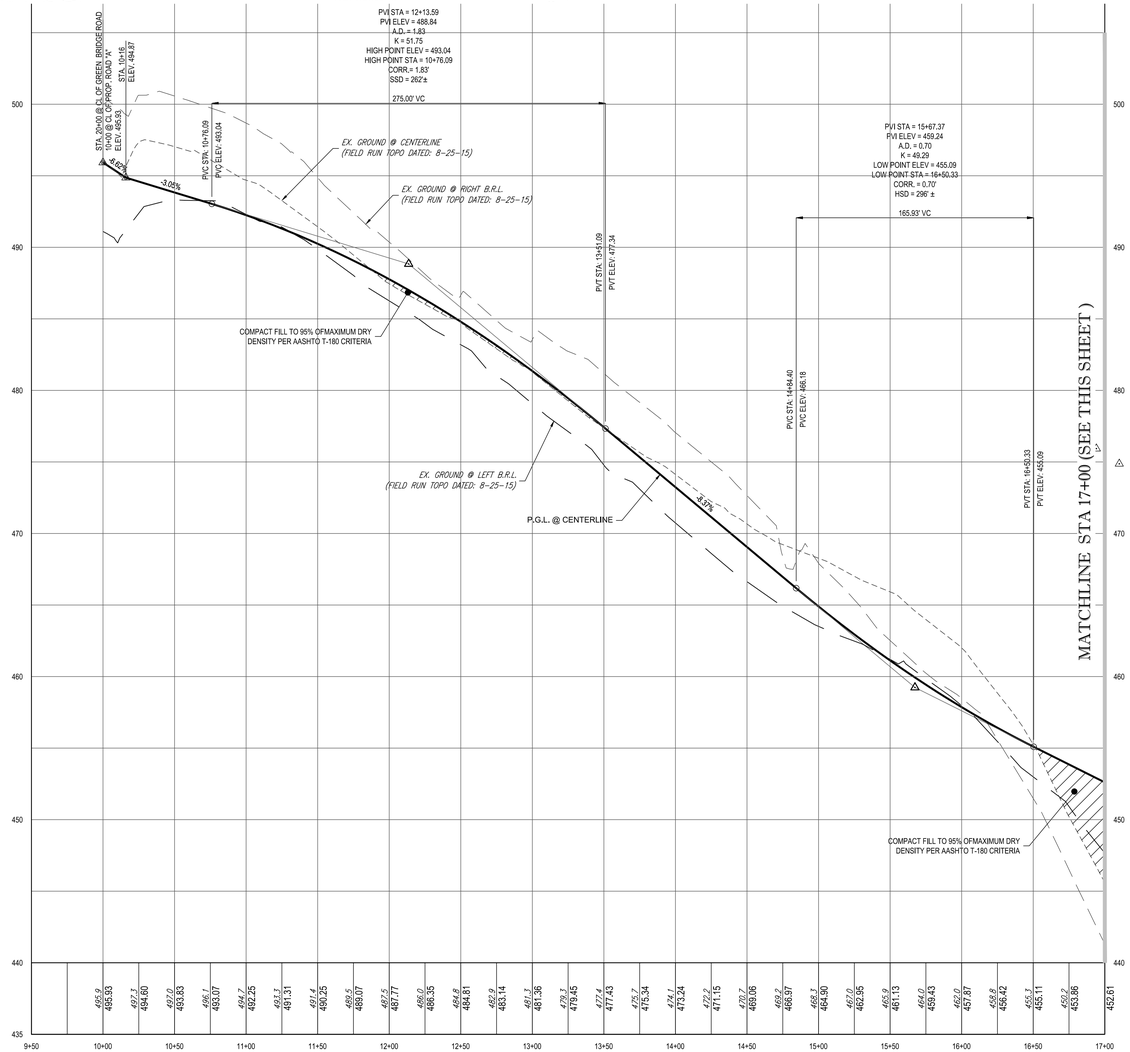


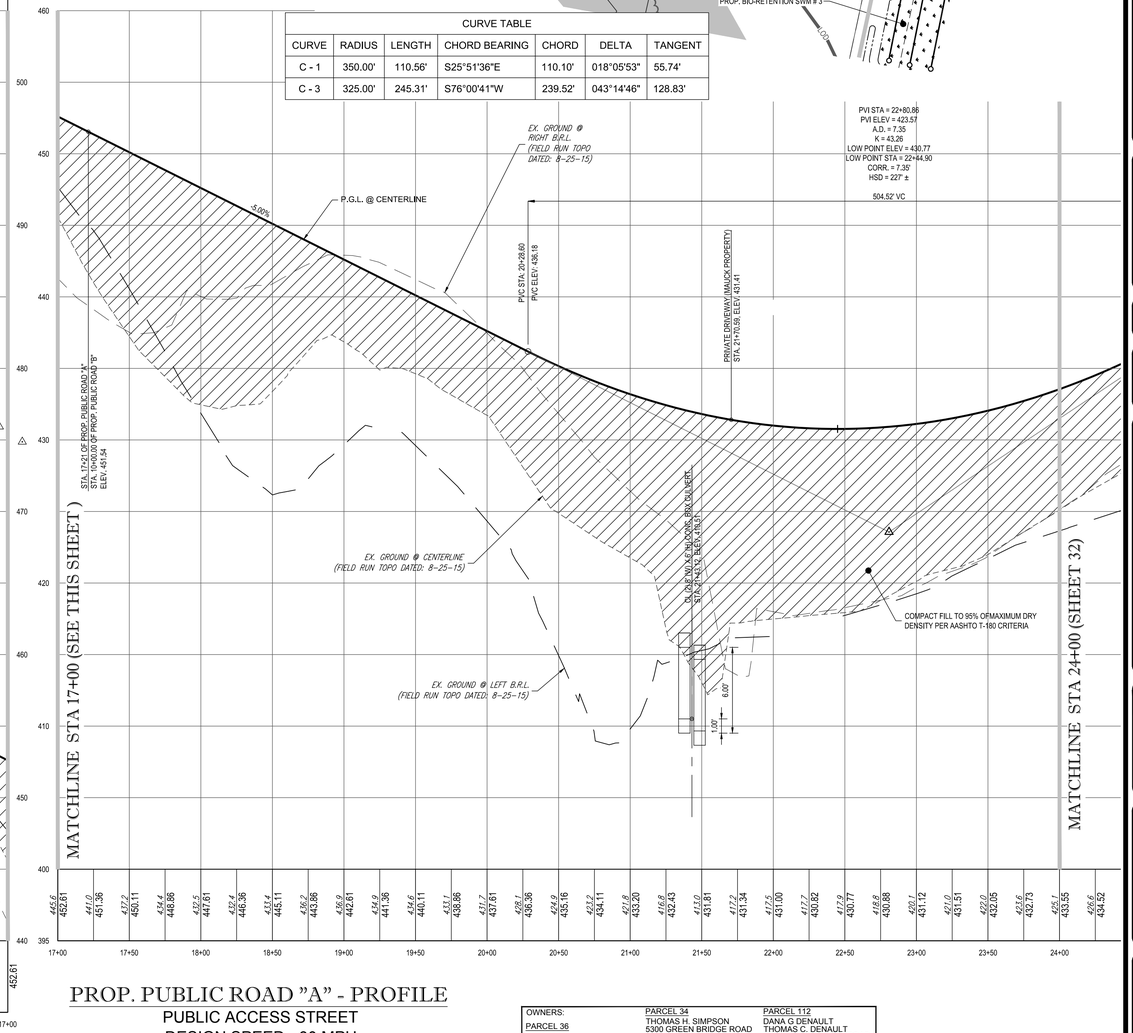
ROADWAY INFORMATION CHART

ROAD NAME	CLASSIFICATION	DESIGN SPEED	CL STATION LIMITS	PAVING SECTION
PUBLIC ROAD "A"	PUBLIC ACCESS STREET	30 M.P.H.	STA 10+11.00 TO STA 27+53.11	P-2

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C - 1	350.00'	110.56'	S25°51'36"E	110.10'	018°05'53"	55.74'
C - 3	325.00'	245.31'	S76°00'41"W	239.52'	043°14'46"	128.83'





PROP. PUBLIC ROAD "A" - PROFILE

PUBLIC ACCESS STREET

DESIGN SPEED - 30 MPH

SCALE : 1" = 50' HOR.
1" = 5' VER.

1"= 50'

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

OWNERS:

PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 98
JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING

CORPORATE OFFICE:
WARREN, NJ

OFFICES:
SOUTHBOROUGH, MA
RONKONKOMA, NY
WILMINGTON, DE
CENTER VALLEY, PA
TAMPA, FL
BOWIE, MD
ANNAPOLIS, MD
STERLING, VA
RICHMOND, VA
FORT LAUDERDALE, FL
PHILADELPHIA, PA

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THESE DRAWINGS ARE THE PROPERTY OF BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER ENGINEERING. ANY UNAUTHORIZED USE OF THESE DRAWINGS SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO BOHLER ENGINEERING

REVISIONS

REV	DATE	COMMENT	BY

MISS UTILITY OF DELMARVA
CONNECTED TO PROTECT

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777)
(VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	AS SHOWN
CAD I.D.:	PP4

PROJECT:

PRELIMINARY EQUIVALENT SKETCH PLAN

FOR

SIMPSON & DENAULT, PROPERTIES

LOTS I-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K

LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax. (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:

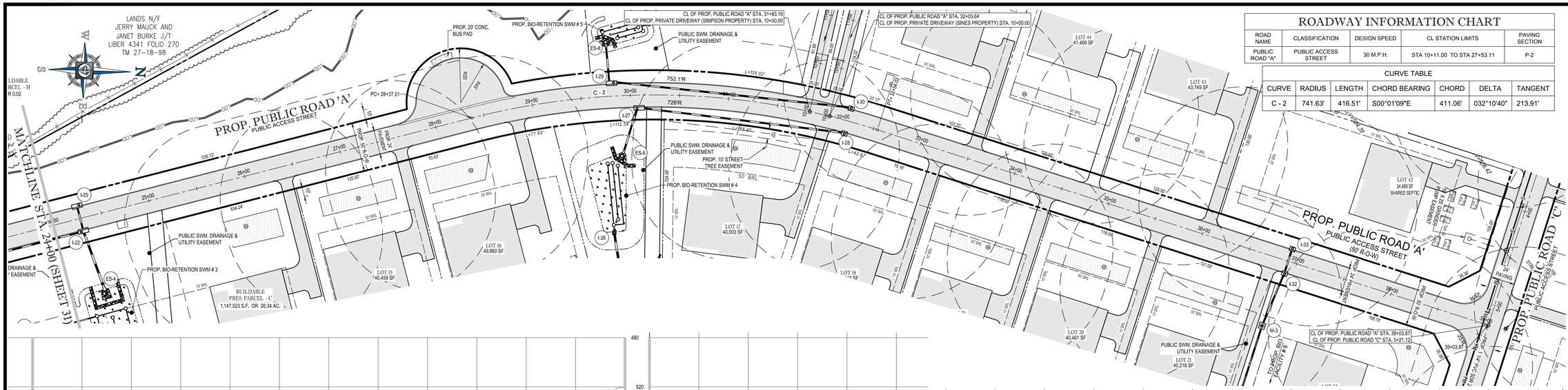
ROAD PLAN AND PROFILE

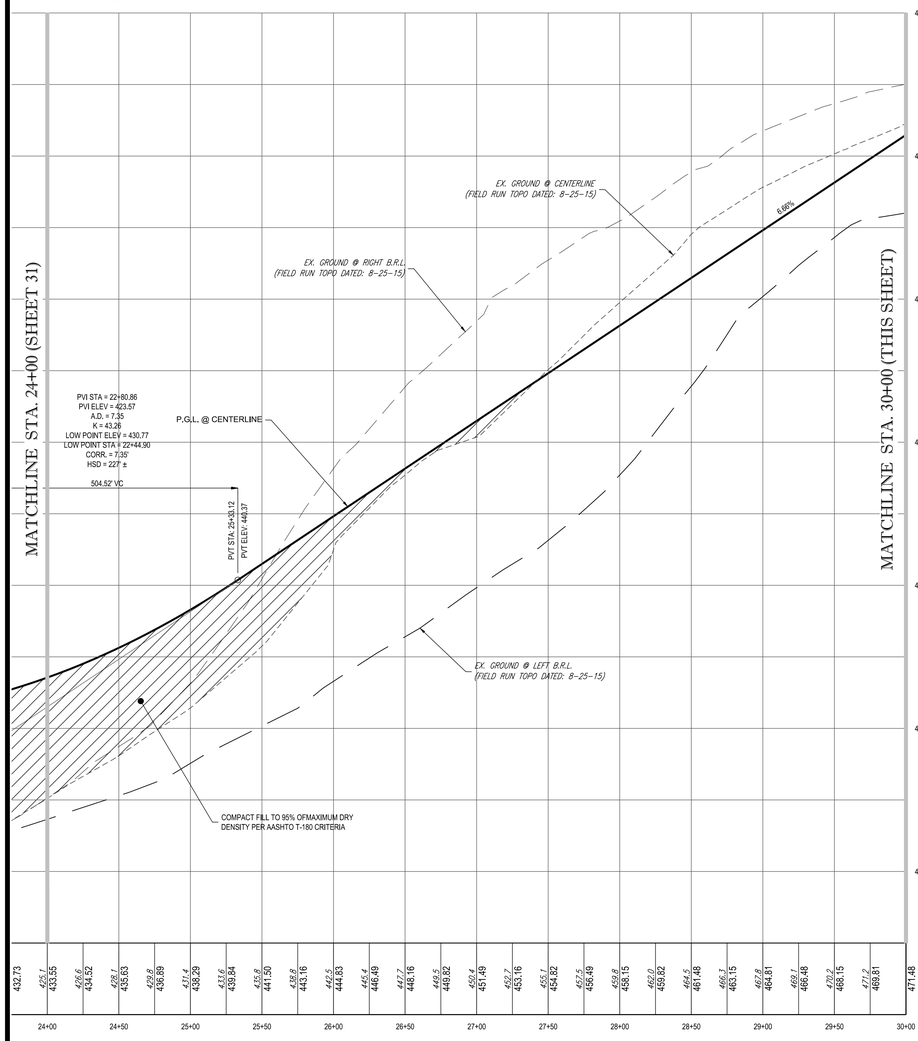
SHEET NUMBER:

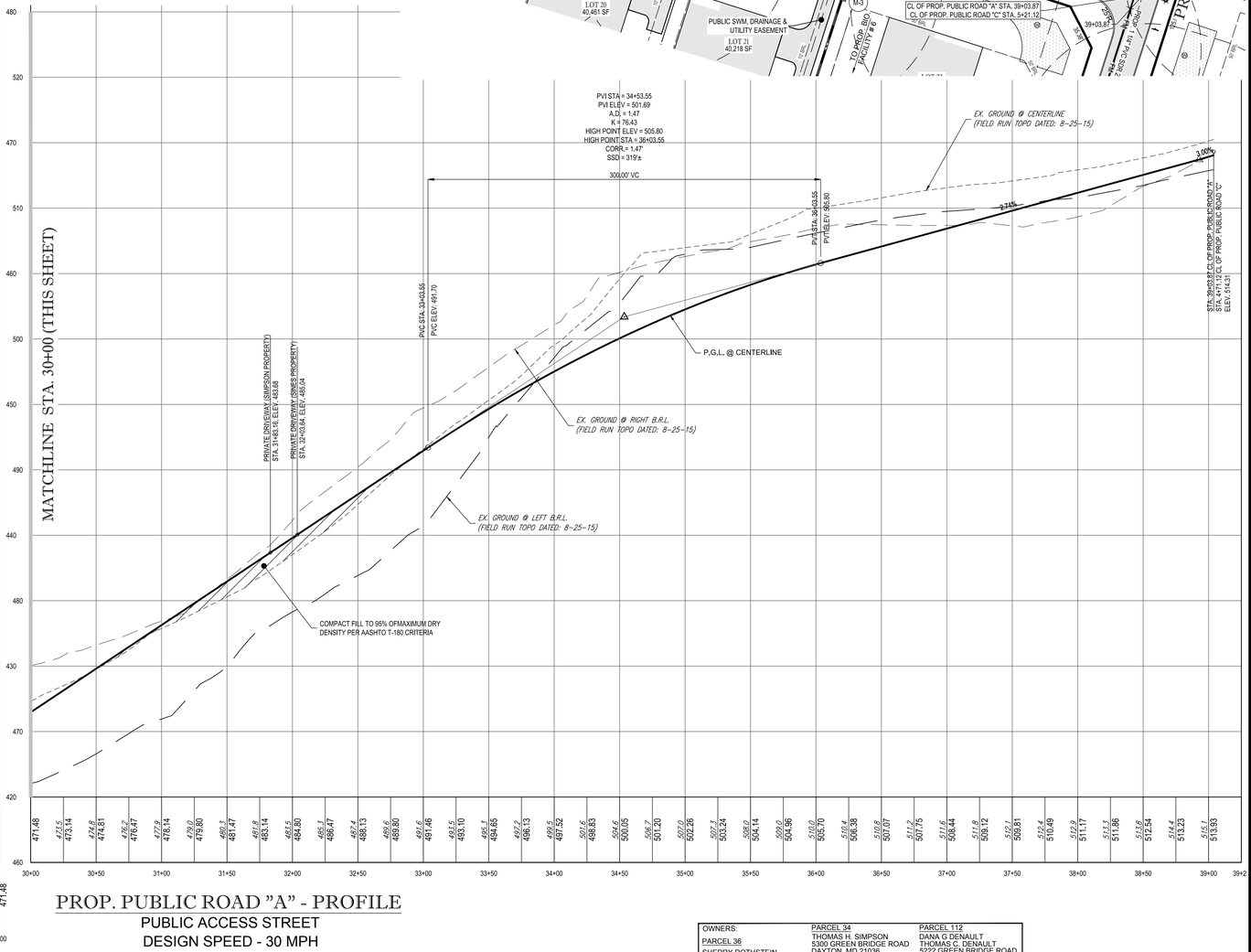
31 OF 42

SP-17-002

H:\1141\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048PP4.DWG PRINTED BY: AGAMBOA 2:55:18 @ 11:49 AM LAST SAVED BY: AGAMBOA







ROADWAY INFORMATION CHART

ROAD NAME	CLASSIFICATION	DESIGN SPEED	CL STATION LIMITS	PAVING SECTION
PUBLIC ROAD "A"	PUBLIC ACCESS STREET	30 M.P.H.	STA 10+11.00 TO STA 27+53.11	P-2

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C - 2	741.63'	416.51'	S00°01'09"E	411.06'	032°10'40"	213.91'

PROP. PUBLIC ROAD "A" - PROFILE

PUBLIC ACCESS STREET

DESIGN SPEED - 30 MPH

SCALE : 1" = 50' HOR.
1" = 5' VER.

50 25 12.5 0 50
1"= 50'

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON 5300 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	DANA G DENAULT THOMAS C. DENAULT 5222 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.
SHERRY ROTHSTEIN DARLENE THOMPSON HARRY SIMPSON DEBBIE RIPPEON PEGGY SIMPSON 5232 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	PARCEL 111 DENNIS A LEAF LENORE D. SINES 5226 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.	PARCEL 98 JERRY MAUCK JANET BURKE J/T 5234 GREEN BRIDGE ROAD DAYTON, MD 21036 TEL.

SUBDIVISION NAME: TBD SECTION/AREA: N/A DEED # 1136/100222, 00183/00554, 15884/003894, 05888/00490 04341/00270, & 03201/00539	PREVIOUS FILE No. : ECP-16-023

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
◆ WARREN, NJ

OFFICES
◆ BOWIE, MD
◆ ANNAPOLIS, MD
◆ STERLING, VA
◆ SOUTHBOROUGH, MA
◆ ALBANY, NY
◆ ROANOKE, VA
◆ ROCHESTER, NY
◆ FORT LAUDERDALE, FL
◆ CLIFTON PARK, NY
◆ CENTER VALLEY, PA
◆ TAMPA, FL
◆ PHILADELPHIA, PA

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BOHLER ENGINEERING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BOHLER ENGINEERING IS PROHIBITED. ANY USE OF THIS PLAN FOR ANY PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH IT WAS PREPARED IS PROHIBITED. ANY MODIFICATION OF THIS PLAN WITHOUT THE WRITTEN PERMISSION OF BOHLER ENGINEERING SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO BOHLER ENGINEERING.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE: IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	AS SHOWN
CAD I.D.:	PP4

PROJECT:

PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES

LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD,
SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40868
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40868, EXPIRATION DATE: 7/3/2019

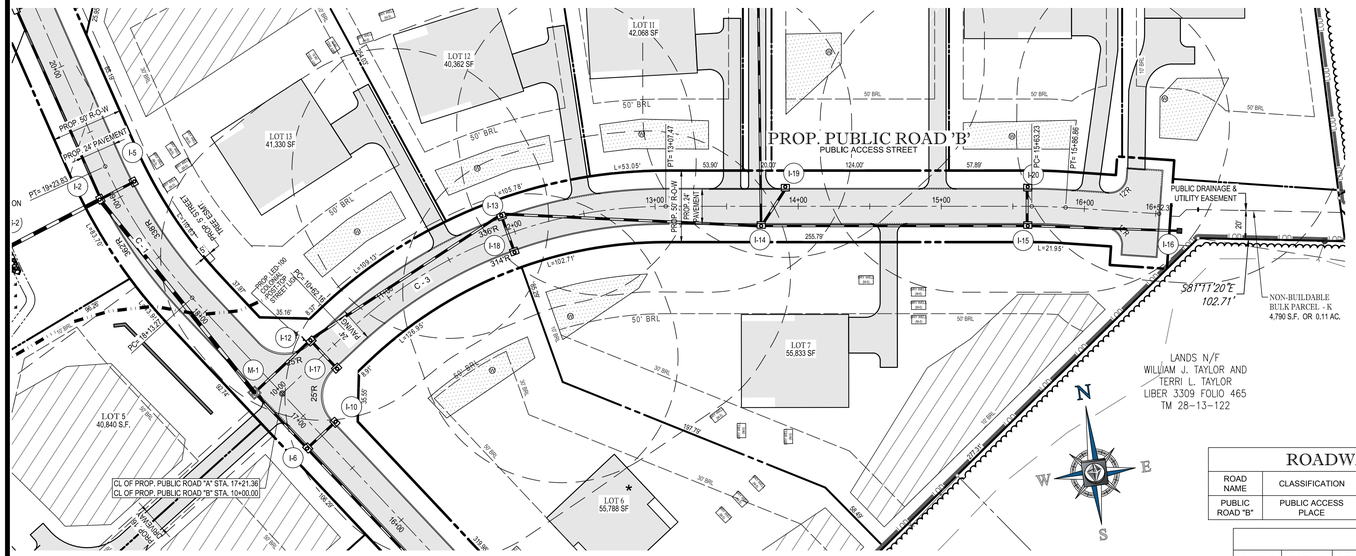
SHEET TITLE:

ROAD PLAN AND PROFILE

SHEET NUMBER:

32 OF 42

SP-17-002

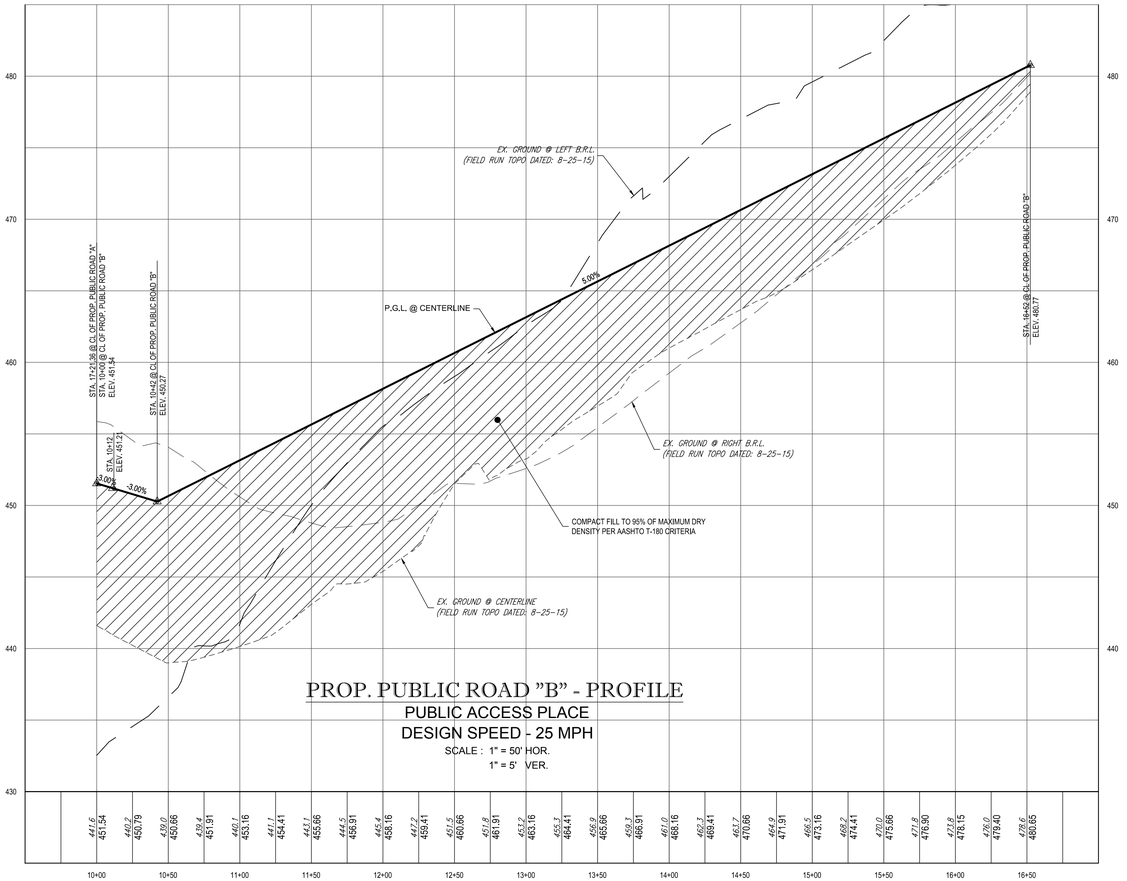


ROADWAY INFORMATION CHART

ROAD NAME	CLASSIFICATION	DESIGN SPEED	CL STATION LIMITS	PAVING SECTION
PUBLIC ROAD "B"	PUBLIC ACCESS PLACE	30 M.P.H.	STA 10+00.00 TO STA 16+52.37	P-2

CURVE TABLE

CURVE	RADIUS	LENGTH	CHORD BEARING	CHORD	DELTA	TANGENT
C - 1	350.00'	110.56'	S25°51'36"E	110.10'	018°05'53"	55.74'
C - 3	325.00'	245.31'	S76°00'41"W	239.52'	043°14'46"	128.83'



PROP. PUBLIC ROAD "B" - PROFILE

PUBLIC ACCESS PLACE

DESIGN SPEED - 25 MPH

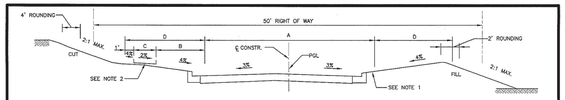
SCALE : 1" = 50' HOR.
1" = 5' VER.

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE



CLOSED SECTION

NOTES:

1. TYPE OF CURB VARIES (MODIFIED COMBINATION CURB & GUTTER OR COMBINATION CURB & GUTTER - SEE DESIGN MANUAL VOLUME III FOR CRITERIA).
2. 4" CONCRETE SIDEWALK AS REQUIRED BY SUB-DIVISION REGULATIONS.
3. 4'-0" SIDEWALK REQUIRES A PASSING AREA (SEE DETAIL R-4.01).

CLASSIFICATION	A	B	C	D	PAVING SECTION
MINOR COLLECTOR 2000 ADT	28'	6'	4'-11"		P-3
ACCESS STREET 1000 ADT	24'*	5'	4'-13"		P-2
ACCESS PLACE 200 ADT	24'*	5'	4'-13"		P-2

*TOWNHOUSES, CONDOMINIUM / APARTMENT DEVELOPMENTS REQUIRE 26' MINIMUM PAVING WIDTH (P-2 PAVING SECTION)

Revised	Howard County, Maryland Department of Public Works	TYPICAL SECTIONS – Residential Streets Access Place, Access Street, Minor Collector (Closed Section)	Detail R-1.02
Revised 1/2/2002 Approved	Approved: Chief, Bureau of Engineering		

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR)	3 TO <5	5 TO <7	≥ 7	3 TO <5	5 TO <7	≥ 7
		PAVEMENT MATERIAL (INCHES)	MIN HMA WITH GAB			HMA WITH CONSTANT GAB		
P-1	PARKING BAYS: RESIDENTIAL AND NON-RESIDENTIAL PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE (INA)	NA	NA	NA	NA	NA	NA
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	3.0	2.5
		GRADED AGGREGATE BASE (GAB)	8.5	7.0	6.0	4.0	4.0	4.0
P-2	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	2.0	2.0
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0	4.0	4.0
P-3	PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY LOCAL ROADS: ACCESS PLACE, ACCESS STREET CUL-DE-SACS: RESIDENTIAL MINOR COLLECTORS: RESIDENTIAL	HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
		HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL)	1.0	1.0	1.0	1.0	1.0	1.0
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 1 (ESAL)	3.0	3.0	3.0	4.5	3.0	2.0
		GRADED AGGREGATE BASE (GAB)	10.0	8.0	6.0	6.0	6.0	6.0
P-4	MINOR COLLECTORS: RESIDENTIAL MAJOR COLLECTORS	HMA SUPERPAVE FINAL SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0
		HMA SUPERPAVE INTERMEDIATE SURFACE 12.5 MM, PG 64-22, LEVEL 2 (LOW ESAL)	2.0	2.0	2.0	2.0	2.0	2.0
		HMA SUPERPAVE BASE 19.0 MM, PG 64-22, LEVEL 2 (LOW ESAL)	4.0	4.0	3.0	6.0	5.0	3.0
		GRADED AGGREGATE BASE (GAB)	13.0	7.0	6.0	8.0	8.0	6.0

Notes:
1) HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARBAGE TRUCKS.
2) HMA SUPERPAVE LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 19.0 MM BASE (2.0" MIN TO 4.0" MAX), 12.5 MM SURFACE (1.5" MIN TO 3.0" MAX), AND 9.5 MM SURFACE (1.0" MIN TO 2.0" MAX)
3) GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 6" MAX COMPACTED THICKNESS LAYERS.
4) THE INTERMEDIATE SURFACE COURSE LAYER MUST BE PLACED WITHIN 2 WEEKS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND BOND REDUCTION.
5) SUBJECT TO THE DIRECTOR OF PUBLIC WORKS APPROVAL, ALL COMMERCIAL/INDUSTRIAL ENTRANCE APRONS WITHIN THE COUNTY RIGHT-OF-WAY WHERE AUXILIARY LANES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER.
6) THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CRB VALUE FOR EACH ROADWAY

HMA SUPERPAVE FINAL SURFACE
HMA SUPERPAVE INTERMEDIATE SURFACE
HMA SUPERPAVE BASE
GRADED AGGREGATE BASE (GAB)

Revised	Howard County, Maryland Department of Public Works	PAVING SECTIONS P-1 to P-4	Detail R-2.01
Revised 1/2/2002 Approved	Approved: Chief, Bureau of Engineering		

50 25 12.5 0 50
1"= 50'

OWNERS:

PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 98
JERRY MAUCK
JANET BURKE JT
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05888/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
◆ WARREN, NJ

OFFICES
◆ BOWIE, MD
◆ CHARLOTTESVILLE, VA
◆ FORT LAUDERDALE, FL
◆ PHILADELPHIA, PA
◆ SOUTHBOROUGH, MA
◆ ALBANY, NY
◆ ROANOKE, VA
◆ ROCHESTER, NY
◆ STERLING, VA
◆ CENTER VALLEY, PA
◆ TAMPA, FL

THESE DRAWINGS ARE AN INSTRUMENT OF SERVICE AND ARE THE PROPERTY OF BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER ENGINEERING. ANY UNAUTHORIZED USE OF THESE DRAWINGS WILL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO BOHLER ENGINEERING. THE USER WILL HOLD HARMLESS BOHLER ENGINEERING FROM ANY CLAIMS ARISING FROM THE UNAUTHORIZED USE OF THESE DRAWINGS. BY USING THESE DRAWINGS, THE USER AGREES TO ALL THE TERMS AND CONDITIONS SET FORTH HEREIN.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.
IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777)
(VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142045
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	AS SHOWN
CAD I.D.:	PP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40882

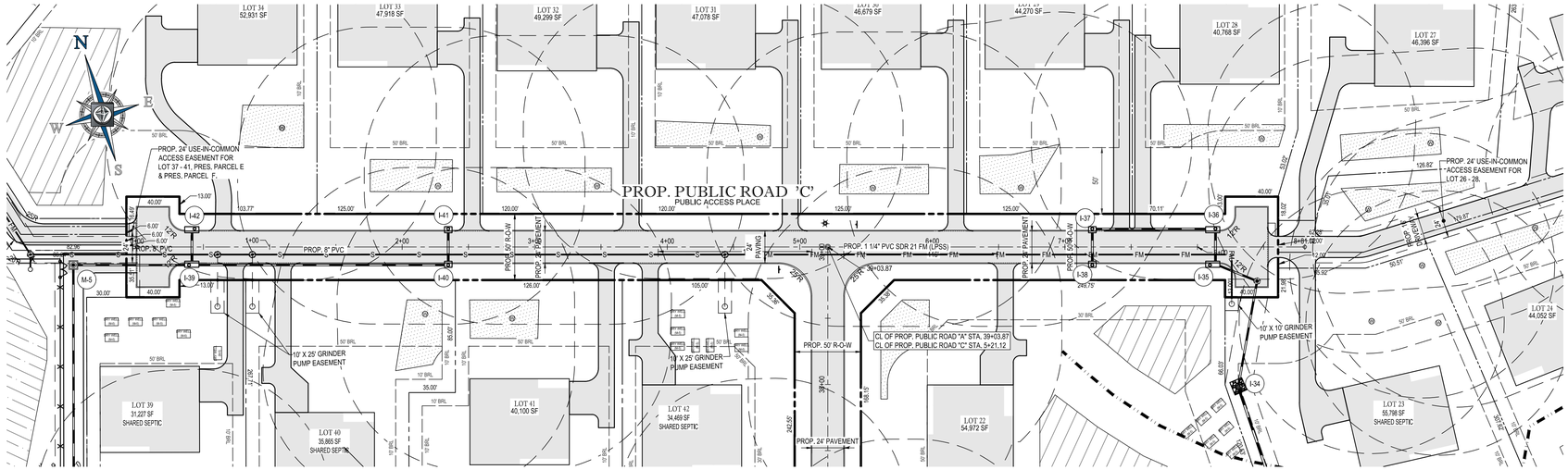
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 40882, EXPIRATION DATE: 7/3/2019

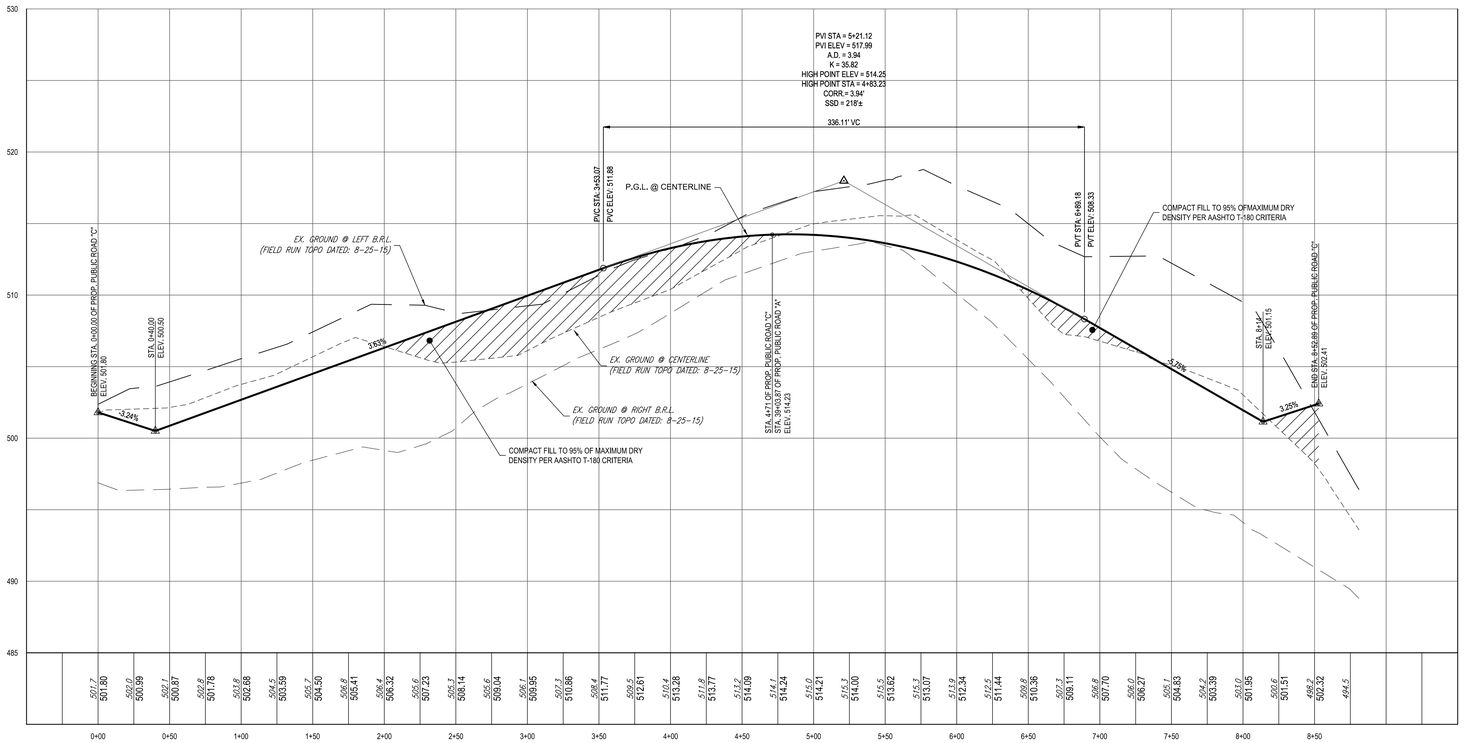
SHEET TITLE:
ROAD PLAN AND PROFILE

SHEET NUMBER:
33 OF 42

SP-17-002

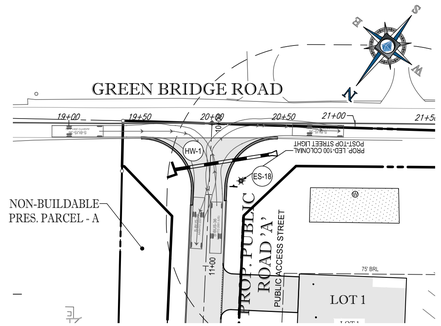
H:\LM\MD142045\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142045PP4.DWG PRINTED BY: AGAMBOA 2:55:18 @ 11:50 AM LAST SAVED BY: AGAMBOA





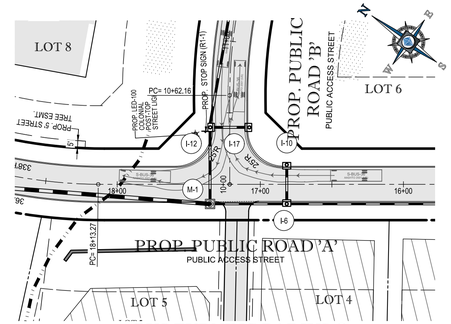
PROP. PUBLIC ROAD "C" - PROFILE

PUBLIC ACCESS PLACE
DESIGN SPEED - 25 MPH
SCALE : 1" = 50' HOR.
1" = 5' VER.



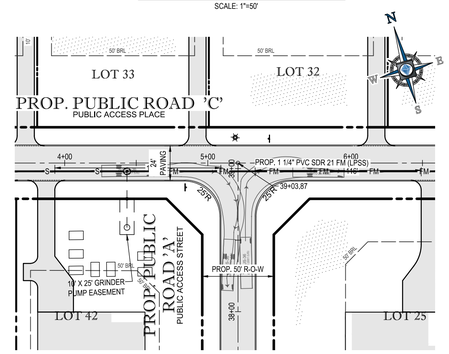
BUS TURNING RADIUS @ GREEN BRIDGE RD AND PROP. PUBLIC ROAD 'A'

SCALE: 1"=50'



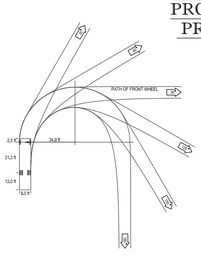
BUS TURNING RADIUS @ PROP. PUBLIC ROAD 'A' & PROP. PUBLIC ROAD 'B'

SCALE: 1"=50'



BUS TURNING RADIUS @ PROP. PUBLIC ROAD 'A' & PROP. PUBLIC ROAD 'C'

SCALE: 1"=50'



BUS TURNING TEMPLATE

SCALE: 1"=50'

ROADWAY INFORMATION CHART

ROAD NAME	CLASSIFICATION	DESIGN SPEED	CL STATION LIMITS	PAVING SECTION
PUBLIC ROAD "C"	PUBLIC ACCESS PLACE	25 M.P.H.	STA 0+00.00 TO STA 8+52.89	P-2

1"= 50'

OWNERS:		
PARCEL 36	PARCEL 34	PARCEL 112
SHERRY ROTHSTEIN	THOMAS H. SIMPSON	DANA G DENAULT
DARLENE THOMPSON	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
HARRY SIMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
DEBBIE RIPPEON	TEL.	DAYTON, MD 21036
PEGGY SIMPSON		TEL.
5232 GREEN BRIDGE ROAD	PARCEL 111	PARCEL 98
DAYTON, MD 21036	DENNIS A LEAF	JERRY MAUCK
TEL.	LENORE D. SINES	JANET BURKE J/T
	5226 GREEN BRIDGE ROAD	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036	DAYTON, MD 21036
	TEL.	TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE

DATE

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
◆ WARREN, NJ
OFFICES
◆ BOWIE, MD
◆ CHANTILLY, VA
◆ SOUTHBOROUGH, MA
◆ ALBANY, NY
◆ RONKONKOMA, NY
◆ STERLING, VA
◆ WILMINGTON, DE
◆ CENTER VALLEY, PA
◆ FORT LAUDERDALE, FL
◆ TAMPA, FL
◆ PHILADELPHIA, PA

THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY AND COPYRIGHTED WORK OF BOHLER ENGINEERING AND ARE TO BE USED ONLY FOR THE PROJECT AND SPECIFIC PURPOSE FOR WHICH THEY WERE PREPARED. THEY ARE NOT TO BE USED FOR ANY OTHER PURPOSE OR PROJECT WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER ENGINEERING. ANY UNAUTHORIZED USE OF THESE DRAWINGS AND SPECIFICATIONS SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO BOHLER ENGINEERING.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777)
(VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	AS SHOWN
CAD I.D.:	PP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
ROAD PLAN AND PROFILE

SHEET NUMBER:
34 OF 42

SP-17-002

H:\142\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048PP4.DWG PRINTED BY: AGAMBOA 2:05:18 @ 11:50 AM LAST SAVED BY: AGAMBOA

DRAINAGE AREA INFORMATION

D.A.	IMPERVIOUS	PERVIOUS	TOTAL (AC.)
1A (BIO. #1)	0.55	1.39	1.94
1B (OFFSITE)	0.32	0.69	1.01
2A (BIO #2)	0.72	5.10	5.82
★2B (OFFSITE)	0.92	4.31	5.23
3 (BIO #3)	0.63	1.58	2.21
4 (BIO #4)	0.35	1.40	1.75
5 (BIO #5)	0.21	0.30	0.51
6 (BIO #6)	0.54	4.02	4.56
7 (BIO #7)	0.44	1.96	2.40
8 (MB1)	0.14	0.22	0.36
9 (MB2)	0.14	0.23	0.37
10 (MB3)	0.14	0.23	0.37
11 (MB4)	0.14	0.20	0.34
12 (S.G.W. #1)	0.18	0.46	0.64
13 (MB5)	0.05	0.09	0.14
14 (MB6)	0.06	0.09	0.15

★RUNOFF FROM D.A. 2B WILL DIRECTED INTO EXISTING STREAM VIA FLOW SPLITTER INLET PRIOR TO REACHING BIO-RETENTION FACILITY # 2.

LEGEND

- LOD LOD — LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- TC PATH
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- (D.A.1) DRAINAGE AREA DESIGNATION

NOTES:
1. DRAINAGE AREA INFORMATION SHOWN HEREON IS PRIMARILY BASED OFF OF FIELD RUN TOPOGRAPHY PREPARED BY BOHLER ENGINEERING DATED AUGUST. 25, 2015.

OWNERS:	PARCEL 34	PARCEL 112
PARCEL 36	THOMAS H. SIMPSON	DANA G DENAULT
SHERRY ROTHSTEIN	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
DARLENE THOMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
HARRY SIMPSON	TEL.	DAYTON, MD 21036
DEBBIE RIPPEON		TEL.
PEGGY SIMPSON	PARCEL 111	PARCEL 98
5232 GREEN BRIDGE ROAD	DENNIS A LEAF	JERRY MAUCK
DAYTON, MD 21036	LENORE D. SINES	JANET BURKE J/T
TEL.	5226 GREEN BRIDGE ROAD	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036	DAYTON, MD 21036
	TEL.	TEL.

200 100 50 0 200
1"= 200'

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05888/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

APPROVED PLANNING BOARD OF HOWARD COUNTY	TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
DATE	PLANNING DIRECTOR DATE

H:\14\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048DA.DWG PRINTED BY: AGAMBOA 2:25:18 @ 11:51 AM LAST SAVED BY: AGAMBOA

BOHLER ENGINEERING

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

CORPORATE OFFICE:
◆ WARRENS, NJ

OFFICES:
◆ BOWIE, MD
◆ DOWNINGTOWN, PA
◆ SOUTHBOROUGH, MA
◆ ALBANY, NY
◆ ROANOKE, VA
◆ ROANOKE, NY
◆ STERLING, VA
◆ CHESTER, NY
◆ WILMINGTON, NC
◆ CENTER VALLEY, PA
◆ FORT LAUDERDALE, FL
◆ TAMPA, FL
◆ PHILADELPHIA, PA

THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SAFE WORKING CONDITIONS IN, ON AND ABOUT THE JOB SITE. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND THE ENGINEER FROM AND AGAINST ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777 (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	AS NOTED
CAD I.D.:	DA4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40868

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40868, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
OVERALL DRAINAGE AREA MAP

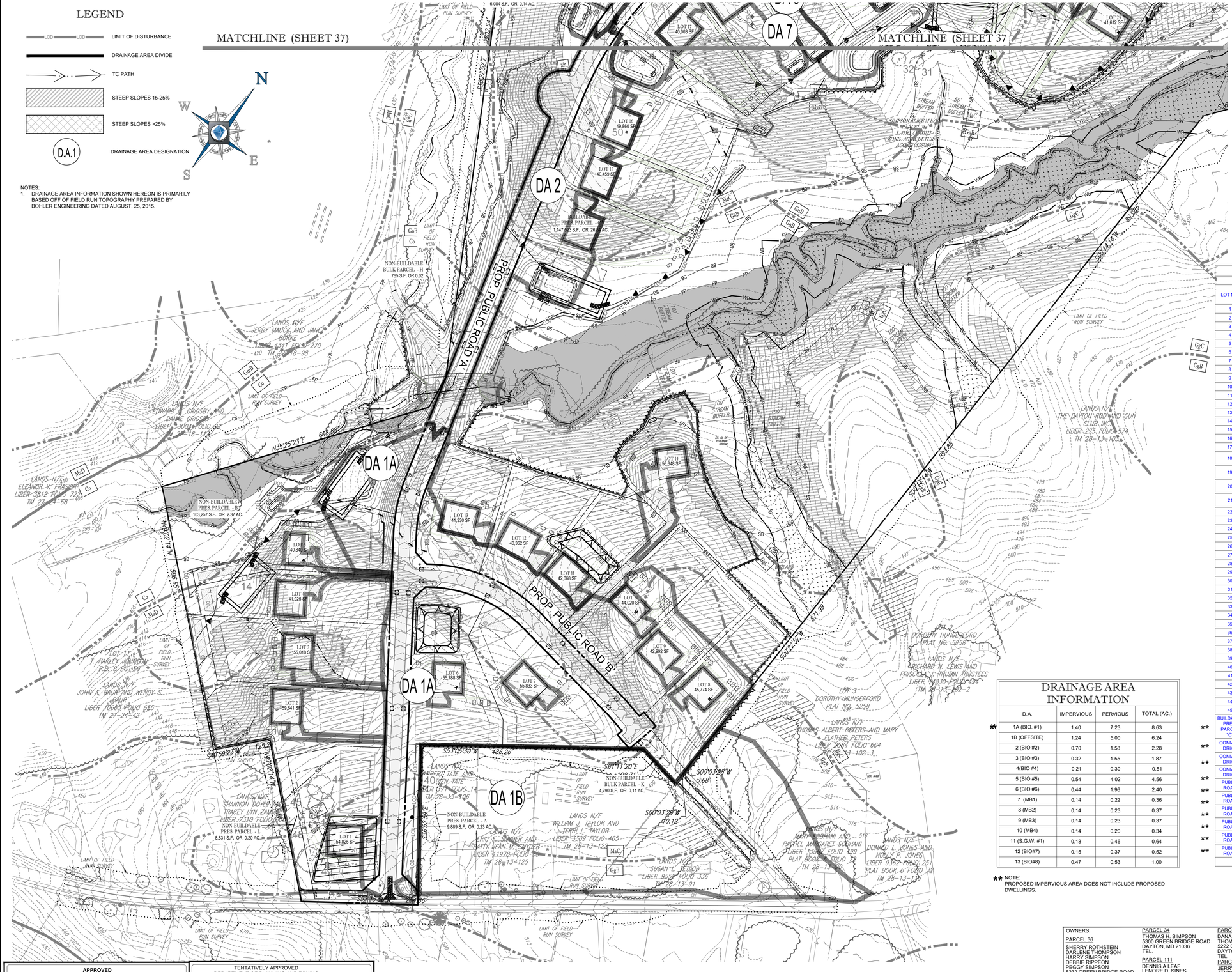
SHEET NUMBER:
35 OF 42

SP-17-002

LEGEND

- LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- TC PATH
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- D.A.1 — DRAINAGE AREA DESIGNATION

NOTES:
1. DRAINAGE AREA INFORMATION SHOWN HEREON IS PRIMARILY BASED OFF OF FIELD RUN TOPOGRAPHY PREPARED BY BOHLER ENGINEERING DATED AUGUST. 25, 2015.



STORMWATER MANAGEMENT PRACTICES

LOT NO.	PERMEABLE PAVING A-2 (Y / N)	ESD FACILITY TYPE AND NUMBER	TOTAL AREA (Ac)	ESDv REQUIRED (C.F.)	ESDv PROVIDED (C.F.)	
1	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
2	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
3	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
4	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
5	N	(6) DRYWELLS (M-5)	0.16	1235	1,235	
6	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
7	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
8	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
9	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
10	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
11	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
12	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
13	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
14	N	(8) DRYWELLS (M-5)	0.18	1646	1,441	
15	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
16	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
17	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
18	N	MICRO-BIORETENTION # 1 (M-6)	0.35	600	828	
19	N	MICRO-BIORETENTION # 2 (M-6)	0.37	601	828	
20	N	MICRO-BIORETENTION # 3 (M-6)	0.36	604	828	
21	N	MICRO-BIORETENTION # 4 (M-6)	0.34	603	828	
22	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
23	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
24	N	(8) DRYWELLS (M-5)	0.18	1646	1,646	
25	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
26	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
27	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
28	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
29	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
30	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
31	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
32	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
33	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
34	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
35	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
36	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
37	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
38	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
39	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
40	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
41	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
42	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
43	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
44	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
45	N	(7) DRYWELLS (M-5)	0.16	1441	1,441	
BUILDABLE PRES. PARCEL "C"	N	(7) DRYWELLS (M-5)	0.16	1441	1,646	**
COMMON DRIVE	N	SUBMERGED GRAVEL WETLAND #1 (M-2)	0.63	813	1,208	**
COMMON DRIVE	N	BIORETENTION # 7 (M-6)	0.52	692	1,156	**
COMMON DRIVE	N	BIORETENTION # 8 (M-6)	1.00	2009	2,924	**
PUBLIC ROAD	N	BIORETENTION FACILITY #1	8.63	7378	11,119	**
PUBLIC ROAD	N	BIORETENTION FACILITY #2	2.28	3218	5,644	**
PUBLIC ROAD	N	BIORETENTION FACILITY #3	1.87	1599	3,346	**
PUBLIC ROAD	N	BIORETENTION FACILITY #4	0.51	916	2,251	**
PUBLIC ROAD	N	BIORETENTION FACILITY #5	4.56	3116	7,964	**
PUBLIC ROAD	N	BIORETENTION FACILITY #6	2.40	2252	5,303	**
TOTALS			30.59	85,126	104,950	

** NOTE:
PROPOSED IMPERVIOUS AREA DO NOT INCLUDE PROPOSED DWELLINGS.

NOTE: THE PROPOSED IMPERVIOUS AREA FOR THIS PROJECT IS 10.28 ACRES. FOR EACH LOT, THE PROPOSED IMPERVIOUS DRAINAGE AREA FOR EACH DRYWELL HAS BEEN SET AT 1,000 S.F. (MAXIMUM ALLOWED). FOR COMPUTATIONAL PURPOSES, THIS RESULTS IN A GREATER IMPERVIOUS AREA THAN WHAT IS INDICATED ON THE MARYLAND ESD CALCULATIONS. THE PROPOSED ESDV PROVIDED, EXCEEDS THE REQUIRED ESDV. A MORE DETAILED ANALYSIS OF EACH LOT WILL BE PROVIDED AT THE SDP PHASE OF DESIGN.

DRAINAGE AREA INFORMATION

D.A.	IMPERVIOUS	PERVIOUS	TOTAL (AC.)	
1A (BIO. #1)	1.40	7.23	8.63	**
1B (OFFSITE)	1.24	5.00	6.24	
2 (BIO #2)	0.70	1.58	2.28	
3 (BIO #3)	0.32	1.55	1.87	
4(BIO #4)	0.21	0.30	0.51	
5 (BIO #5)	0.54	4.02	4.56	
6 (BIO #6)	0.44	1.96	2.40	
7 (MB1)	0.14	0.22	0.36	
8 (MB2)	0.14	0.23	0.37	
9 (MB3)	0.14	0.23	0.37	
10 (MB4)	0.14	0.20	0.34	
11 (S.G.W. #1)	0.18	0.46	0.64	
12 (BIO#7)	0.15	0.37	0.52	
13 (BIO#8)	0.47	0.53	1.00	

** NOTE:
PROPOSED IMPERVIOUS AREA DOES NOT INCLUDE PROPOSED DWELLINGS.

APPROVED PLANNING BOARD OF HOWARD COUNTY	TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
DATE	PLANNING DIRECTOR DATE

OWNERS:		
PARCEL 36	PARCEL 34	PARCEL 112
SHERRY ROTHSTEIN	THOMAS H. SIMPSON	DANA G DENAULT
DARLENE THOMPSON	5300 GREEN BRIDGE ROAD	THOMAS C. DENAULT
HARRY SIMPSON	DAYTON, MD 21036	5222 GREEN BRIDGE ROAD
DEBBIE RIPPEON	TEL.	DAYTON, MD 21036
PEGGY SIMPSON		TEL.
5232 GREEN BRIDGE ROAD	PARCEL 111	PARCEL 98
DAYTON, MD 21036	DENNIS A LEAF	JERRY MAUCK
TEL.	LENORE D. SINES	JANET BURKE J/T
	5226 GREEN BRIDGE ROAD	5234 GREEN BRIDGE ROAD
	DAYTON, MD 21036	DAYTON, MD 21036
	TEL.	TEL.

SUBDIVISION NAME: TBD SECTION/AREA: N/A DEED # 11361/00222, 00183/00554, 15884/00389, 05889/00490 04341/00270, & 03201/00539	PREVIOUS FILE No.: ECP-16-023	TAX MAP: 27 GRID: 18 ZONED: RR-DEO PARCEL: 34, 36, 98, 111 & 112 5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

BOHLER ENGINEERING

CORPORATE OFFICE:
◆ WARREN, NJ

OFFICES:
◆ BOWIE, MD
◆ CHESTERFIELD, MO
◆ DENVER, CO
◆ FORT LAUDERDALE, FL
◆ HOUSTON, TX
◆ MIDDLETOWN, NY
◆ PHILADELPHIA, PA
◆ PITTSBURGH, PA
◆ RICHMOND, VA
◆ SOUTHBOROUGH, MA
◆ STERLING, VA
◆ TAMPA, FL
◆ WASHINGTON, DC
◆ WILMINGTON, DE

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SAFE WORK PRACTICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING UTILITIES AND SERVICES. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES AND GOVERNING AUTHORITIES A MINIMUM OF 72 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES AND SERVICES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS PRIOR TO THE START OF CONSTRUCTION.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777)
(VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	BRR
DATE:	02-01-18
SCALE:	1" = 100'
CAD I.D.:	DA4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE:
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
PROPOSED SWM/ STORM DRAIN DRAINAGE AREA MAP

SHEET NUMBER:
36 OF 42

SP-17-002

LEGEND

- LOD LOD — LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- TC PATH
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- D.A.1 — DRAINAGE AREA DESIGNATION

NOTES:
1. DRAINAGE AREA INFORMATION SHOWN HEREON IS PRIMARILY BASED OFF OF FIELD RUN TOPOGRAPHY PREPARED BY BOHLER ENGINEERING DATED AUGUST. 25, 2015.

100 50 25 0 100
1"= 100'

DRAINAGE AREA INFORMATION

	D.A.	IMPERVIOUS	PERVIOUS	TOTAL (AC.)
*	1A (BIO. #1)	1.40	7.23	8.63
	1B (OFFSITE)	1.24	5.00	6.24
	2 (BIO #2)	0.70	1.58	2.28
	3 (BIO #3)	0.32	1.55	1.87
	4(BIO #4)	0.21	0.30	0.51
	5 (BIO #5)	0.54	4.02	4.56
	6 (BIO #6)	0.44	1.96	2.40
	7 (MB1)	0.14	0.22	0.36
	8 (MB2)	0.14	0.23	0.37
	9 (MB3)	0.14	0.23	0.37
	10 (MB4)	0.14	0.20	0.34
	11 (S.G.W. #1)	0.18	0.46	0.64
	12 (BIO#7)	0.15	0.37	0.52
	13 (BIO#8)	0.47	0.53	1.00

** NOTE:
PROPOSED IMPERVIOUS AREA DOES NOT INCLUDE PROPOSED DWELLINGS.

STORMWATER MANAGEMENT PRACTICES

	LOT NO.	PERMEABLE PAVING A-2 (Y / N)	ESD FACILITY TYPE AND NUMBER	TOTAL AREA (Ac)	ESDv REQUIRED (C.F.)	ESDv PROVIDED (C.F.)
	1	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	2	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	3	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	4	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	5	N	(6) DRYWELLS (M-5)	0.16	1235	1,235
	6	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	7	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	8	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	9	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	10	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	11	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	12	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	13	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	14	N	(8) DRYWELLS (M-5)	0.18	1646	1,441
	15	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	16	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	17	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	18	N	MICRO-BIORETENTION # 1 (M-6)	0.35	600	828
	19	N	MICRO-BIORETENTION # 2 (M-6)	0.37	601	828
	20	N	MICRO-BIORETENTION # 3 (M-6)	0.36	604	828
	21	N	MICRO-BIORETENTION # 4 (M-6)	0.34	603	828
	22	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	23	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	24	N	(8) DRYWELLS (M-5)	0.18	1646	1,646
	25	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	26	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	27	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	28	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	29	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	30	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	31	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	32	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	33	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	34	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	35	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	36	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	37	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	38	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	39	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	40	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	41	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	42	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	43	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	44	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
	45	N	(7) DRYWELLS (M-5)	0.16	1441	1,441
**	BUILDABLE PRES. PARCEL 'C'	N	(7) DRYWELLS (M-5)	0.16	1441	1,646
**	COMMON DRIVE	N	SUBMERGED GRAVEL WETLAND #1 (M-2)	0.63	813	1,208
**	COMMON DRIVE	N	BIORETENTION # 7 (M-6)	0.52	692	1,156
**	COMMON DRIVE	N	BIORETENTION # 8 (M-6)	1.00	2009	2,924
**	PUBLIC ROAD	N	BIORETENTION FACILITY #1	8.63	7378	11,119
**	PUBLIC ROAD	N	BIORETENTION FACILITY #2	2.28	3218	5,644
**	PUBLIC ROAD	N	BIORETENTION FACILITY #3	1.87	1599	3,346
**	PUBLIC ROAD	N	BIORETENTION FACILITY #4	0.51	916	2,251
**	PUBLIC ROAD	N	BIORETENTION FACILITY #5	4.56	3116	7,964
**	PUBLIC ROAD	N	BIORETENTION FACILITY #6	2.40	2252	5,303
	TOTALS			30.59	85,126	104,950

** NOTE:
PROPOSED IMPERVIOUS AREA DO NOT INCLUDE PROPOSED DWELLINGS.

NOTE: THE PROPOSED IMPERVIOUS AREA FOR THIS PROJECT IS 10.28 ACRES. FOR EACH LOT, THE PROPOSED IMPERVIOUS DRAINAGE AREA FOR EACH DRYWELL HAS BEEN SET AT 1,000 S.F. (MAXIMUM ALLOWED). FOR COMPUTATIONAL PURPOSES, THIS RESULTS IN A GREATER IMPERVIOUS AREA THAN WHAT IS INDICATED ON THE MARYLAND ESD CALCULATIONS. THE PROPOSED ESDV PROVIDED, EXCEEDS THE REQUIRED ESDV. A MORE DETAILED ANALYSIS OF EACH LOT WILL BE PROVIDED AT THE SDP PHASE OF DESIGN.

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE _____

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR _____ DATE _____

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

OWNERS:
PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.
PARCEL 98
JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

BOHLER ENGINEERING
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS
CORPORATE OFFICE: WARREN, NJ
OFFICES: BOWIE, MD; ANNAPOLIS, MD; STERLING, VA; SOUTHBOROUGH, MA; ROANOKE, VA; FORT LAUDERDALE, FL; ROCHESTER, NY; CENTERVALLEY, PA; TAMPA, FL; PHILADELPHIA, PA

THESE PLANS AND DESIGNS ARE COPYRIGHTED BY BOHLER ENGINEERING AND SHALL REMAIN THE PROPERTY OF BOHLER ENGINEERING. THEY ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH THEY ARE PREPARED AND PREPARATION FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN PERMISSION OF BOHLER ENGINEERING IS PROHIBITED. ANY REUSE WITHOUT SUCH PERMISSION WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO BOHLER ENGINEERING.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: MD142048
DRAWN BY: AVG
CHECKED BY: BRR
DATE: 02-01-18
SCALE: 1" = 100'
CAD I.D.: DA4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18, PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40808
PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:
PROPOSED SWM/ STORM DRAIN DRAINAGE AREA MAP

SHEET NUMBER:
37 OF 42

SP-17-002

LEGEND

- LOD — LOD — LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- TC PATH
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- D.A.1 — DRAINAGE AREA DESIGNATION

NOTES:
1. DRAINAGE AREA INFORMATION SHOWN HEREON IS PRIMARILY BASED OFF OF FIELD RUN TOPOGRAPHY PREPARED BY BOHLER ENGINEERING DATED AUGUST. 25, 2015.

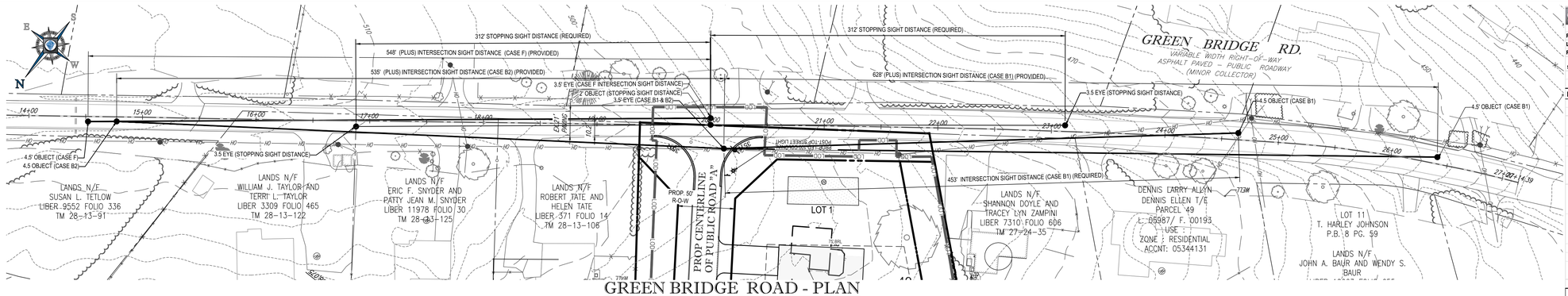
MATCHLINE (SHEET 39)
MATCHLINE (SHEET 39)
LIMIT OF DISTURBANCE
6,084 S.F. OR 0.14 AC.
3D
3C
3B
3A
2A
2C
2B
1A
1B
1C
1D
2D
2E
2F
2G
2H
2J
2K
2L
1E
1F
1G
1H
2I
15A
LOT 17 40,003 SF
LOT 16 49,860 SF
LOT 15 40,459 SF
LOT 14 56,648 SF
LOT 13 41,330 SF
LOT 12 40,362 SF
LOT 11 42,068 SF
LOT 10 44,020 SF
LOT 9 42,992 SF
LOT 8 45,774 SF
LOT 7 55,788 SF
LOT 6 55,788 SF
LOT 5 40,840 SF
LOT 4 41,925 SF
LOT 3 55,018 SF
LOT 2 59,641 SF
LOT 1 54,825 SF
LOT 23 41,812 SF
BUILDABLE PRES. PARCEL - C 1,147,523 S.F. OR 26.34 AC.
NON-BUILDABLE BULK PARCEL - H 765 S.F. OR 0.02
NON-BUILDABLE PRES. PARCEL - B1 103,257 S.F. OR 2.37 AC.
NON-BUILDABLE PRES. PARCEL - A 9,889 S.F. OR 0.23 AC.
NON-BUILDABLE PRES. PARCEL - L 8,831 S.F. OR 0.20 AC.
NON-BUILDABLE BULK PARCEL - K 4,790 S.F. OR 0.11 AC.
PROP. PUBLIC ROAD E
LANDS N/F JERRY MAUCK AND JANET BURKE JT 5234 GREEN BRIDGE ROAD LIBER 7300 FOLIO 550 TM 28-13-98
LANDS N/F EDWARD J. GRIGSBY AND DIANE GRIGSBY LIBER 7300 FOLIO 550 18-14
LANDS N/F ELEANOR V. FRASHURE LIBER 3812 FOLIO 72 TM 27-24-68
LANDS N/F JOHN A. BAUR AND WENDY S. BAUR LIBER 10683 FOLIO 685 TM 27-24-42
T. HARLEY ARMSTRONG P.B. 8 - 159
LANDS N/F SHANNON DOYLE, TRACEY LYN ZAMPA LIBER 7310 FOLIO 270 TM 28-13-96
LANDS N/F WILLIAM J. TAYLOR AND TERRI L. TAYLOR LIBER 3309 FOLIO 465 TM 28-13-122
LANDS N/F SUSAN L. BROWN LIBER 9552 FOLIO 191 TM 28-13-91
LANDS N/F THE DAYTON ROD AND GUN CLUB, INC. LIBER 275, FOLIO 574 TM 28-13-103
LANDS N/F DOROTHY HUNGERFORD PLAT NO. 5258
LANDS N/F RICHARD N. LEWIS AND PRISCILLA L. TRUBIN TRUSTEES LIBER 11330 FOLIO 104 TM 28-13-102-2
LANDS N/F THOMAS ALBERT ROGERS AND MARY FEATHER PETERS LIBER 2564 FOLIO 604 TM 28-13-102-3
LANDS N/F RACHEL MARGARET SOOHANI LIBER 13552 FOLIO 199 PLAT BOOK 6 FOLIO 12 TM 28-13-126
LANDS N/F DONALD L. JONES AND HOWARD P. JONES LIBER 9302 FOLIO 251 PLAT BOOK 6 FOLIO 12 TM 28-13-126
SIMPSON ALICE M ET AL 1-H/87 - 0022 - BOWE-MORLETTUN ACQUIRE 05/30/2001
50' STREAM BUFFER
100' STREAM BUFFER
LIMIT OF FIELD RUN SURVEY
N35°25'23"E 685.88'
N30°14'14"W 386.89'
S30°14'14"E 694.85'
S30°14'14"E 671.89'
S30°22'57"W 607.89'
S30°59'23"W 486.26'
S60°59'23"W 125.00'
S60°59'23"W 496.12'
S30°03'38"W 5.68'
S30°03'38"W 10.12'
S60°59'23"W 386.36'
N60°59'23"E 125.00'
N60°59'23"E 496.12'
N30°03'38"E 5.68'
N30°03'38"E 10.12'
N60°59'23"E 386.36'
N30°03'38"E 486.26'
N30°14'14"W 386.89'
N30°14'14"W 694.85'
N30°22'57"E 671.89'
N35°25'23"E 685.88'
SB
WB
FP
W
GoB
Co
GnB
MaD
MaC
GgB
GgC
GpC
GpB
GrB
GrC
GsB
GsC
MuB
MuC
Ld
Ld-CULV
Ld-CULV-DET
Ld-DET
Ld-SWM-DET
Ld-SWM-POND
Ld-SWM-POND-DET
Ld-SWM-POND-DET-DET
Ld-SWM-POND-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET-DET
Ld-SWM-POND-DET

LEGEND

- LOD — LOD — LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- TC PATH
- STEEP SLOPES 15-25%
- STEEP SLOPES >25%
- 2D — DRAINAGE AREA DESIGNATION

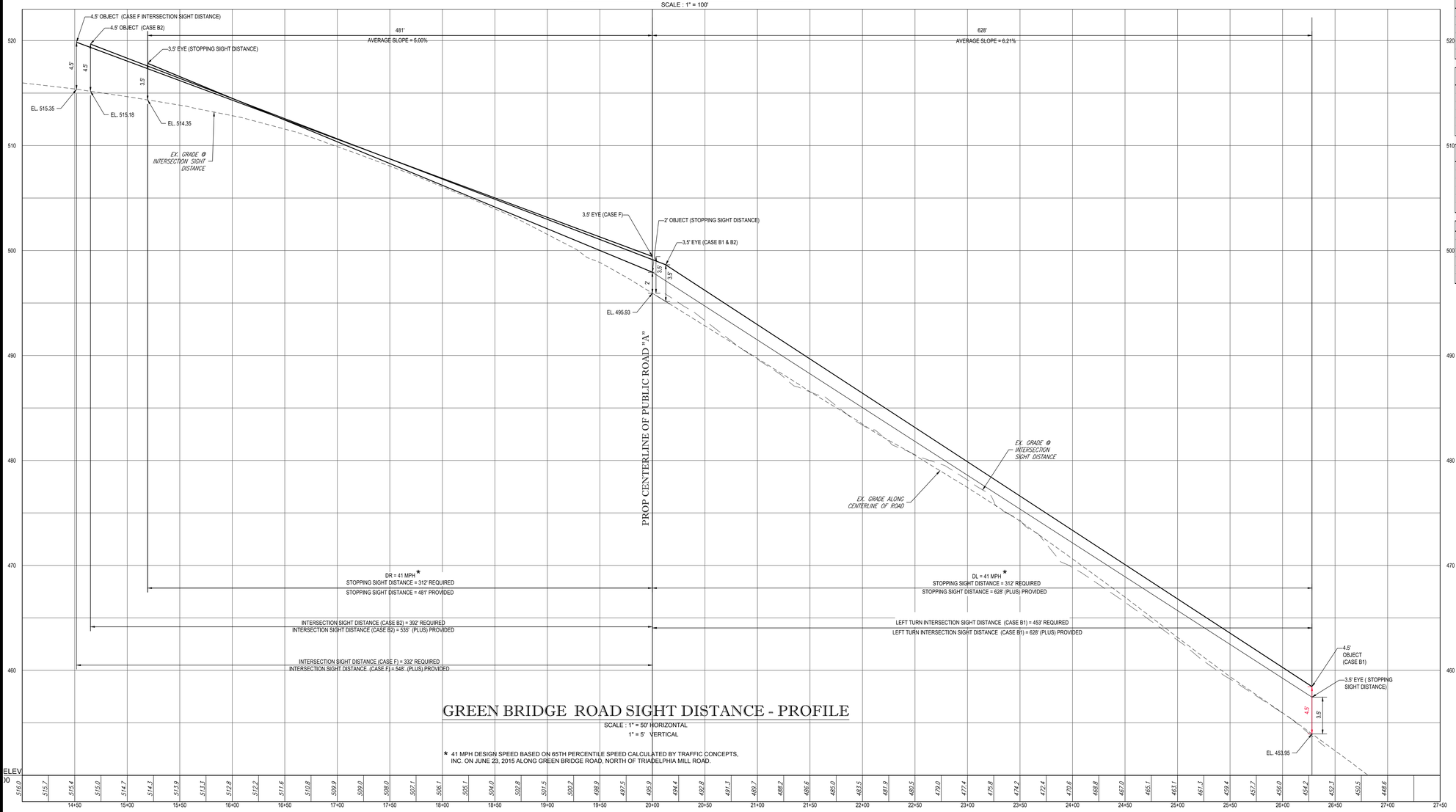
NOTES:
1. DRAINAGE AREA INFORMATION SHOWN HEREON IS PRIMARILY BASED OFF OF FIELD RUN TOPOGRAPHY PREPARED BY BOHLER ENGINEERING DATED AUGUST. 25, 2015.

N
W
E
S
PARCEL A-1 BAUER PROPERTY
LANDS N/F RICKY M. BAUER AND LESLIE A. BAUER LIBER 14100 FOLIO 17 TM 27-11-57-A1 (AGRICULTURAL PRESERVATION EASEMENT HELD BY THE AGRICULTURAL PRESERVATION PROGRAM #H0-91-15-E)
LIMIT OF FIELD RUN SURVEY
LOT 37 55,035 SF
LOT 36 44,800 SF
LOT 35 54,827 SF
LOT 38 33,223 SF SHARED SEPTIC
LOT 39 31,227 SF SHARED SEPTIC
LOT 40 35,865 SF SHARED SEPTIC
LOT 41 40,100 SF
LOT 42 34,469 SF SHARED SEPTIC
LOT 43 43,749 SF
LOT 44 41,469 SF
LOT 45 47,077 SF
LOT 34 52,931 SF
LOT 33 47,918 SF
LOT 32 49,299 SF
LOT 31 47,078 SF
LOT 30 46,679 SF
LOT 29 44,270 SF
LOT 28 40,768 SF
LOT 27 46,396 SF
LOT 26 48,488 SF
LOT 25 41,612 SF
LOT 24 44,052 SF
LOT 23 55,798 SF SHARED SEPTIC
LOT 22 54,972 SF
LOT 21 40,218 SF
LOT 20 40,461 SF
LOT 19 40,461 SF
LOT 18 40,443 SF
LOT 17 40,003 SF
LANDS N/F DALE CAPUANO LIBER 4807 FOLIO 314 TM 27-18-69
LANDS N/F DENNIS A. LEAF AND LENORE DENISE SINES LIBER 3201 FOLIO 539 TM 27-18-111
LANDS N/F JERRY MAUCK AND JANET BURKE J/T LIBER 4341 FOLIO 270 TM 27-18-98
PARCEL B THE OAKS AT BRIDLE CREEK PLAT BOOK 199 PAGE 8
LANDS N/F BRK, LLC LIBER 15496 FOLIO 155 TM 28-7-13-B
THE OAKS AT BRIDLE CREEK PLAT BOOK 199 PAGE 8
N14°53'42"E 562.66'
N15°18'59"E 325.00'
N69°48'37"W 141.92'
N80°04'52"W 214.30'
S25°06'01"W 51.23'
S22°22'15"E 1215.42'
S64°54'45"E 2360.25'
S64°54'45"E 2360.25'
S64°54'45"E 2360.25



GREEN BRIDGE ROAD - PLAN

SCALE : 1" = 100'



GREEN BRIDGE ROAD SIGHT DISTANCE - PROFILE

SCALE : 1" = 50' HORIZONTAL
1" = 5' VERTICAL

* 41 MPH DESIGN SPEED BASED ON 65TH PERCENTILE SPEED CALCULATED BY TRAFFIC CONCEPTS, INC. ON JUNE 23, 2015 ALONG GREEN BRIDGE ROAD, NORTH OF TRIADELPHIA MILL ROAD.

BOHLER ENGINEERING

Project	Simpson Property	By	BRR
Location	Howard County, MD	Chkd By	DW
Road Name	Green Bridge Road	Date	9/24/2015
Posted Speed Limit	30 mph	Job#	MD142048

SIGHT DISTANCE ANALYSIS

Road Data

V_{major} =	41	(Design Speed, mph - Major Road)
V =	41	(Design Speed, mph)
a =	11.2	Deceleration Rate, ft/s² (Std decel rate for Passenger Cars = 11.2 sec)
G_1 =	5.0	(Road Grade % - To Right (for left turn))
G_2 =	6.2	(Road Grade % - To Left (for right turn))
tg(case B1) =	7.5	- Passenger Car = 7.5 sec - Single Unit Truck= 9.5 sec - Combination truck = 11.5 sec
tg(case B2) =	6.5	- Passenger Car = 6.5 sec - Single Unit Truck= 8.5 sec - Combination truck = 10.5 sec
tg(Case F) =	5.5	- Passenger Car = 5.5 sec - Single Unit Truck= 6.5 sec - Combination truck = 7.5 sec
t =	2.5	Brake Reaction Time, seconds
BRT=		Distance traveled during braking reaction time
BDG=		Distance traveled during braking (braking to a stopped position)

CASE B1 - Intersection Sight Distance (left turn from minor street)

ISD = 1.47 x Vmajor x tg

ISD = 1.47 x 41 x 7.5

ISD = **452.03** ft

CASE B2 - Intersection Sight Distance (right turn from minor street)

ISD = 1.47 x Vmajor x tg

ISD = 1.47 x 41 x 6.5

ISD = **391.76** ft

CASE F - Intersection Sight Distance (left turn from major street)

ISD = 1.47 x Vmajor x tg

ISD = 1.47 x 41 x 5.5

ISD = **331.49** ft

Stopping Sight Distance

d = 1.47 Vt + 1.075 (V^2 / a)

d = 1.47 x 41 x 2.5 + 1.075 x 41^2 / 11.2

d = **312.02**

Stopping Sight Distance (on Grades)

SSD =BRT + BDG

Braking Reaction Time = Distance Traveled

BRT= 1.47Vt

BRT= 1.47 x 41 x 2.5

BRT= **150.675** ft

Left Turn

$BDG = \frac{V^2}{30((a/32.2) \pm G_1)}$

$BDG = \frac{41^2}{30((11.2 / 32.2) \pm 5.0\%))}$

BDG = **1681** / **11.93**

BDG = **140.85** ft

BRT	+	BDG	=	SSD (Left)
151	+	141	=	**292** ft

Right Turn

$BDG = \frac{V^2}{30((a/32.2) \pm G_2)}$

$BDG = \frac{41^2}{30((11.2 / 32.2) \pm 6.2\%))}$

BDG = **1681** / **12.29**

BDG = **136.72** ft

BRT	+	BDG	=	SSD (Right)
151	+	137	=	**287** ft

BOHLER ENGINEERING

CORPORATE OFFICE:
◆ WARREN, NJ
OFFICES
◆ BOWIE, MD
◆ CHANTILLY, VA
◆ STERLING, VA
◆ SOUTHBOROUGH, MA
◆ ROCHESTER, NY
◆ RONKONKOMA, NY
◆ CENTER VALLEY, PA
◆ FORT LAUDERDALE, FL
◆ TAMPA, FL
◆ PHILADELPHIA, PA

CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THESE DRAWINGS ARE THE PROPERTY OF BOHLER ENGINEERING AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESS WRITTEN CONSENT OF BOHLER ENGINEERING. ANY UNAUTHORIZED USE OF THESE DRAWINGS WILL BE AT THE SOLE RISK OF THE UNAUTHORIZED USER AND WITHOUT LIABILITY TO BOHLER ENGINEERING.

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777) (VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.: MD142048
DRAWN BY: AVG
CHECKED BY: BRR
DATE: 02-01-18
SCALE: AS SHOWN
CAD I.D.: SA4

PROJECT:

SIGHT DISTANCE

FOR

SIMPSON & DENAULT, PROPERTIES

LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L - P & NON-BUILDABLE BULK PARCEL D & H-K

LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18,
PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

B.R. ROWE
PROFESSIONAL ENGINEER
MARYLAND LICENSE No. 40830

PROFESSIONAL CERTIFICATION
I, BRANDON R. ROWE, 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. 40808, EXPIRATION DATE: 7/3/2019

SHEET TITLE:

FINAL SIGHT DISTANCE ANALYSIS

SHEET NUMBER:

40 OF 42

APPROVED
PLANNING BOARD OF HOWARD COUNTY

DATE _____

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR _____ DATE _____

OWNERS:

PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5225 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 98
JERRY MAUCK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

100 50 25 0 100
1"= 100'

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15884/003894, 05889/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. : ECP-16-023

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

H:\142\MD142048\DRAWINGS\PLAN SETS\PRELIMINARY EQUIVALENT SKETCH PLAN\MD142048SA4.DWG PRINTED BY: AGAMBOA 2.05.18 @ 11:52 AM LAST SAVED BY: AGAMBOA

SP-17-002

FOREST CONSERVATION SEQUENCE OF CONSTRUCTION

1. PRECONSTRUCTION MEETING SHALL BE HELD BETWEEN DEVELOPER, CONTRACTOR, AND COUNTY INSPECTOR.
2. SEDIMENT CONTROL SHALL BE INSTALLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLAN FOR SITE. TEMPORARY PROTECTIVE FENCING AND CONSERVATION SIGNAGE SHALL BE INSTALLED AS PER FOREST CONSERVATION PLAN.
3. SITE SHALL BE GRADED, INFRASTRUCTURE INSTALLED, AND HOUSES CONSTRUCTED. DISTURBED AREAS SHALL BE STABILIZED. PERMANENT SIGNAGE IN POOR CONDITION SHALL BE REPLACED.
4. POSTCONSTRUCTION MEETING SHALL BE HELD WITH COUNTY INSPECTOR TO ENSURE COMPLIANCE WITH DEVELOPMENT PLAN. SEDIMENT CONTROL AND TEMPORARY PROTECTIVE FENCING UPON STABILIZATION OF SITE AND COMPLETION OF CONSTRUCTION ACTIVITIES.

FOREST CONSERVATION EASEMENT #5

EXISTING FOREST AREA =	0.00 AC
NONCREDIT FOREST/FLOODPLAIN =	0.00 AC
CREDITED FOREST =	0.00 AC
REFORESTATION =	1.31 AC
EASEMENT AREA =	1.31 AC
CREDITED EASEMENT AREA =	1.31 AC

FOREST CONSERVATION EASEMENT #1

EXISTING FOREST AREA =	1.79 AC
NONCREDIT FOREST/FLOODPLAIN =	0.12 AC
CREDITED FOREST =	1.67 AC
REFORESTATION =	5.47 AC
EASEMENT AREA =	7.26 AC
CREDITED EASEMENT AREA =	7.14 AC

NOTE: ADDITIONAL 2.5"-3" TREES REQUIRED WITHIN 35' OF THE PROPERTY LINES OF LOTS 38, 43, 44 & 45.

FOREST CONSERVATION EASEMENT #2

EXISTING FOREST AREA =	1.17 AC
NONCREDIT FOREST/FLOODPLAIN =	0 AC
CREDITED FOREST =	1.17 AC
REFORESTATION =	2.25 AC
EASEMENT AREA =	3.42 AC
CREDITED EASEMENT AREA =	3.42 AC

FOREST CONSERVATION EASEMENT #3

EXISTING FOREST AREA =	0 AC
NONCREDIT FOREST/FLOODPLAIN =	0 AC
CREDITED FOREST =	0 AC
REFORESTATION =	1.41 AC
EASEMENT AREA =	1.41 AC
CREDITED EASEMENT AREA =	1.41 AC

NOTE: ADDITIONAL 2.5"-3" TREES REQUIRED WITHIN 35' OF THE PROPERTY LINES OF LOTS 4 AND 5.

FOREST CONSERVATION EASEMENT #4

EXISTING FOREST AREA =	18.71 AC
NONCREDIT FOREST/FLOODPLAIN =	4.55 AC
CREDITED FOREST =	14.16 AC
REFORESTATION =	4.26 AC
EASEMENT AREA =	22.97 AC
CREDITED EASEMENT AREA =	18.42 AC

NOTE: ADDITIONAL 2.5"-3" TREES REQUIRED WITHIN 35' OF THE PROPERTY LINES OF LOTS 15 AND 16 AND PARCEL C.

SITE AREA COMPUTATIONS

GROSS TRACT AREA = 99.95 AC
100 YEAR FLOODPLAIN = 7.09 AC
NET TRACT AREA = 92.86 AC
ZONING = RR-DEO

FORESTED FLOODPLAIN

FOREST = 4.74 AC

FOREST CLEARING

FOREST TO BE CLEARED = 15.36 AC. (0.06 AC. WITHIN FLOODPLAIN)

FOREST CONSERVATION EASEMENT AREA TABULATION

EASEMENT	GROSS FOREST AREA (AC)	FOREST AREA NONCREDITED (FOR FOREST LESS THAN 10,000 S.F. (AC)	FOREST AREA NONCREDITED (100 YEAR FLOODPLAIN) (AC)	NET FOREST (RETAINED) (CREDITED) (AC)	PLANTED AREA (REFORESTATION) (CREDITED) (AC)	CREDITED EASEMENT AREA (AC)	TOTAL EASEMENT AREA (AC)
FCE # 1	1.79	0.00	0.12	1.67	5.47	7.14	7.26
FCE # 2	1.17	0.00	0.00	1.17	2.25	3.42	3.42
FCE # 3	0.00	0.00	0.00	0.00	1.41	1.41	1.41
FCE # 4	18.71	0.00	4.55	14.16	4.26	18.42	22.97
FCE # 5	0.00	0.00	0.00	0.00	1.31	1.31	1.31
TOTAL	21.67	0.00	4.67	17.00	14.70	31.70	36.37

FOREST STAND / VEGETATIVE COVER

KEY	COMMUNITY TYPE	ACREAGE	DOMINANT VEGETATION	GENERAL CONDITION
1	MATURE MIXED HARDWOODS	26.2 AC	BLACK OAK	FAIR
2	TULIP POPLAR MONOCULTURE	10.85 AC	TULIP POPLAR	FAIR

SPECIMEN TREES

ID #	SPECIES NAME	SIZE	CONDITION	SPECIMEN TREES TO REMAIN
1	TULIP POPLAR	34"	GOOD	NO
2	TULIP POPLAR	32"	GOOD	NO
3	TULIP POPLAR	38"	POOR	NO
4	TULIP POPLAR	31"	GPPD	NO
5	TULIP POPLAR	31"	POOR	NO
6	TULIP POPLAR	33"	FAIR	NO
7	TULIP POPLAR	40"	F. GOOD	NO
8	TULIP POPLAR	38"	POOR	NO
9	TULIP POPLAR	31"	GOOD	NO
10	TULIP POPLAR	33"	GOOD	NO
11	TULIP POPLAR	38"	GOOD	NO
12	TULIP POPLAR	36"	GOOD	NO
13	TULIP POPLAR	54"	F. GOOD	NO
14	BLACK OAK	33"	GOOD	YES
15	TULIP POPLAR	33"	F. GOOD	NO
16	TULIP POPLAR	48"	F. GOOD	NO
17	BLACK OAK	34"	POOR	NO
18	WHITE OAK	32"	F. GOOD	NO
19	NORTHERN RED OAK	33"	GOOD	NO
20	RED OAK	31"	F. GOOD	NO
21	BLACK OAK	32"	V POOR	NO
22	NORTHERN RED OAK	31"	V. POOR	NO
23	TULIP POPLAR	31"	GOOD	NO
24	TULIP POPLAR	30"	F. GOOD	NO
25	TULIP POPLAR	31"	GOOD	NO
26	TULIP POPLAR	33"	GOOD	NO
27	SYCAMORE	45"	FAIR	YES
28	TULIP POPLAR	40"	GOOD	NO
29	TULIP POPLAR	33"	GOOD	NO
30	TULIP POPLAR	36"	GOOD	NO
31	TULIP POPLAR	32"	GOOD	YES
32	TULIP POPLAR	32"	GOOD	YES
33	TULIP POPLAR	31"	GOOD	NO
34	TULIP POPLAR	33"	GOOD	NO
35	TULIP POPLAR	40"	GOOD	NO
36	UNCONFIRMED	40"	GOOD	NO
37	NORTHERN RED OAK	34"	GOOD	NO
38	WHITE OAK	52"	GOOD SPLIT ABOVE DBH	NO
39	SOUTHERN RED OAK	31"	GOOD	NO
40	WHITE OAK	30"	GOOD	YES
41	NORTHERN RED OAK	31"	GOOD HEALTHY, IMBALANCED CROWN	NO
42	WHITE OAK	30"	GOOD	NO
43	BLACK OAK	31"	GOOD	NO
44	NORTHERN RED OAK	30"	GOOD	YES
45	WHITE OAK	30"	POOR	YES
46	NORTHERN RED OAK	32"	FAIR POOR	YES
47	SOUTHERN RED OAK	32"	GOOD	NO
48	WHITE OAK	32"	GOOD	YES
49	NORTHERN RED OAK	32"	GOOD	YES
50	RED MAPLE	40"	GOOD	NO

WETLAND DATA

WETLAND SYSTEM	COWARDIN CLASSIFICATION	DOMINATE VEGETATION
WDS 1	PFO1B	CINNAMON FERN, SKUNK CABBAGE, JEWELLWEED
WDS 2	PFO1B	CINNAMON FERN, *Microstigium*
WDS 3	[PEM1A/B, POW	REED CANARY GRASS, SENSITIVE FERN, POND LILY
WDS 4	PFO1B	RED MAPLE, SPICEBUSH, WINTERBERRY
ODS 1	R4	MIXED OAK, RED MAPLE
ODS2	PFO1B	MIXED OAK, RED MAPLE

SOILS TABLE

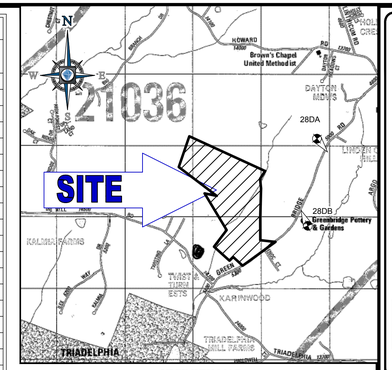
SOILS NAME	SOILS DESCRIPTION	HYDROLOGIC SOILS GROUP	HIGHLY ERODIBLE SOIL	K FACTOR
Co	CODORUS AND HATBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES	C	NO	0.32
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B	NO	0.28
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B	NO	0.28
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C	YES	0.43
GnB	GLENVILLE-BAILE SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	YES	0.43
GoB	GLENVILLE-CODORUS SILT LOAMS, 0 TO 8 PERCENT SLOPES	C	YES	0.43
MaC	MANOR LOAM, 8 TO 15 PERCENT SLOPES	B	NO	0.28
MaD	MANOR LOAM, 15 TO 25 PERCENT SLOPES	B	NO	0.28

LEGEND

- PROPERTY LINE
- WETLAND BUFFER LIMITS
- LOD — LOD — LIMIT OF DISTURBANCE
- 541 — EXISTING CONTOUR
- 541 — PROPOSED CONTOUR
- TPF — TPF — TREE PROTECTION FENCE
- FOREST CONSERVATION EASEMENT
- REFORESTATION AREA
- FOREST RETENTION AREA
- WETLANDS
- 100 YR — 100 YR — 100 YR. FLOODPLAIN
- FOREST CONSERVATION SIGNAGE
- SPECIMEN TREES
- W — WETLAND BOUNDARY
- WD — 25-FOOT WETLAND BUFFER
- SB — 100-FOOT STREAM BUFFER
- SOILS BOUNDARY
- EXISTING TREE LINE
- STEEP SLOPES 15-24.99%
- STEEP SLOPES 25% +
- SPECIMEN TREE (TO BE REMOVED)

N / W / E / S — MD STATE GRID (NAD 83)

200 100 50 0 200
1"= 200'



VICINITY MAP

COPYRIGHT ADC THE MAP PEOPLE
PERMIT USE NO. 20602153-5
SCALE: 1"=2000'
ADC MAP COORDINATES: 30/C5

FOREST CONSERVATION WORKSHEET

NET TRACT AREA:

A.	Total tract area ...		99.95
B.	Land dedication acres (parks, county facility, etc.) ...		0.00
C.	Land dedication for roads or utilities (not being constructed by this plan) ...		0.00
D.	Area to remain in commercial agricultural production/use ...		0.00
E.	Other deductions (specify)		7.09
F.	Net Tract Area	=	92.86

LAND USE CATEGORY: (from *Trees Technical Manual*)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	MDR	IDA	HDR	MPD	CIA
0	1	0	0	0	0

G.	Afforestation Threshold ...	20%	x F =	18.57
H.	Conservation Threshold ...	25%	x F =	23.22

EXISTING FOREST COVER:

I.	Existing forest cover	=	32.30
J.	Area of forest above afforestation threshold	=	13.73
K.	Area of forest above conservation threshold	=	9.09

BREAK EVEN POINT:

L.	Forest retention above threshold with no mitigation ....=		25.03
M.	Clearing permitted without mitigation	=	7.27

PROPOSED FOREST CLEARING:

N.	Total area of forest to be cleared	=	15.30
O.	Total area of forest to be retained	=	17.00

PLANTING REQUIREMENTS:

P.	Reforestation for clearing above conservation threshold ....=		2.27
Q.	Reforestation for clearing below conservation threshold ....=		12.43
R.	Credit for retention above conservation threshold	=	0.00
S.	Total reforestation required	=	14.70
T.	Total afforestation required	=	0.00
U.	Credit for landscaping (may not exceed 20% of "S")	=	0.00
V.	Total reforestation and afforestation required	=	14.70

REFORESTATION PLANTING SCHEDULE

	FCE #1	FCE #2	FCE #3	FCE #4	FCE #5				
ACREAGE	5.47	2.25	1.41	4.26	1.31				
P.U. REQUIRED	1969	810	508	1534	472				
	QTY					SPECIES	SIZE	SPACING	TOTAL FCA UNITS
	328	135	85	256	133	ACER RUBRUM - RED MAPLE	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS	11' O.C.	937
	328	135	85	256	133	PLATNUS OCCIDENTALIS - AMERICAN SYCAMORE	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS	11' O.C.	937
					133	PALUSTRIS	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS		133
	328	135	85	256	10	QUERCUS RUBRA - RED OAK	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS	11' O.C.	814
	328	135	85	256	10	LIRIODENDRON TULIPIFERA - TULIP POPLAR	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS	11' O.C.	814
	328	135	85	256	10	CERCIS CANADENSIS - EASTERN REDBUD	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS	11' O.C.	814
	329	135	85	256	43	AMELANCHIER CANADENSIS - SERVICEBERRY	HARDWOOD SEEDLINGS OR WHIPS/ACRE WITH TREE SHELTERS	11' O.C.	848
P.U. PROVIDED	1969	810	510	1536	472			TOTAL PLANTINGS	5297

* IN ADDITION TO THE ABOVE REFERENCED MATERIAL 2-½" TO 3" CALIPER MATERIAL WILL BE REQUIRED FOR ANY REFORESTATION WITHIN 35' OF THE LOT LINES OF THE FOLLOWING LOTS PER THE CHART BELOW:

LOTS 4 & 5	27 ADDITIONAL 2.5" CALIPER TREES (14 PLATNUS OCCIDENTALIS, 13 QUERCUS RUBRA)
LOTS 15,16 & PARCEL C	85 ADDITIONAL 2.5" CALIPER TREES (28 ACER RUBRUM, 28 QUERCUS RUBRA, 29 LIRIODENDRON TULIPIFERA)
LOTS 35	28 ADDITIONAL 2.5" CALIPER TREES (9 ACER RUBRUM, 9 QUERCUS RUBRA, 10 PLATNUS OCCIDENTALIS)
LOT 38	98 ADDITIONAL 2.5" CALIPER TREES (33 ACER RUBRUM, 33 QUERCUS RUBRA, 32 PLATNUS OCCIDENTALIS)

APPROVED
PLANNING BOARD OF HOWARD COUNTY
DATE _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT DATE _____

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE _____

OWNERS:
PARCEL 36
SHERRY ROTHSTEIN
DARLENE THOMPSON
HARRY SIMPSON
DEBBIE RIPPEON
PEGGY SIMPSON
5232 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 34
THOMAS H. SIMPSON
5300 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 111
DENNIS A LEAF
LENORE D. SINES
5226 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 112
DANA G DENAULT
THOMAS C. DENAULT
5222 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

PARCEL 98
JERRY MALICK
JANET BURKE J/T
5234 GREEN BRIDGE ROAD
DAYTON, MD 21036
TEL.

DEVELOPER: ELM STREET DEVELOPMENT
5074 DORSEY HALL ROAD, SUITE 205
COLUMBIA, MD 21042
CONTACT: JASON VAN KIRK
PHONE: (410) 720-3021

TAX MAP: 27 GRID: 18 ZONED: RR-DEO
PARCEL: 34, 36, 98, 111 & 112
5TH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SUBDIVISION NAME: TBD
SECTION/AREA: N/A
DEED # 11361/00222, 00183/00554, 15984/003894, 05888/00490 04341/00270, & 03201/00539

PREVIOUS FILE No. :
ECP-16-023
SP-17-002

PROFESSIONAL CERTIFICATION
I, ERIC R. MCWILLIAMS, HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED LANDSCAPE ARCHITECT UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 3697, EXPIRATION DATE: 9/20/18

BOHLER ENGINEERING
CORPORATE OFFICE: ◆ WARREN, NJ
OFFICES: ◆ BOWIE, MD ◆ CHANTILLY, VA ◆ SOUTHBOROUGH, MA ◆ MORRISTOWN, NJ ◆ ROANOKE, VA ◆ STERLING, VA ◆ ROCKAWAY, NJ ◆ FORT LAUDERDALE, FL ◆ CENTER VALLEY, PA ◆ PHILADELPHIA, PA ◆ TAMPA, FL
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF BOHLER ENGINEERING. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF BOHLER ENGINEERING IS PROHIBITED. ANY USE OF THIS DRAWING WITHOUT THE SPECIFIC WRITTEN PERMISSION OF BOHLER ENGINEERING SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO BOHLER ENGINEERING. ALL RIGHTS RESERVED. COPYRIGHT © 2017

REVISIONS

REV	DATE	COMMENT	BY

THE FOLLOWING STATES REQUIRE NOTIFICATION BY EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE. IN VIRGINIA, MARYLAND, THE DISTRICT OF COLUMBIA, AND DELAWARE CALL - 811
(WV 1-800-245-4848) (PA 1-800-242-1776) (DC 1-800-257-7777)
(VA 1-800-552-7001) (MD 1-800-257-7777) (DE 1-800-282-8555)

NOT APPROVED FOR CONSTRUCTION

PROJECT No.:	MD142048
DRAWN BY:	AVG
CHECKED BY:	JMA
DATE:	12/11/17
SCALE:	AS SHOWN
CAD I.D.:	FCP4

PROJECT:
PRELIMINARY EQUIVALENT SKETCH PLAN
FOR
SIMPSON & DENAULT, PROPERTIES
LOTS 1-45, BUILDABLE PRESERVATION PARCEL C, NON-BUILDABLE PRESERVATION PARCELS A, B, E - G & L & NON-BUILDABLE BULK PARCEL D & H-K
LOCATION OF SITE
5232 GREEN BRIDGE ROAD
5TH ELECTION DISTRICT
TAX MAP 27, GRID 18, PARCELS 34, 36, 98, 111, & 112
HOWARD COUNTY, MARYLAND

BOHLER ENGINEERING
901 DULANEY VALLEY ROAD, SUITE 801
TOWSON, MARYLAND 21204
Phone: (410) 821-7900
Fax: (410) 821-7987
www.BohlerEngineering.com

E.R. McWILLIAMS
REGISTERED LANDSCAPE ARCHITECT
MARYLAND LICENSE No. 3697

SHEET TITLE:
PRELIMINARY FOREST CONSERVATION PLAN

SHEET NUMBER:
41 OF 42

SP-17-002

FOREST CONSERVATION SPECIFICATIONS

9. PLANTING

A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
1.1. PLANTS: MARCH 15 TO DECEMBER 15
1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULOUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBER STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
  - A) 2 TABLETS PER 1 GALLON PLANT
  - B) 3 TABLETS PER 5 GALLON PLANT
  - C) 4 TABLETS PER 15 GALLON PLANT
  - D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

M. GROUND COVER AREAS SHALL RECEIVE A ½" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

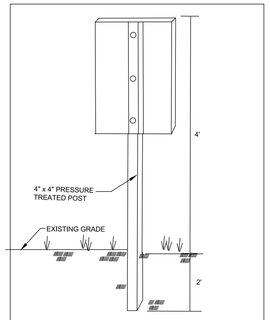
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.



MIN 11"

FOREST RETENTION AREA

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS *PROHIBITED*

VIOLATORS ARE SUBJECT TO FINES IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

MIN 15"

MIN 11"

SPECIMEN TREE

DO NOT REMOVE

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS *PROHIBITED*

VIOLATORS ARE SUBJECT TO FINES IMPOSED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991

MIN 15"

MIN 11"

Forest Conservation Area

REFORESTATION PROJECT

Trees for Your Future

MIN 15"

FOREST CONSERVATION SIGN DETAIL

NOT TO SCALE

REFORESTATION PLAN

THE REFORESTATION AREA WILL BE PLACED INTO A FOREST CONSERVATION EASEMENT.

A. PLANTING PLAN AND METHODS

PLANT SPECIES SELECTION WAS BASED ON OUR KNOWLEDGE REGARDING PLANT COMMUNITIES IN MARYLAND'S PIEDMONT PLATEAU AND INFORMATION PROVIDED IN THE SOIL SURVEY ON TYPICAL VEGETATION FOR THE SOIL TYPE ON THE PLANTING SITE. SPECIES SELECTION WAS ALSO BASED ON OUR KNOWLEDGE OF PLANT AVAILABILITY IN THE NURSERY INDUSTRY.

REFORESTATION WILL BE ACCOMPLISHED THROUGH A MIXED PLANTING OF WHIPS AND BRANCHED TRANSPLANTS. CONTAINER GROWN STOCK IS RECOMMENDED BUT BAREROOT STOCK MAY BE USED TO HELP CONTROL AFFORESTATION COSTS. IF BAREROOT STOCK IS USED THE ROOT SYSTEMS OF ALL PLANTS WILL BE DIPPED IN AN ANTI-DESICCANT GEL PRIOR TO PLANTING TO IMPROVE MOISTURE RETENTION IN THE ROOT SYSTEMS.

PRIOR TO PLANTING THE PROPOSED FOREST CONSERVATION EASEMENTS ALL MULTIFLORA ROSE IN THE PLANTING AREA SHALL BE REMOVED. REMOVAL OF THE ROSE MAY BE PERFORMED WITH MECHANICAL MEANS SUCH AS BRUSH HOGGING, OR CHEMICAL REMOVAL OF ALL TOP GROWTH FOLLOWED BY A FOLIAR HERBICIDE APPLICATION TO THE REGROWTH WHEN IT REACHES THE RECOMMENDED HEIGHT FOR EFFECTIVE HERBICIDE TREATMENT. IF CHEMICAL REMOVAL OF THE ROSE IS POSSIBLE, HERBICIDES TREATMENTS SHALL OCCUR ON 2 MONTH INTERVALS DURING THE FOREST GROWING SEASON AND ONCE EACH IN THE SPRING AND FALL FOR SUBSEQUENT YEARS AS NEEDED. HERBICIDE USED SHALL BE MADE SPECIFICALLY TO ADDRESS WOODY PLANT MATERIALS AND SHALL BE APPLIED AS PER MANUFACTURERS SPECIFICATIONS. CARE SHOULD BE TAKEN NOT TO SPRAY PLANTED TREES OR NATURALLY OCCURRING NATIVE TREES/SHRUB SEEDLINGS. IT IS RECOMMENDED THAT INITIATION OF ROSE REMOVAL BEGIN AT LEAST SIX MONTHS PRIOR TO PLANTING.

B. PLANTING AND SOIL SPECIFICATIONS

PLANT MATERIAL WILL BE INSTALLED IN ACCORDANCE WITH THE PLANTING DETAIL AND PLANTING SPECIFICATIONS SHOWN ON THE FOREST CONSERVATION PLAN.

AMENDMENTS TO EXISTING SOIL WILL BE IN ACCORDANCE WITH THE PLANTING SPECIFICATIONS SHOWN ON THE FOREST CONSERVATION PLAN. SOIL DISTURBANCE WILL BE LIMITED TO INDIVIDUAL PLANTING LOCATIONS.

C. MAINTENANCE OF PLANTINGS

SEE POST CONSTRUCTION NOTES

D. GUARANTEE REQUIREMENTS

A 90 PERCENT SURVIVAL RATE OF THE REFORESTATION PLANTINGS WILL BE REQUIRED AFTER ONE GROWING SEASON. ALL PLANT MATERIAL BELOW THE 90 PERCENT SURVIVAL THRESHOLD WILL BE REPLACED AT THE BEGINNING OF THE SECOND GROWING SEASON. AT THE END OF THE SECOND GROWING SEASON, A 75 PERCENT SURVIVAL RATE WILL BE REQUIRED. ALL PLANT MATERIAL BELOW THE 75 PERCENT SURVIVAL THRESHOLD WILL BE REPLACED BY THE BEGINNING OF THE NEXT GROWING SEASON.

E. SECURITY FOR REFORESTATION

SECTION 16-1209 OF THE HOWARD COUNTY FOREST CONSERVATION ACT REQUIRES THAT A DEVELOPER SHALL POST A SECURITY (BOND, LETTER OF CREDIT, ETC.) WITH THE COUNTY TO INSURE THAT ALL WORK IS DONE IN ACCORDANCE WITH THE FCP.

CONSTRUCTION PERIOD PROTECTION PROGRAM

A. FOREST PROTECTION TECHNIQUES

1. SOIL PROTECTION AREA (CRITICAL ROOT ZONE)

THE SOIL PROTECTION AREA, OR CRITICAL ROOT ZONE, OF A TREE IS THAT PORTION OF THE SOIL COLUMN WHERE MOST OF A ITS ROOTS MAY BE FOUND. THE MAJORITY OF ROOTS RESPONSIBLE FOR WATER AND NUTRIENT UPTAKE ARE LOCATED JUST BELOW THE SOIL SURFACE. TEMPORARY FENCING SHALL BE PLACED AROUND THE CRITICAL ROOT ZONE OF THE FOREST IN AREAS WHERE THE FOREST LIMITS OCCUR WITHIN 25 FEET OF THE LIMIT OF DISTURBANCE.

2. FENCING AND SIGNAGE

EXISTING FOREST LIMITS OCCURRING WITHIN 25 FEET OF THE LIMITS OF DISTURBANCE SHALL BE PROTECTED USING TEMPORARY PROTECTIVE FENCING. PERMANENT SIGNAGE SHALL BE PLACED AROUND THE AFFORESTATION AREA PRIOR TO PLANT INSTALLATION, AS SHOWN ON THE PLAN.

B. PRE-CONSTRUCTION MEETING

UPON STAKING OF LIMITS OF DISTURBANCE A PRE-CONSTRUCTION MEETING WILL BE HELD BETWEEN THE DEVELOPER, CONTRACTOR AND APPROPRIATE COUNTY INSPECTOR. THE PURPOSE OF THE MEETING WILL BE TO
VERIFY THAT ALL SEDIMENT CONTROL IS IN ORDER, AND TO NOTIFY THE CONTRACTOR OF POSSIBLE PENALTIES FOR NON-COMPLIANCE WITH THE FCP.

C. STORAGE FACILITIES/EQUIPMENT CLEANING

ALL EQUIPMENT STORAGE, PARKING, SANITARY FACILITIES, MATERIAL STOCKPILING, ETC. ASSOCIATED WITH CONSTRUCTION OF THE PROJECT WILL BE RESTRICTED TO THOSE AREAS OUTSIDE OF THE PROPOSED FOREST CONSERVATION EASEMENT. CLEANING OF EQUIPMENT WILL BE LIMITED TO AREA WITHIN THE LOD OF THE PROPOSED HOMESITES. WASTEWATER RESULTING FROM EQUIPMENT CLEANING WILL BE CONTROLLED TO PREVENT RUNOFF INTO ENVIRONMENTALLY SENSITIVE AREAS.

D. SEQUENCE OF CONSTRUCTION

THE FOLLOWING TIMETABLE REPRESENTS THE PROPOSED TIMETABLE FOR DEVELOPMENT. THE ITEMS OUTLINED IN THE FOREST CONSERVATION PLAN WILL BE ENACTED WITHIN TWO (2) YEARS OF SUBDIVISION APPROVAL.

BELOW FIND A PROPOSED SEQUENCE OF CONSTRUCTION.

1. INSTALL ALL SIGNAGE AND SEDIMENT CONTROL DEVICES.
2. HOLD PRE-CONSTRUCTION MEETING BETWEEN DEVELOPER, CONTRACTOR AND COUNTY INSPECTOR.
3. BUILD ACCESS ROADS, INSTALL WELL AND SEPTIC SYSTEMS, AND CONSTRUCT HOUSES. STABILIZE ALL DISTURBED AREAS ACCORDINGLY.
4. INSTALL PERMANENT PROTECTIVE SIGNAGE FOR EASEMENTS AND INITIATE PLANTINGS IN ACCORDANCE WITH FOREST CONSERVATION PLAN. PLANTINGS WILL BE COMPLETED WITHIN TWO (2) YEARS OF SUBDIVISION APPROVAL.
5. REMOVE SEDIMENT CONTROL.
6. HOLD POST-CONSTRUCTION MEETING WITH COUNTY INSPECTORS TO ASSURE COMPLIANCE WITH FCP. SUBMIT CERTIFICATION OF INSTALLATION.
7. MONITOR AND MAINTAIN PLANTINGS FOR 2 YEARS.

E. CONSTRUCTION MONITORING

ECO-SCIENCE PROFESSIONALS OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, WILL MONITOR CONSTRUCTION OF THE PROJECT TO ENSURE THAT ALL ACTIVITIES ARE IN COMPLIANCE WITH THE FOREST CONSERVATION PLAN.

F. POST-CONSTRUCTION MEETING

UPON COMPLETION OF CONSTRUCTION, ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, WILL NOTIFY THE COUNTY THAT CONSTRUCTION HAS BEEN COMPLETED AND ARRANGE FOR A POST-CONSTRUCTION MEETING TO REVIEW THE PROJECT SITE. THE MEETING WILL ALLOW THE COUNTY INSPECTOR TO VERIFY THAT AFFORESTATION PLANTINGS HAVE BEEN INSTALLED.

POST-CONSTRUCTION MANAGEMENT PLAN

HOWARD COUNTY REQUIRES A TWO YEAR FOREST CONSTRUCTION MANAGEMENT PLAN BE PREPARED AS PART OF THE FOREST CONSERVATION PLAN. THE PLAN SHALL BE PREPARED BY ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, AND SHALL BE SUBMITTED TO THE COUNTY. ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL DESIGNATED BY THE DEVELOPER, WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THE POST-CONSTRUCTION MANAGEMENT PLAN.

THE FOLLOWING ITEMS WILL BE INCORPORATED INTO THE PLAN:

A. FENCING AND SIGNAGE

PERMANENT SIGNAGE INDICATING THE LIMITS OF THE RETENTION/REFORESTATION AREA SHALL BE MAINTAINED.

B. GENERAL SITE INSPECTIONS/MAINTENANCE OF PLANTINGS

SITE INSPECTIONS WILL BE PERFORMED A MINIMUM OF THREE TIMES DURING THE GROWING SEASON. THE PURPOSE OF THE INSPECTIONS WILL BE TO ASSESS THE HEALTH OF THE AFFORESTATION PLANTINGS. APPROPRIATE MEASURES WILL BE TAKEN TO RECTIFY ANY PROBLEMS WHICH MAY ARISE.

IN ADDITION, MAINTENANCE OF THE AFFORESTATION PLANTINGS WILL INVOLVE THE FOLLOWING STEPS:

1. WATERING - ALL PLANT MATERIAL SHALL BE WATERED TWICE A MONTH DURING THE 1ST GROWING SEASON, MORE OR LESS FREQUENTLY DEPENDING ON WEATHER CONDITIONS. DURING THE SECOND GROWING SEASON, ONCE A MONTH DURING MAY-SEPTEMBER, IF NEEDED.
2. REMOVAL OF INVASIVE EXOTICS AND NOXIOUS WEEDS. OLD FIELD SUCCESSIONAL SPECIES WILL BE RETAINED.
3. IDENTIFICATION OF SERIOUS PLANT PESTS AND DISEASES, TREATMENT WITH APPROPRIATE AGENT.
4. PRUNING OF DEAD BRANCHES.
5. AFTER 12 AND 24 MONTHS, REPLACEMENT OF PLANTS, IF REQUIRED, IN ACCORDANCE WITH THE GUARANTEE REQUIREMENTS SHOWN ON THE FCP.

C. EDUCATION

THE DEVELOPER WILL PROVIDE APPROPRIATE MATERIALS TO PROPERTY OWNERS INFORMING THEM OF THE LOCATION AND PURPOSE OF THE AFFORESTATION AREA. MATERIALS MAY INCLUDE SITE PLANS AND INFORMATION EXPLAINING THE INTENT OF THE FOREST CONSERVATION LAW.

D. FINAL INSPECTION

AT THE END OF THE TWO YEAR POST-CONSTRUCTION MANAGEMENT PERIOD, ECO-SCIENCE PROFESSIONALS, OR ANOTHER QUALIFIED PROFESSIONAL, WILL SUBMIT TO THE ADMINISTRATOR OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM CERTIFICATION THAT ALL RETENTION/AFFORESTATION REQUIREMENTS HAVE BEEN MET. UPON ACCEPTANCE OF THIS CERTIFICATION, THE COUNTY WILL RELEASE THE DEVELOPER FROM ALL FUTURE OBLIGATIONS AND RELEASE THE DEVELOPER'S BOND.

PLANTING/SOIL SPECIFICATIONS

1. PLANTING OF NURSERY STOCK SHALL TAKE PLACE BETWEEN MARCH 15TH AND APRIL 30TH OR SEPTEMBER 15TH - NOVEMBER 15TH
2. A TWELVE (12) INCH LAYER OF TOPSOIL SHALL BE SPREAD OVER ALL FORESTATION AREAS IMPACTED BY SITE GRADING TO ASSURE A SUITABLE PLANTING AREA. DISTURBED AREAS SHALL BE SEEDED AND STABILIZED AS PER GENERAL CONSTRUCTION PLAN FOR PROJECT. PLANTING AREAS NOT IMPACTED BY SITE GRADING SHALL HAVE NO ADDITIONAL TOPSOIL INSTALLED
3. ALL BARE ROOT PLANTING STOCK SHALL HAVE THEIR ROOT SYSTEMS DIPPED INTO AN ANTI-DESICCANT GEL PRIOR TO PLANTING.
4. PLANTING HOLES SHALL BE DUG SUCH THAT THE DEPTH OF THE HOLE MEASURED FROM THE BOTTOM TO GRADE IS LEVEL WITH THE TOP OF EXISTING GRADE. BACKFILL IN THE PLANTING PITS SHALL CONSIST OF 3 PARTS EXISTING SOIL TO 1 PART THE TYPE OF COMPOST MIX.
5. FERTILIZER SHALL CONSIST OF AGRIFORM 20-6-2 OR EQUIVALENT, APPLIED AS PER MANUFACTURERS SPECIFICATIONS.
6. A TWO (2) INCH LAYER OF HARDWOOD MULCH SHALL BE PLACED OVER THE ROOT AREA OF ALL PLANTINGS.
7. PLANT MATERIAL SHALL BE TRANSPORTED TO THE SITE IN A TARPED OR COVERED TRUCK. PLANTS SHALL BE KEPT MOIST PRIOR TO PLANTING.
8. ALL NON-ORGANIC DEBRIS ASSOCIATED WITH THE PLANTING OPERATION SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

SEQUENCE OF CONSTRUCTION

1. SEDIMENT CONTROL AND TREE PROTECTION DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLAN FOR SITE. SITE SHALL BE GRADED IN ACCORDANCE WITH GENERAL CONSTRUCTION PLANS.
2. PROPOSED FORESTATION AREAS IMPACTED BY SITE GRADING SHALL BE TOPSOILED AND STABILIZED AS PER #2 OF PLANTING/SOIL SPECIFICATIONS FOR PROJECT.
3. TREE POSTS SHALL BE INSTALLED AS PER PLANT SCHEDULE AND THE PLANTING/SOIL SPECIFICATIONS FOR THE PROJECT.
4. UPON COMPLETION OF INSTALLATION, SIGNAGE SHALL BE INSTALLED AS PER THE FOREST PROTECTION DEVICES SHOWN ON THE FOREST CONSERVATION PLAN.
5. PLANTINGS SHALL BE MAINTAINED AND GUARANTEED IN ACCORDANCE WITH THE MAINTENANCE AND GUARANTEE REQUIREMENTS FOR PROJECT.

MAINTENANCE OF PLANTINGS

1. MAINTENANCE OF PLANTINGS SHALL LAST FOR A PERIOD OF 24 MONTHS.
2. ALL PLANT MATERIAL SHALL BE WATERED TWICE A MONTH DURING THE 1ST GROWING SEASON, WATERING MAY BE MORE OR LESS FREQUENT DEPENDING ON WEATHER CONDITIONS. DURING SECOND GROWING SEASON, ONCE A MONTH DURING MAY-SEPTEMBER, IF NEEDED.
3. INVASIVE EXOTICS AND NOXIOUS WEEDS WILL BE REMOVED FROM FORESTATION AREAS. OLD FIELD SUCCESSIONAL SPECIES WILL BE RETAINED.
4. PLANTS WILL BE EXAMINED A MINIMUM TWO TIMES DURING THE GROWING SEASON FOR SERIOUS PLANT PESTS AND DISEASES. SERIOUS PROBLEMS WILL BE TREATED WITH THE APPROPRIATE AGENT.
5. DEAD BRANCHES WILL BE PRUNED FROM PLANTINGS.

GUARANTEE REQUIREMENTS

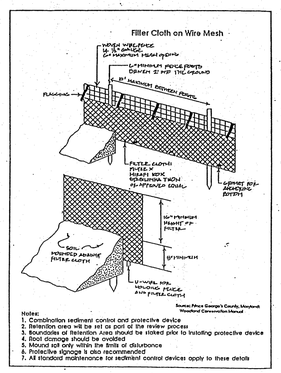
1. A 75 PERCENT SURVIVAL RATE OF FORESTATION PLANTINGS WILL BE REQUIRED AT THE END OF THE 24 MONTH MAINTENANCE PERIOD. ALL PLANT MATERIAL BELOW THE 75 PERCENT THRESHOLD WILL BE REPLACED AT THE BEGINNING OF THE NEXT GROWING SEASON.

SURETY FOR FORESTATION

1. THE DEVELOPER SHALL POST A SURETY (BOND, LETTER OF CREDIT) TO ENSURE THAT FORESTATION PLANTINGS ARE COMPLETED. UPON ACCEPTANCE OF THE PLANTINGS BY THE COUNTY, THE BOND SHALL BE RELEASED.

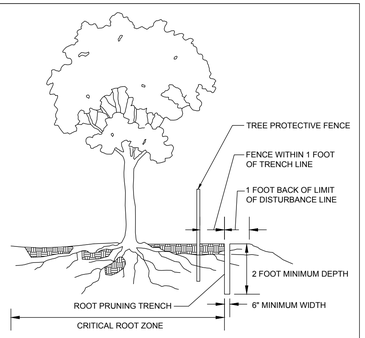
FCP NOTES

1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
3. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
4. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENT, EXCEPT AS PERMITTED BY HOWARD COUNTY DPZ.
5. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
6. TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. FENCING SHALL BE INSTALLED ALONG LIMITS OF DISTURBANCE OCCURRING WITHIN 50 FEET OF THE PROPOSED FCE LIMITS.
7. PERMANENT SIGNAGE WILL BE POSTED A AT 50-100 FOOT INTERVALS ALONG ALL FCE LIMITS.
8. THE FOREST CONSERVATION ACT REQUIREMENTS FOR THIS PROJECT WILL BE MET THROUGH THE RETENTION OF 17.61 ACRES OF NET TRACT AREA FOREST WITHIN THE LIMITS OF A FOREST CONSERVATION EASEMENT, AND A REFORESTATION OBLIGATION OF 22.90 ACRES. THE REFORESTATION OBLIGATION WILL BE MET WITH 21.90 ACRES OF ONSITE PLANTING AND 1.0 ACRES OF OFFSITE REFORESTATION OR WITH THE PURCHASE OF CREDIT IN A FOREST CONSERVATION BANK.
9. EXISTING FOREST CALCULATIONS DIFFER BETWEEN THE APPROVED FOREST STAND DELINEATION AND THE FOREST CONSERVATION PLAN. THE DIFFERENCE IS DUE TO A REVISED FLOODPLAIN DELINEATION AND COMPUTER CALCULATED FOREST AREA. THE APPROVED FOREST STAND DELINEATION SHOWS 17.61 ACRES OF NET TRACT AREA FOREST. THE DIFFERENCE IN LIMITS AND RESULTED IN A CALCULATION OF LESS NET TRACT AREA FOREST. THE EXISTING FOREST CALCULATION SHOWN IN THE FOREST CONSERVATION WORKSHEET REFLECTS THE REVISED FLOODPLAIN LIMITS AND COMPUTER CALCULATED FOREST AREA.



PROTECTIVE TREE FENCE DETAIL

NOT TO SCALE

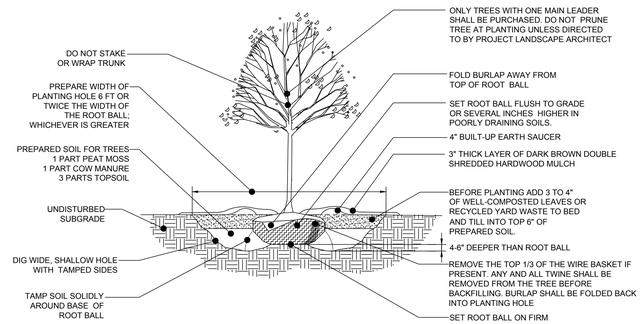


NOTES:

1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS.
2. BOUNDARIES OF RETENTION AREAS SHOULD BE STAKED FLAGGED PRIOR TO TRENCHING.
3. EXACT LOCATION OF TRENCH SHOULD BE IDENTIFIED.
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH SOIL REMOVED OR OTHER HIGH ORGANIC SOIL.
5. ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.

ROOT PRUNING DETAIL

NOT TO SCALE


DO NOT STAKE OR WRAP TRUNK
PREPARE WIDTH OF PLANTING HOLE 6 FT OR TWICE THE WIDTH OF THE ROOT BALL; WHICHEVER IS GREATER
PREPARED SOIL FOR TREES 1 PART PEAT MOSS 1 PART COW MANURE 3 PARTS TOPSOIL
UNDISTURBED SUBGRADE
DIG WIDE, SHALLOW HOLE WITH TAMPED SIDES
TAMP SOIL SOLIDLY AROUND BASE OF ROOT BALL
ONLY TREES WITH ONE MAIN LEADER SHALL BE PURCHASED. DO NOT PRUNE TREE AT PLANTING UNLESS DIRECTED TO BY PROJECT LANDSCAPE ARCHITECT
FOLD BURLAP AWAY FROM TOP OF ROOT BALL
SET ROOT BALL FLUSH TO GRADE OR SEVERAL INCHES HIGHER IN POORLY DRAINING SOILS.
4" BUILT-UP EARTH SAUCER
3" THICK LAYER OF DARK BROWN DOUBLE SHREDDED HARDWOOD MULCH
BEFORE PLANTING ADD 3 TO 4" OF WELL-COMPOSTED