

INDEX OF DRAWINGS

| NO. | DESCRIPTION |
|-----|--|
| 1 | COVER SHEET |
| 2 | SITE DEVELOPMENT PLAN |
| 3 | SEDIMENT CONTROL AND SWM NOTES AND DETAILS |

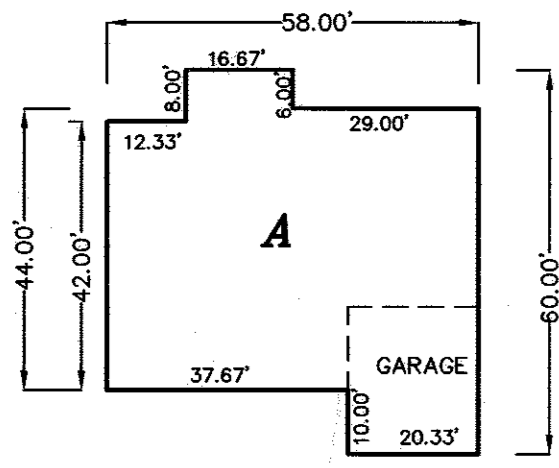
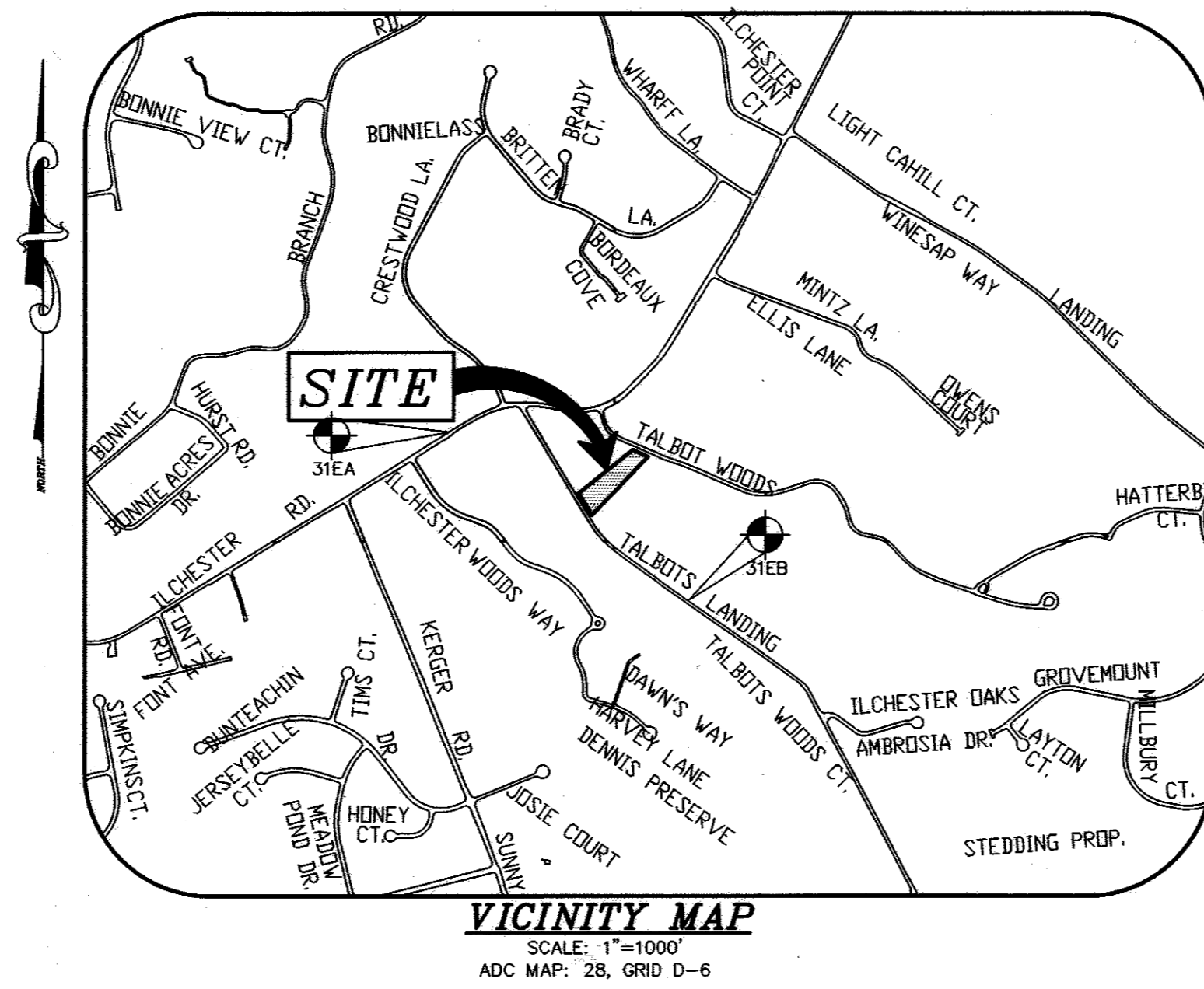
SITE DEVELOPMENT PLAN

TURLEY'S OVERLOOK

LOTS 1 THRU 3

FIRST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



GENERIC BOX 'A'
SCALE: 1"=30'

HOUSE TYPE SELECTION CHART

| GENERIC BOX | POTOMAC | PATAPSCO | SENECA | SUSQUEHANNA |
|-------------|-------------|-------------|-------------|-------------|
| A (LOT 1) | ALL OPTIONS | ALL OPTIONS | ALL OPTIONS | ALL OPTIONS |
| A (LOT 2) | ALL OPTIONS | ALL OPTIONS | ALL OPTIONS | ALL OPTIONS |
| A (LOT 3) | ALL OPTIONS | ALL OPTIONS | ALL OPTIONS | ALL OPTIONS |

GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH CONTOUR INTERVALS PREPARED BY FISHER, COLLINS, CARTER, INC. DATED SEPTEMBER, 2012 AND SUPPLEMENTED WITH HOWARD COUNTY GIS INFORMATION.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND NAD 83 (HORZ) AND NGVD88 (VERT) AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS #31EA AND #31EB.
 STA. No. 31EA N 559,641.124 ELEV. 468.84
 E 1,374,815.94
 STA. No. 31EB N 568,730.98 ELEV. 452.63
 E 1,376,237.49
- STORMWATER MANAGEMENT DESIGN FOR LOTS 1 THRU 3 HAS BEEN PROVIDED UNDER F-14-079. ALL SWM PRACTICES WILL BE PRIVATELY OWNED AND MAINTAINED.
- EXISTING UTILITIES ARE BASED ON ACTUAL FIELD LOCATIONS, IN COMBINATION WITH EXISTING WATER AND SEWER CONTRACTS.
- ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SEWER HOUSE CONNECTION ELEVATIONS SHOWN ARE LOCATED AT THE PROPERTY LINE OR EASEMENT LINE.
- SITE ANALYSIS DATA:**
 LOCATION: TAX MAP: 31 PARCEL: 739; GRID: 16
 ELECTION DISTRICT: FIRST
 ZONING: R-20
 TOTAL AREA: 1.545 AC.±
 LIMIT OF DISTURBED AREA: 1.53 AC.±
 PROPOSED USE FOR SITE: RESIDENTIAL, SINGLE FAMILY DETACHED DWELLING.
 TOTAL NUMBER OF UNITS: 3
 TYPE OF PROPOSED UNIT: SFD
 DPZ FILE NO: ECP-13-075, WP-14-146, F-14-079
- SUBJECT PROPERTY IS ZONED R-20 PER THE OCTOBER 6, 2013 HOWARD COUNTY COMPREHENSIVE ZONING PLAN.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- THIS PROJECT IS SUBJECT TO WP-14-146, APPROVED ON JUNE 16, 2014, WAIVING SECTION 16.120(D)(6)(v)(c) TO PERMIT PIPESTEMS TO BE CREATED ON BOTH SIDES OF A FRONTAGE LOT IN THE SAME SUBDIVISION. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
 - COMPLIANCE WITH ALL SRC AGENCY COMMENTS GENERATED WITH THE REVIEW OF THE FINAL PLAN, F-14-079.
 - THE APPLICANT MUST PROVIDE A LANDSCAPING BUFFER ALONG THE ENTIRE USE-IN-COMMON DRIVEWAY BETWEEN THE DRIVEWAY AND THE ADJOINING TURLEY'S MEADOW SUBDIVISION, LOTS 1 & 4, WITH A SINGLE ROW OF THUJA PLICATA (GIANT ARBORVITAE "GREEN GIANT") TREES, OR AN EQUIVALENT SPECIES AT A SPACING OF 15-20 FEET ON CENTER. THE PROPOSED USE-IN-COMMON DRIVEWAY MUST MAINTAIN AT LEAST A 10 FOOT DISTANCE FROM THE PROJECT BOUNDARY, AT ALL POINTS, TO ENSURE ADEQUATE ROOM FOR THE LANDSCAPING BUFFER. THE LANDSCAPING TREES SHALL BE SHOWN AS PART OF THE LANDSCAPE PLAN FOR F-14-079 AND SHALL BE BONDED WITH THE LANDSCAPING OBLIGATION.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12 FEET MIN. (16 FEET MIN. SERVING MORE THAN ONE RESIDENCE).
 - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2 INCH MINIMUM).
 - GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS.
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT # 14-4775-D.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT ONTO THE PIPESTEM LOT DRIVEWAY.
- PUBLIC WATER AND SEWAGE ALLOCATIONS WILL BE GRANTED AT THE TIME OF ISSUANCE OF THE BUILDING PERMIT IF CAPACITY IS AVAILABLE AT THAT TIME.
- THE FOREST CONSERVATION REQUIREMENTS OF SECTION 16.120(D) OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT WAS SATISFIED UNDER THE SUBDIVISION PLAN FOR TURLEY'S OVERLOOK F-14-079. FOREST CONSERVATION IS PROVIDED BY OFF-SITE REFORESTATION OF .52 ACRES ON THE ROSEBAR PROPERTY, PRESERVATION PARCEL 'A'. FINANCIAL SURETY WAS POSTED UNDER F-99-019-A.
- LANDSCAPING FOR LOTS 1 THRU 3 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY FOR THE REQUIRED LANDSCAPING IN THE AMOUNT OF \$9,930.00 (13 SHADE TREE @ \$300/SHADE TREE, 39 EVERGREEN TREE @ \$150/EVERGREEN TREE AND 6 SHRUBS @ \$30/SHRUB) WILL BE POSTED AS PART OF BUILDING/GRADING PERMIT FOR THIS SDP.
- OPEN SPACE REQUIREMENTS HAVE BEEN SATISFIED VIA THE PAYMENT OF FEE-IN-LIEU IN THE AMOUNT OF \$3,000.00 UNDER F-14-079.
- NO CEMETERIES EXIST ON SITE.
- NO HISTORIC STRUCTURE EXISTS ON SITE.
- A WETLAND DELINEATION, FOREST STAND DELINEATION REPORT & PRELIMINARY FOREST CONSERVATION PLAN FOR THIS PROJECT DATED SEPTEMBER 28, 2012 WAS PREPARED BY ECO-SCIENCE PROFESSIONALS. NO WETLANDS EXIST ON-SITE PER REPORT SUBMITTED UNDER F-14-079.
- A COMMUNITY MEETING WAS CONDUCTED ON JULY 10, 2012 FOR THE PURPOSE OF THE DEVELOPER TO PROVIDE INFORMATION TO THE COMMUNITY REGARDING THE PROPOSED RESIDENTIAL DEVELOPMENT AND TO ALLOW THE COMMUNITY TO ASK QUESTIONS AND TO MAKE COMMENTS, PER SECTION 16.128(D), OF THE SUBDIVISION REGULATIONS.
- THERE ARE NO FLOODPLAIN, 15-24.9% SLOPES, 25% OR GREATER SLOPES, STREAMS, OR THEIR BUFFERS ON THIS SITE AS CERTIFIED UNDER F-14-079.
- RESIDENTIAL DRIVEWAY ENTRANCE SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARD DETAIL R-6.03 FOR THE PROPOSED USE-IN-COMMON DRIVEWAY.
- A USE-IN-COMMON ACCESS MAINTENANCE AGREEMENT HAS BEEN RECORDED WITH F-14-079 UNDER L 15888/F 080 ON 11/21/2014 IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.
- THE MODERATE HOUSING UNIT AGREEMENT FOR THIS SUBDIVISION WILL BE MET BY THE PAYMENT OF A FEE-IN-LIEU FOR EACH PROPOSED UNIT. THE MIHU AGREEMENT HAS BEEN RECORDED IN THE LAND RECORDS OF HOWARD COUNTY ON 11/21/14 AS L 15888/F.083.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06.

PLEASE NOTE THAT ALL LOTS IN THIS SUBDIVISION ARE SUBJECT TO THE MODERATE INCOME HOUSING UNIT (MIHU) FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

ADDRESS CHART

| LOT # | ADDRESS |
|-------|----------------------|
| 1 | 7502 LEAFY TREE LANE |
| 2 | 7506 LEAFY TREE LANE |
| 3 | 7510 LEAFY TREE LANE |

PERMIT INFORMATION BLOCK

| | | |
|--|-------------------------|----------------------|
| SUBDIVISION NAME: TURLEY'S OVERLOOK, LOTS 1 THRU 3 | SECTION/AREA: N/A | PARCEL: 739 |
| PLAT NO. 23058 | BLOCK(S) 16 | ZONING R-20 |
| TAX MAP NO. 31 | ELECTION DISTRICT FIRST | CENSUS TRACT 6011.04 |

DEVELOPERS CERTIFICATE
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Tim Burkard
 SIGNATURE OF DEVELOPER
 PRINTED NAME OF DEVELOPER
 DATE: 09/21/14

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

R. JACOB HIKMAT
 SIGNATURE OF ENGINEER
 PRINTED NAME OF ENGINEER
 DATE: 9/25/15

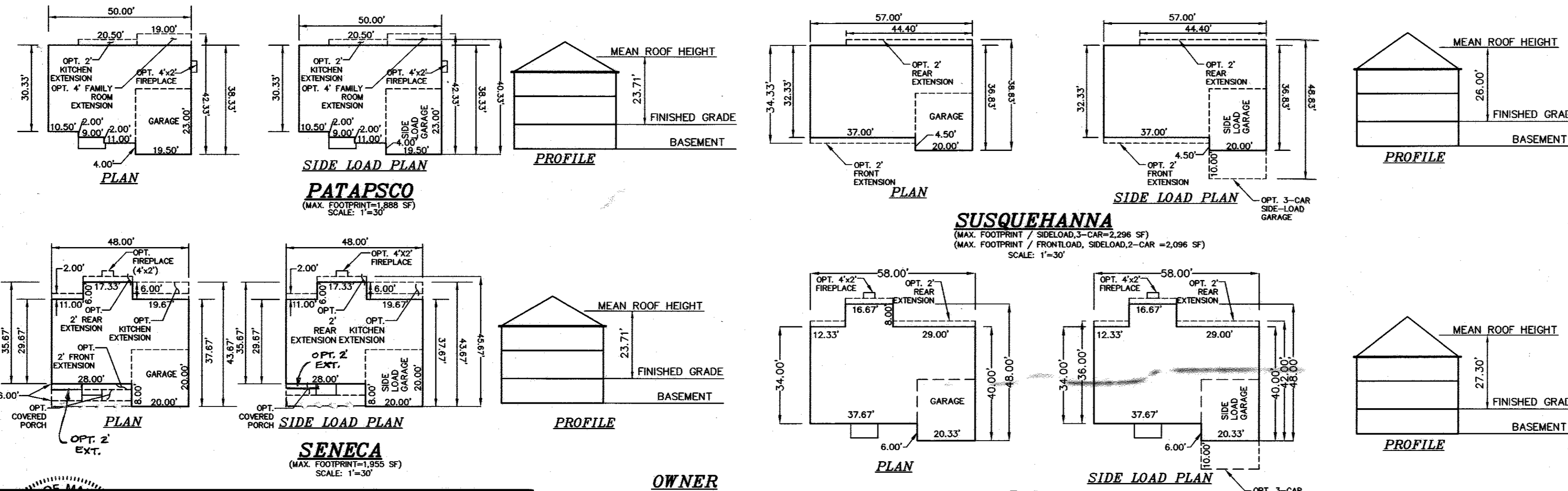
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY NATURAL RESOURCE CONSERVATION DISTRICT.

John K. Karst
 HOWARD COUNTY NATURAL RESOURCE CONSERVATION DISTRICT
 DATE: 9/30/15

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chad Candace
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 10-20-15

W. J. Sedore
 CHIEF, DIVISION OF LAND DEVELOPMENT
 DATE: 10-22-15

William J. Allen
 DIRECTOR
 DATE: 10-23-15



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

R. JACOB HIKMAT
 DATE: 9/25/15

OWNER
 TW LAND, LLC
 5300 DORSEY HALL DRIVE, SUITE 102
 ELLICOTT CITY MD 21043
 (443)367-0422

BUILDER
 BURKARD HOMES, LLC
 5300 DORSEY HALL DRIVE, SUITE 102
 ELLICOTT CITY MD 21043
 (443)367-0422

Project: 15-004
 Engineering: MAM/AMT
 Illustration: MAM/AMT
 Scale: 1"=30'
 Date: 9/15/16

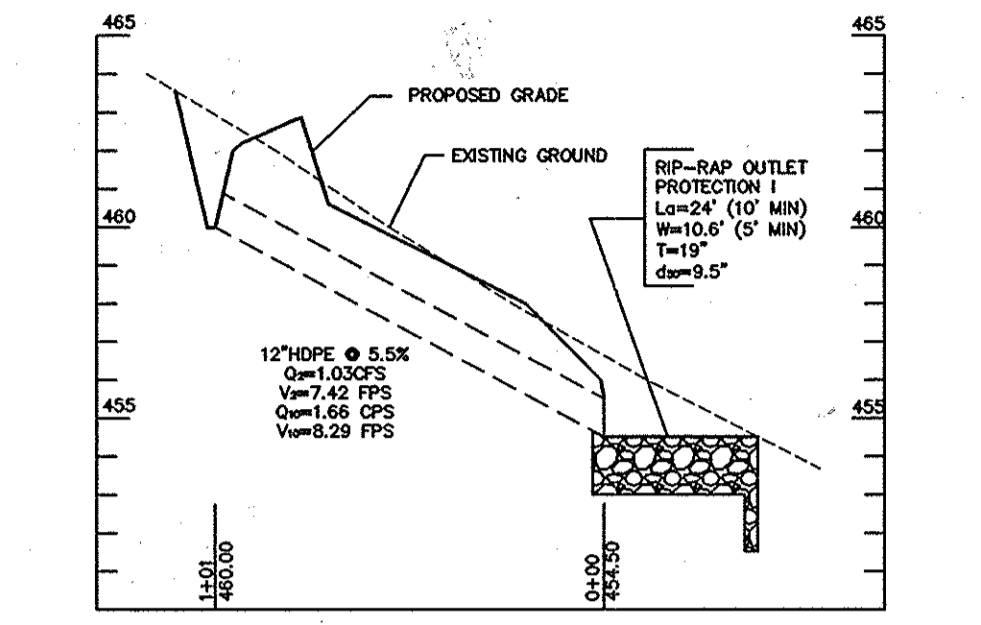
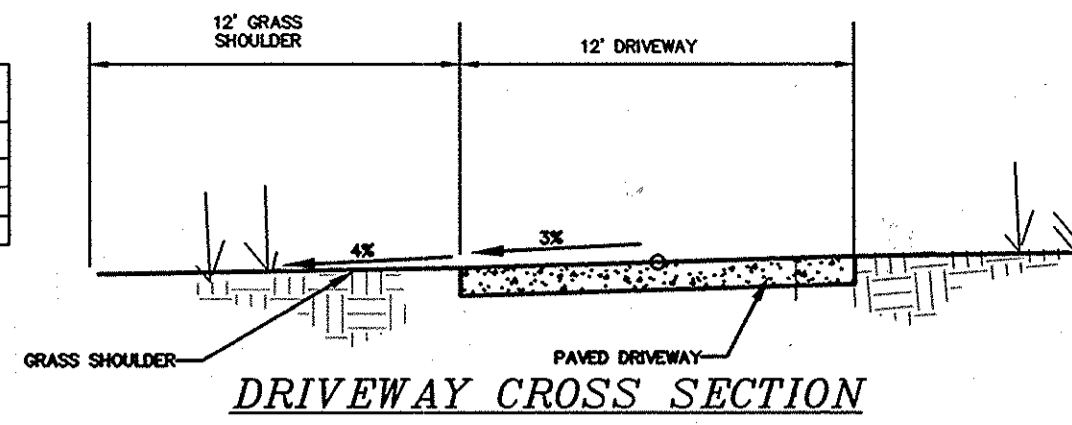
REV. SENECA MODEL_ADD 2 EXTENSION 9/15/16

TURLEY'S OVERLOOK LOTS 1 THRU 3
 SINGLE FAMILY DWELLING
 TAX MAP: 31 GRID: 16 PARCEL: 739
 HOWARD COUNTY
 FIRST ELECTION DISTRICT
 COVER SHEET

MILDENBERG & ASSOC., INC.
 Engineers Planners Surveyors
 7550-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0296 Fax: (410) 997-0298 Fax

1 OF 3
 SDP-15-060

| SOILS LEGEND | | | | |
|--------------|--|------------|----------|--|
| SYMBOL | NAME / DESCRIPTION | SOIL GROUP | K FACTOR | |
| ChB | CHILLUM-RUSSETT LOAM, 2 TO 5 PERCENT SLOPES | B | 0.37 | |
| ChC | CHILLUM-RUSSETT LOAM, 5 TO 10 PERCENT SLOPES | B | 0.37 | |
| SaC | SASSAFRAS LOAM, 5 TO 10 PERCENT SLOPES | B | 0.24 | |



| STORMWATER MANAGEMENT PRACTICES | | | | | | | | | | | | | | | | | |
|---------------------------------|----------------------|----------------------|--------------------------|-----------------|---------------------------------|-------------------------------------|---------------------------------|----------------------|---------------------------|------------------------|--------------------|----------------------|--------------------|--------------|--------------|------------------|--------------|
| LOT # | ADDRESS | GREEN ROOF PAVEMENTS | PERMEABLE ROOF PAVEMENTS | REINFORCED TURF | DISCONNECTION OF ROOFTOP RUNOFF | DISCONNECTION OF NON-ROOFTOP RUNOFF | SHEETFLOW TO CONSERVATION AREAS | RAINWATER HARVESTING | SUBMERGED GRAVEL WETLANDS | LANDSCAPE INFILTRATION | INFILTRATION BERMS | DRY WELLS (MODIFIED) | MICRO-BIORETENTION | RAIN GARDENS | SWALES | ENHANCED FILTERS | |
| | | A-1 (Y/N) | A-2 (Y/N) | A-3 (Y/N) | N-1 (NUMBER) | N-2 (Y/N) | N-3 (Y/N) | (NUMBER) | M-1 (NUMBER) | M-2 (NUMBER) | M-3 (NUMBER) | M-4 (NUMBER) | M-5 (NUMBER) | M-6 (NUMBER) | M-7 (NUMBER) | M-8 (NUMBER) | M-9 (NUMBER) |
| 1 | 7502 LEAFY TREE LANE | N | N | N | 6 | Y | N | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
| 2 | 7506 LEAFY TREE LANE | N | N | N | 2 | N | N | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |
| 3 | 7510 LEAFY TREE LANE | N | N | N | 3 | N | N | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 0 |

Turley's Overview Boring Photos 01/09/2014

Attached are pictures of the excavation performed on January 9, 2014 from 11:30 am to 12:30 pm in three locations within less than 50 feet of 2 proposed bioretention facilities and an infiltration berm. Temperature was approximately 35°F and partly sunny. Attendees included Tony Ferritis and Tom Lehr of Fisher, Collins & Carter, Inc. and Monty Kinna of Kinna Contracting, who performed the excavations.

- Boring B-1** - The existing elevation is 458.63 (per field location). The proposed elevation is 459.0. This hole was excavated to 10.0 feet (See photo#1). No water was encountered during excavation. Boring B-1 is located in the bottom of the proposed bioretention facility on Lot 2 (elevation 459.0). The proposed bottom of the underdrain gravel will be at elevation 456.00. There is a minimum of 7.5 feet of good soil beneath the proposed facility. See attached photos #1 to #5 for depth of excavation, sidewall and bottom, bottom of hole, excavated material on left and sidewall, and sidewalk.
- Boring B-2** - The existing elevation is 456.91 (per field location). The proposed elevation is 458.75. This hole was excavated to 10.5 feet (See photo#6). No water was encountered during excavation. Boring B-2 is located in the bottom of the bottom of the proposed bioretention facility on Lot 3 (elevation 458.75). The proposed bottom of the underdrain gravel will be at elevation 455.75. There is a minimum of 9.5 feet of good soil beneath the proposed facility. See attached photos #6 to #10 for depth of excavation, bottom and sidewall, material at bottom of hole, sidewall, and material at bottom of hole.
- Boring B-3** - The existing elevation is 457.43 (per field location). The proposed elevation is 456.5. This hole was excavated to 9 feet (See photo#11). Water was encountered at the bottom of the hole. An infiltration berm is proposed on Lot 3 (surface elevation at low point of 456.0) is located approximately 9 feet from Boring B-3. Although this boring is not required for the design of an infiltration berm, excavation was conducted in case an alternate proposal is made at the time of SDP. See attached photos #10 to #13 for depth of excavation, bottom of hole, material at bottom, and sidewall and bottom of hole.

TAKEN FROM THE GEOTECHNICAL INVESTIGATION ("SOIL BORING INFORMATION") PREPARED BY FISHER, COLLINS, AND CARTER, INC. IN JANUARY, 2014 AND APPROVED UNDER F-14-079.

- LEGEND**
- LIMIT OF DISTURBANCE
 - SUPER SILT FENCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - ROOF DRAIN LEADER
 - 75' @ 5% MAX (N-1) ROOFTOP DISCONNECTION (N-1) FLOW PATH
 - AREA TREATED BY N-1, ROOFTOP DISCONNECTION
 - NON-ROOFTOP DISCONNECTION (N-2) TREATMENT AREA
 - EXISTING TREELINE
 - EXISTING TREES APPROVED UNDER F-13-084.
 - EXIST. 20' PUBLIC SEWER & UTILITY EASEMENT (PLAT #22763)
 - 30' PRIVATE USE-IN-COMMON DRIVEWAY EASEMENT FOR THE USE AND BENEFIT OF LOTS 1 THRU 3
 - SOIL BORING LOCATION

OWNER
TW LAND, LLC
5300 DORSEY HALL DRIVE, SUITE 102
ELLICOTT CITY MD 21043
(443)367-0422

BUILDER
BURKARD HOMES, LLC
5300 DORSEY HALL DRIVE, SUITE 102
ELLICOTT CITY MD 21043
(443)367-0422

DEVELOPERS CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Developer: *[Signature]* DATE: 09/21/15

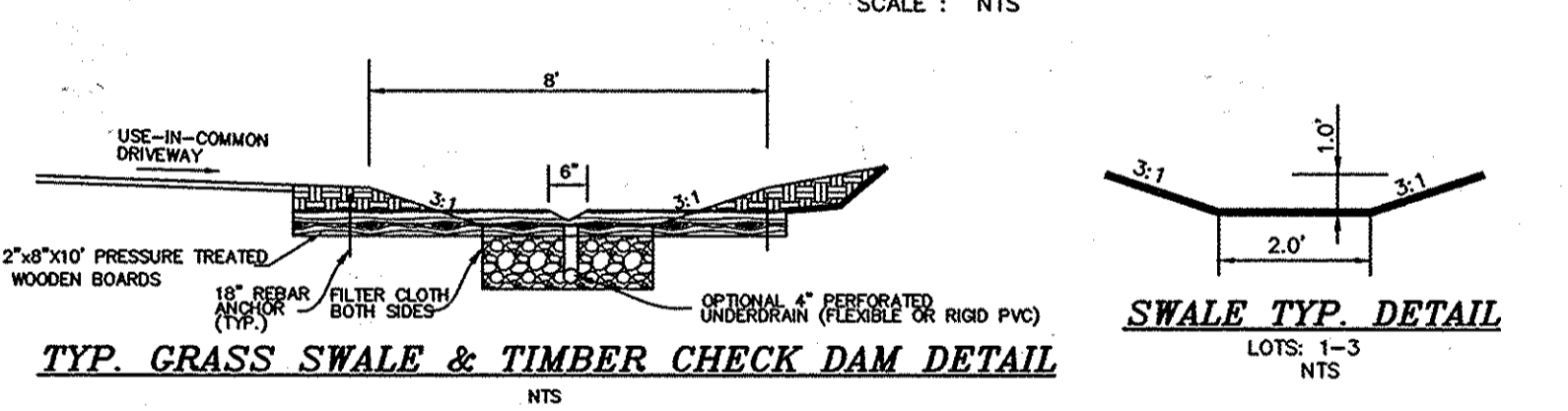
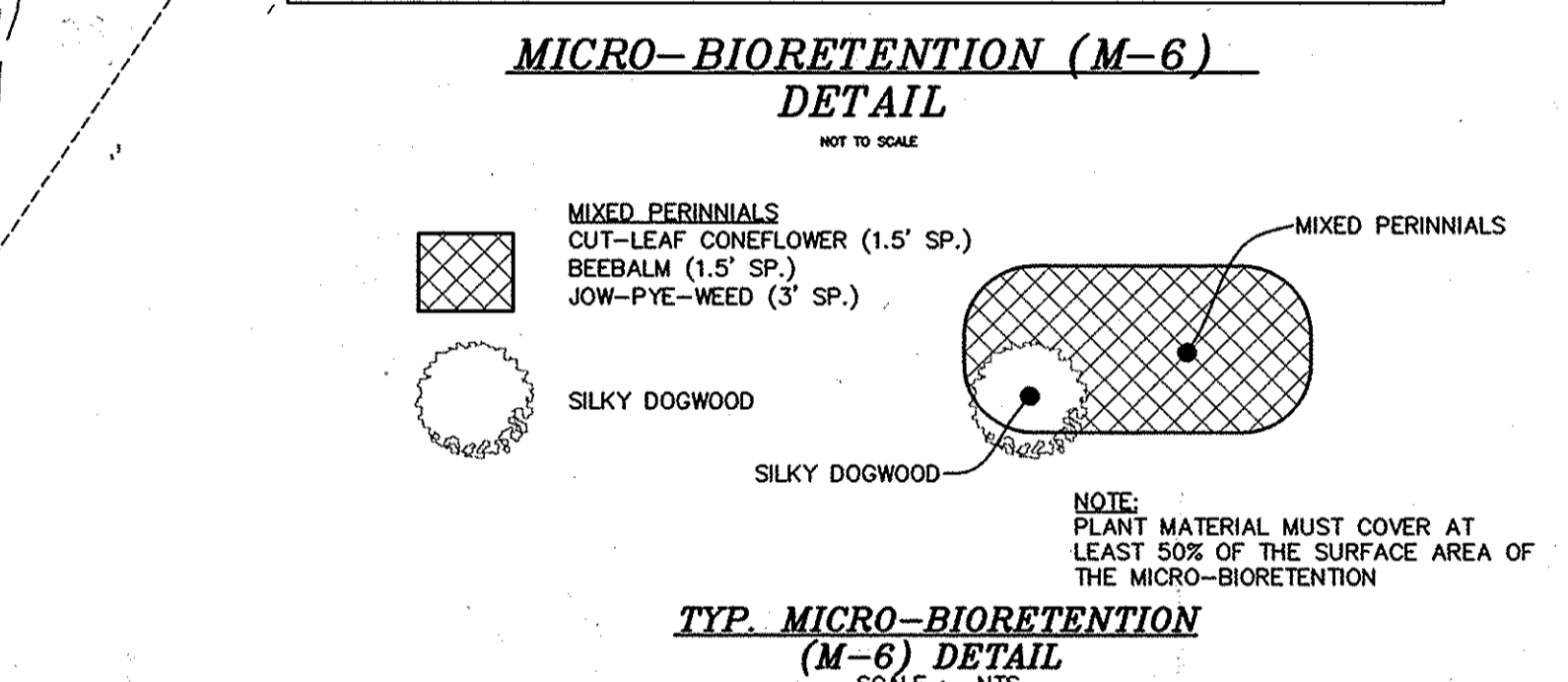
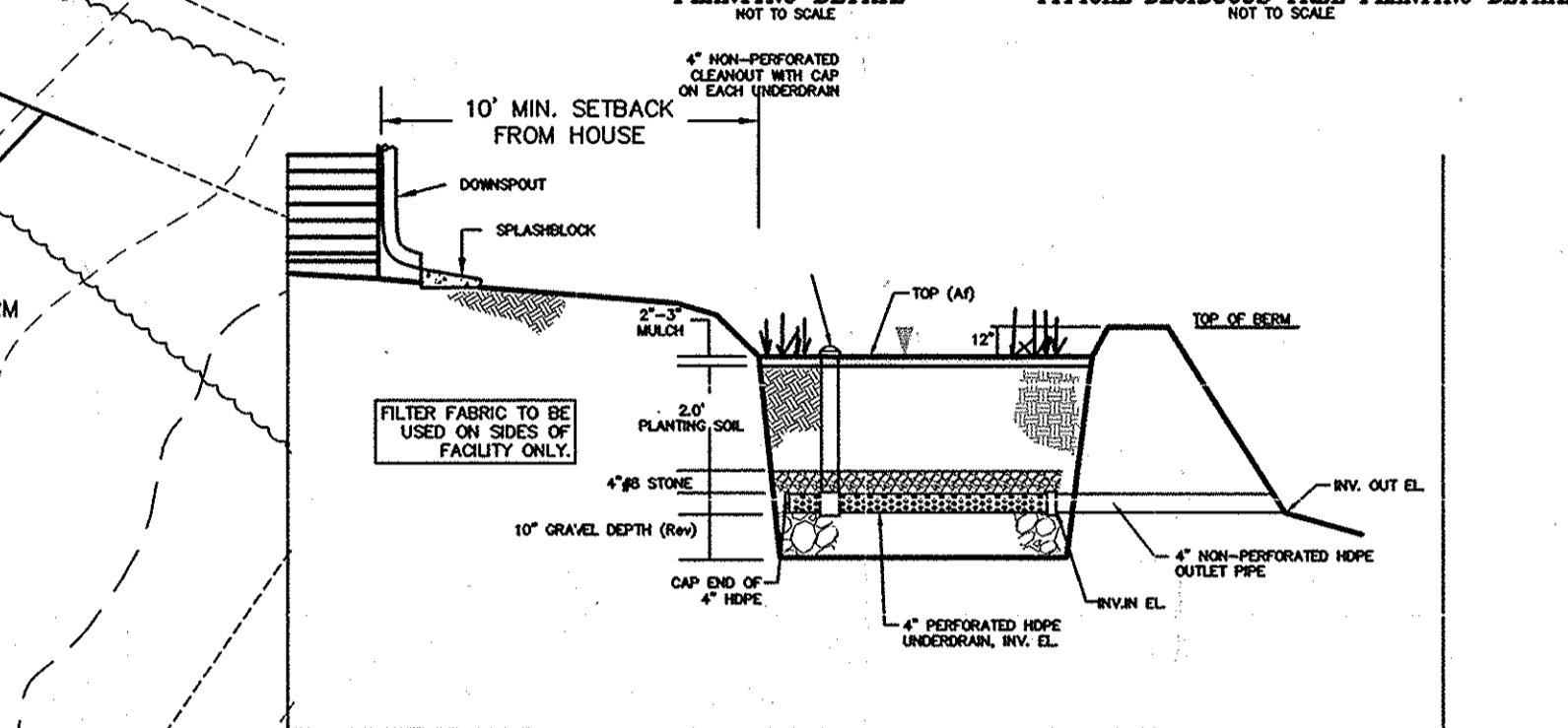
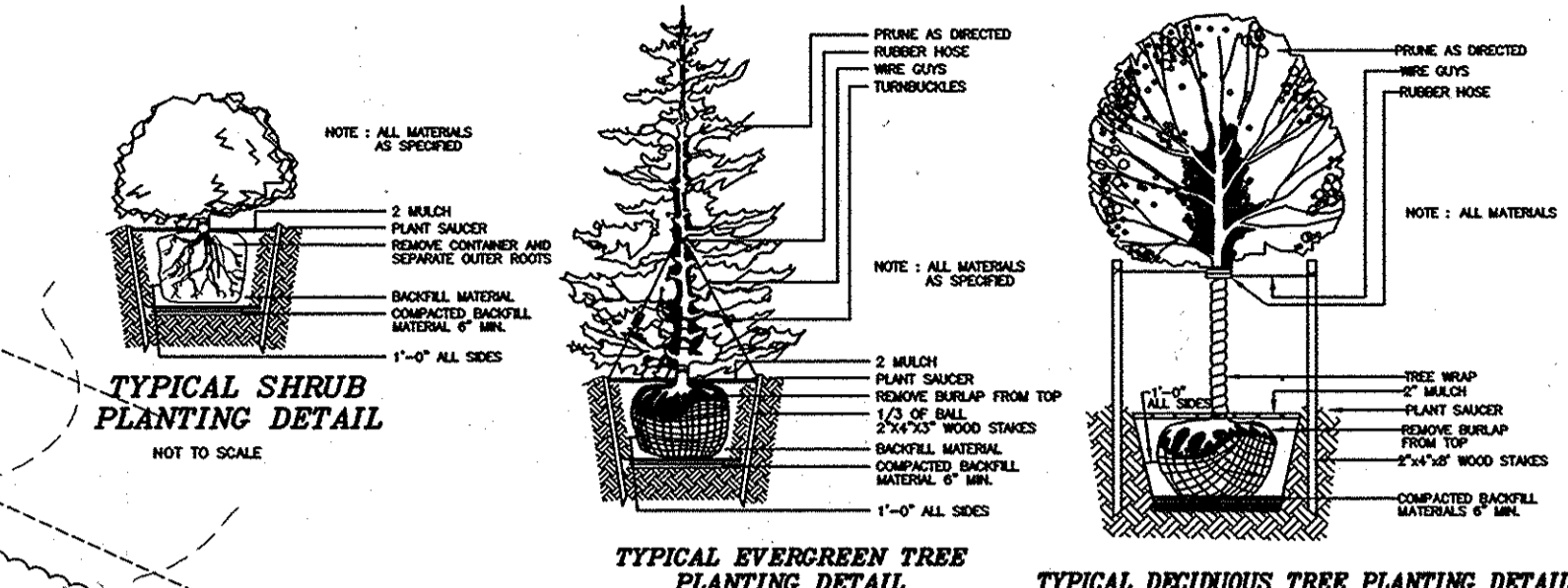
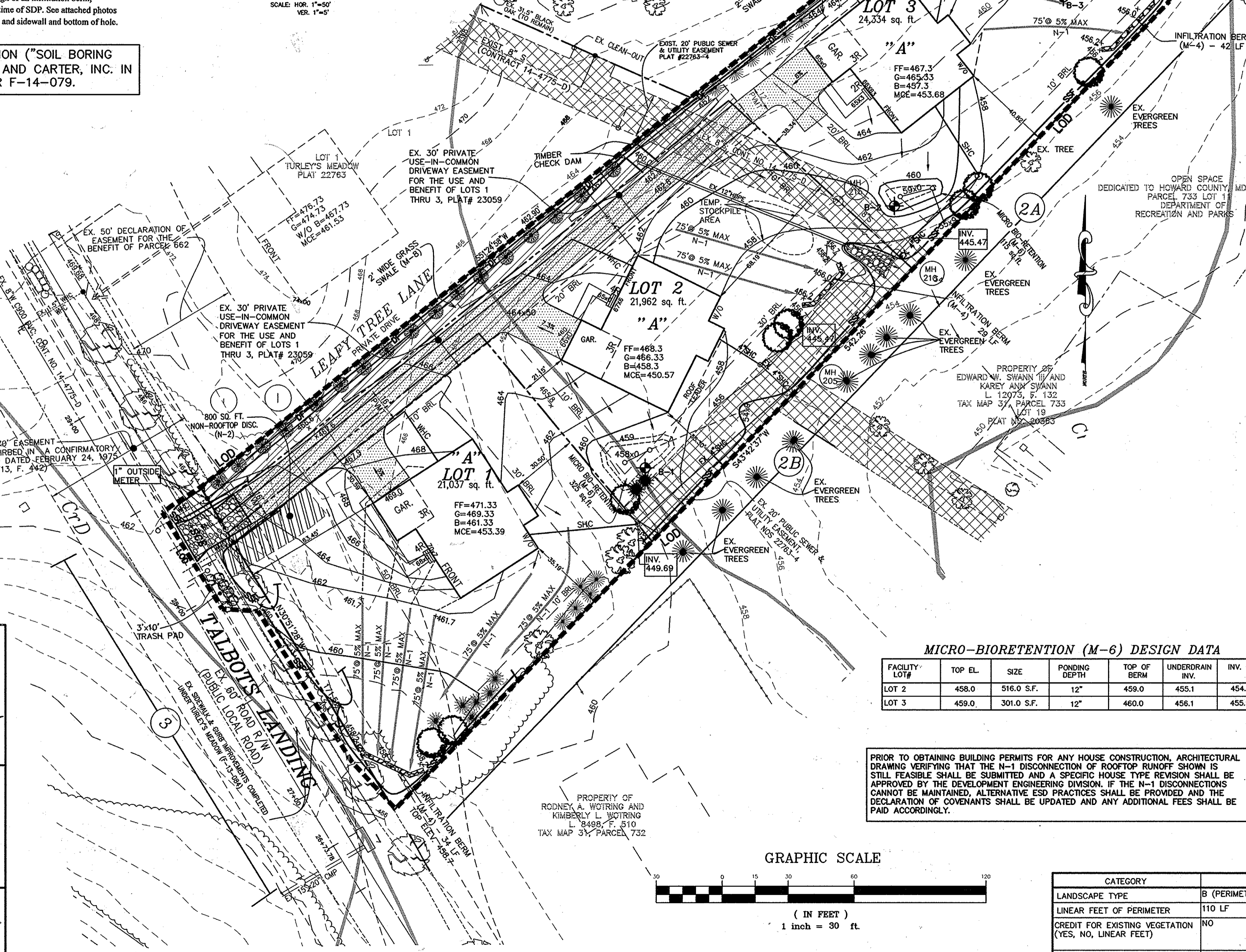
ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Engineer: *[Signature]* DATE: 9/21/15

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature: *[Signature]* DATE: 9/30/15

Signature: *[Signature]* DATE: 10-20-15
Signature: *[Signature]* DATE: 10-22-15
Signature: *[Signature]* DATE: 10-23-15

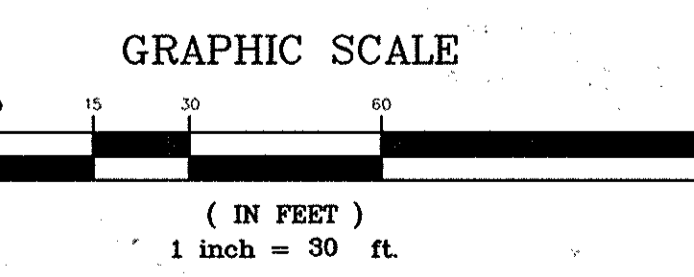
EXISTING CULVERT PROFILE (F-14-079)



MICRO-BIORETENTION (M-6) DESIGN DATA

| FACILITY/LOT# | TOP EL. | SIZE | PONDING DEPTH | TOP OF BERM | UNDERDRAIN INV. | INV. OUT. |
|---------------|---------|------------|---------------|-------------|-----------------|-----------|
| LOT 2 | 458.0 | 516.0 S.F. | 12" | 459.0 | 455.1 | 454.9 |
| LOT 3 | 459.0 | 301.0 S.F. | 12" | 460.0 | 456.1 | 455.9 |

PRIOR TO OBTAINING BUILDING PERMITS FOR ANY HOUSE CONSTRUCTION, ARCHITECTURAL DRAWING VERIFYING THAT THE N-1 DISCONNECTION OF ROOFTOP RUNOFF SHOWN IS STILL FEASIBLE SHALL BE SUBMITTED AND A SPECIFIC HOUSE TYPE REVISION SHALL BE APPROVED BY THE DEVELOPMENT ENGINEERING DIVISION. IF THE N-1 DISCONNECTIONS CANNOT BE MAINTAINED, ALTERNATIVE ESD PRACTICES SHALL BE PROVIDED AND THE DECLARATION OF COVENANTS SHALL BE UPDATED AND ANY ADDITIONAL FEES SHALL BE PAID ACCORDINGLY.



PERIMETER LANDSCAPE REQUIREMENT PLANTING SCHEDULE

| QUANTITY | SYMBOL | BOTANICAL NAME | COMMON NAME | SIZE |
|--|----------|----------------------------------|---------------------------------------|------------------|
| 5 | [Symbol] | ACER RUBRUM (AR) | RED MAPLE | 2 1/2" - 3" CAL. |
| 8 | [Symbol] | TILIA CORDATA 'GREENSPIRE' | GREENSPIRE LITTLELEAF LINDEN | 2 1/2" - 3" CAL. |
| 8 | [Symbol] | ILEX 'NELLIE R. STEVENS' | NELLIE R. STEVENS HOLLY OR EQUIVALENT | 5' - 6' HT. |
| 14 | [Symbol] | THUJA PLICATA | GIANT ARBORVITAE 'GREEN GIANT' | 5' - 6' HT. |
| 17 | [Symbol] | THUJA OCCIDENTALIS 'PYRAMIDALIS' | PYRAMIDAL ARBORVITAE | 5' - 6' HT. |
| 6 | [Symbol] | TAXUS MEDIA 'HICKSI' | HICKS YEW | 2 1/2" - 3" HT. |
| TOTAL | | | | |
| 1 SHADE TREES, 39 EVERGREENS, 6 SHRUBS | | | | |

NOTE THAT 23 EVERGREENS HAVE BEEN PROPOSED ADJACENT TO TURLEY'S MEADOW, LOT 1 AS A BUFFER TO THE PROPOSED COMMON DRIVEWAY PER WAIVER PETITION SUBMITTED.

SCHEDULE A: PERIMETER LANDSCAPED EDGE

| CATEGORY | ADJACENT TO PERIMETER PROPERTIES | ADJACENT TO ROADWAY | TRASH PAD BUFFER | TOTAL | |
|---|--|--|--|--|--|
| LANDSCAPE TYPE | B (PERIMETER 1) | A (PERIMETER 2-A) | C (PERIMETER 2-B) | (PERIMETER 3) | (PERIMETER 4) |
| LINEAR FEET OF PERIMETER | 110 LF | 290 LF | 252 LF | 172 LF | 16 LF |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) | NO | NO | NO | NO | N/A |
| NUMBER OF PLANTS REQUIRED | 2 SHADE TREES 3 EVERGREEN TREES 0 SHRUBS | 5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS | 6 SHADE TREES 13 EVERGREEN TREES 0 SHRUBS | N/A | 0 SHADE TREES 0 EVERGREEN TREES 6 SHRUBS |
| CREDIT FOR EXISTING VEGETATION | 0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS | 0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS | 0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS | 0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS | N/A |
| NUMBER OF PLANTS PROVIDED | 2 SHADE TREES 3 EVERGREEN TREES 0 SHRUBS | 5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS | 6 SHADE TREE 13 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS | 0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS | 0 SHADE TREES 0 EVERGREEN TREES 6 SHRUBS |
| OTHER TREES (2:1 SUBSTITUTION) | 0 | 0 | 0 | 0 | 0 |
| SHRUBS (10:1 SUBSTITUTION) | 0 | 0 | 0 | 0 | 0 |

DEVELOPER'S/OWNER'S CERTIFICATE
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17842, EXP DATE 09/03/16.

Signature: *[Signature]* DATE: 9/25/15

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

Signature: *[Signature]* DATE: 9/25/15

TURLEY'S OVERLOOK LOTS 1 THRU 3
SINGLE FAMILY DWELLING
TAX MAP: 31 GRID: 16 PARCEL: 737, 738
FIRST ELECTION DISTRICT HOWARD COUNTY
SITE DEVELOPMENT PLAN

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

2 OF 3
SDP-15-060

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

DEFINITION THE PROCESS OF PREPARING THE SOILS TO SUSTAIN ADEQUATE VEGETATIVE STABILIZATION. PURPOSE TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. CONDITIONS WHERE PRACTICE APPLIES WHERE VEGETATIVE STABILIZATION IS TO BE ESTABLISHED. CRITERIA A. SEEDING 1. TEMPORARY STABILIZATION a. SEEDING PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT...

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

DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. PURPOSE TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION. CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING. CRITERIA A. SEEDING 1. SPECIFICATIONS a. SEEDS MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW...

(B-4-5) STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH PERMANENT VEGETATION. PURPOSE TO USE LONG-LIVED PERENNIAL GRASSES AND LEGUMES TO ESTABLISH PERMANENT GROUND COVER OF DISTURBED EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR 6 MONTHS OR MORE. CRITERIA A. SEEDING 1. GENERAL USE a. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE...

TEMPORARY SEEDING FOR SITE STABILIZATION Table with columns: PLANT SPECIES, SEEDING RATE (LB/AC), SEEDING DEPTH (INCHES), RECOMMENDED SEEDING DATED BY PLANT HARDNESS ZONE (5B AND 6A, 6B, 7A AND 7B).

PERMANENT SEEDING SUMMARY Table with columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, N, P2O5, K2O, LIME RATE.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DISCONNECTION OF ROOFTOP RUNOFF (N-1), DISCONNECTION OF NON-ROOFTOP RUNOFF (N-2)

OPERATION AND MAINTENANCE SCHEDULE FOR INFILTRATION BERM (M-4)

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6), BIORETENTION SWALE (M-8)

(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS. PURPOSE TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL. CRITERIA 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDNESS ZONE...

(B-4-4) STANDARDS AND SPECIFICATION FOR STOCKPILE AREA

DEFINITION A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION AND CHANGES TO DRAINAGE PATTERNS. CRITERIA 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN...

OWNER TW LAND, LLC 5300 DORSEY HALL DRIVE, SUITE 102 ELLICOTT CITY MD 21043 (443)367-0422

BUILDER BURKARD HOMES, LLC 5300 DORSEY HALL DRIVE, SUITE 102 ELLICOTT CITY MD 21043 (443)367-0422

DEVELOPERS CERTIFICATE I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSON INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE...

Signature of Developer: Tim Burkard, DATE: 9/21/15

ENGINEER'S CERTIFICATE I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS THE PRACTICAL AND WISEST MEANS OF PROTECTING THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATURAL RESOURCE CONSERVATION SERVICE.

Signature of Engineer: R. JACOB HIKMAT P.E., DATE: 9/21/15

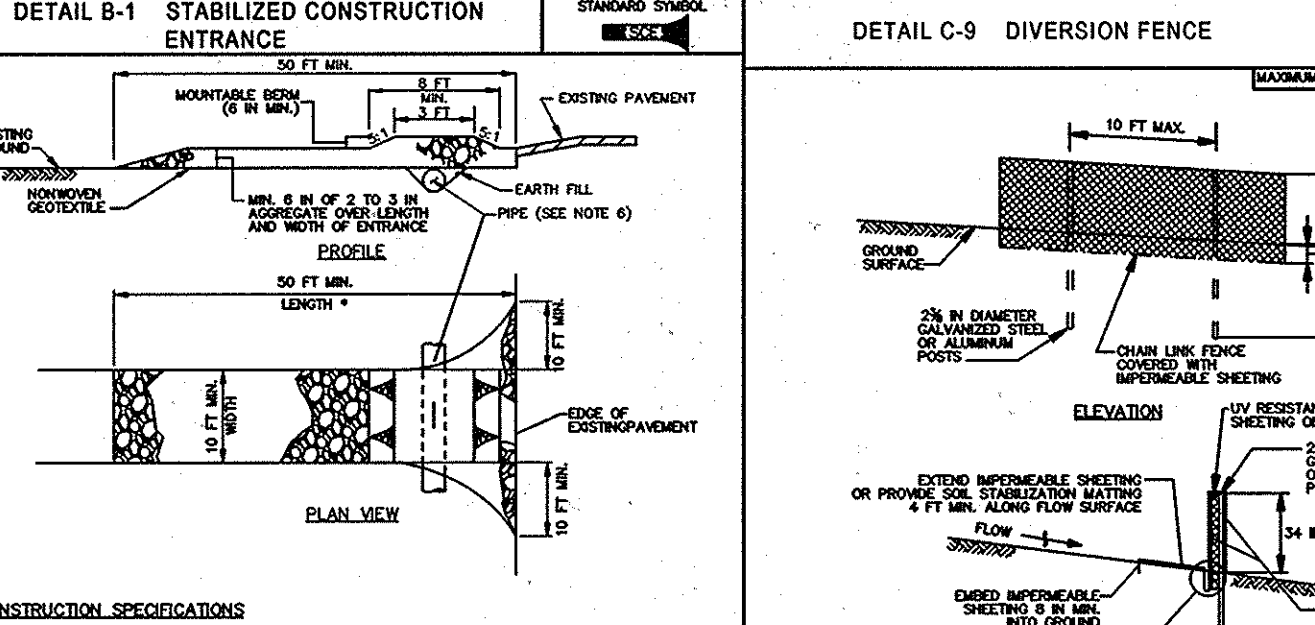
APPROVED: DEPARTMENT OF PLANNING AND ZONING, DATE: 10-20-15

STANDARD SEDIMENT CONTROL NOTES

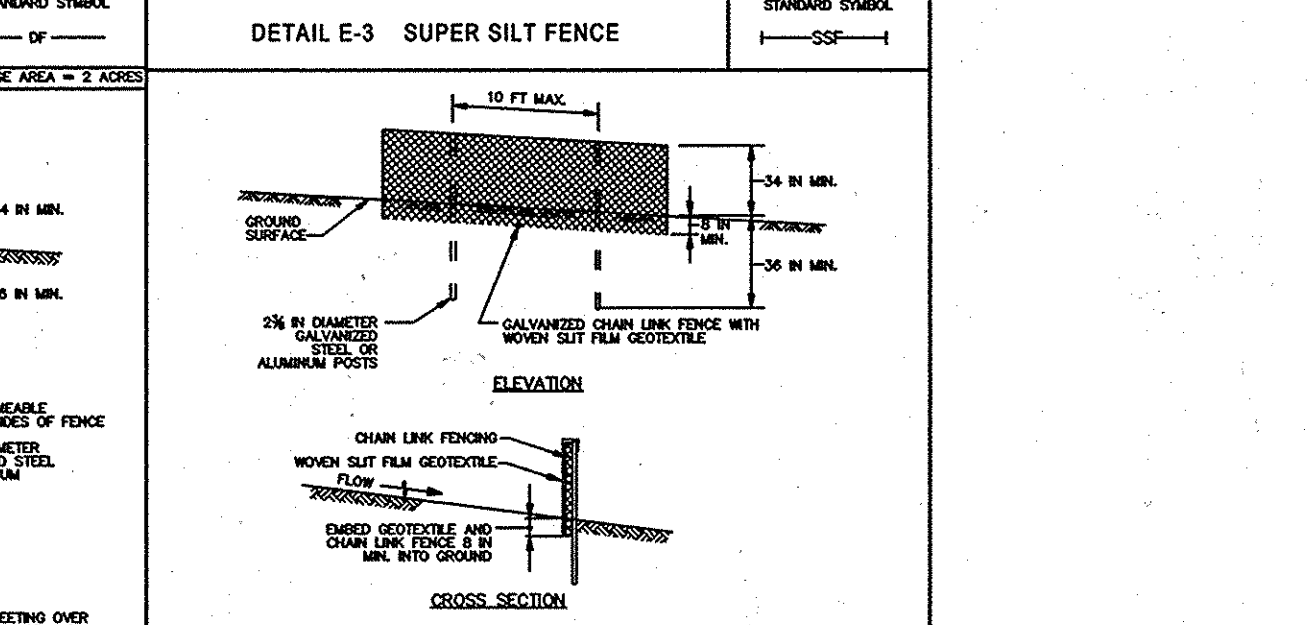
- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID) PRIOR TO THE START OF ANY CONSTRUCTION... 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE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

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT. (1 DAY) 2. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE AT LOCATIONS SHOWN (2 DAYS) 3. INSTALL CURB AND ASSOCIATED RIPRAP UNDER THE USE-IN-COMMON DRIVEWAY. (1 WEEK) 4. INSTALL SUPER SILT AND DIVERSION FENCE AT LOCATIONS SHOWN. (2 DAYS) 5. BASE PAVE DRIVEWAY AND INSTALL GRASS SWALE WITH TIMBER CHECK DAMS ALONG THE USE-IN-COMMON DRIVEWAY. (1 WEEK) 6. CONSTRUCT HOUSES AND STORMWATER MANAGEMENT FACILITIES (90 - 120 DAYS) 7. INSTALL MICRO-BIORETENTION AND INFILTRATION BERM AS EACH LOT'S CONSTRUCTION IS COMPLETE. 8. COMPLETE FINE GRADING OF SITE TO GRADES INDICATED. (2 DAYS PER HOUSE) 9. SEED AND MULCH ALL REMAINING DISTURBED AREAS. (1 DAY PER HOUSE) 10. WHEN ALL CONTRIBUTING DRAINAGE AREAS TO SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED, AND WITH PERMISSION OF SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING DISTURBED AREAS (1 DAY).



CONSTRUCTION SPECIFICATIONS 1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. 2. FINE ALL SURFACE WATER FLOWING TO OR OVER THE ENTRANCE. 3. PROVIDE APPROPRIATE SIGNAGE AND CHAIN LINK FENCING TO PROTECT THE ENTRANCE FROM OVERHEAD POWER LINES AND TO PREVENT UNAUTHORIZED ACCESS TO THE SITE.



CONSTRUCTION SPECIFICATIONS 1. FASTER 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (24 MIN MAXIMUM OPENING) 42 INCHES IN HEIGHT... 2. PROVIDE APPROPRIATE SIGNAGE AND CHAIN LINK FENCING TO PROTECT THE ENTRANCE FROM OVERHEAD POWER LINES AND TO PREVENT UNAUTHORIZED ACCESS TO THE SITE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING, DATE: 10-20-15, DATE: 10-23-15

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17942, EXP DATE 09/03/16, DATE: 9/25/15

TURLEY'S OVERLOOK, LOTS 1 THRU 3 SINGLE FAMILY DWELLING, PARCEL 797, 798, 799. HOWARD COUNTY, FIRST ELECTION DISTRICT. MILDBERG & ASSOC., INC. 7360-B Grace Drive, Columbia, Maryland 21044 (410) 997-0299 Fax.