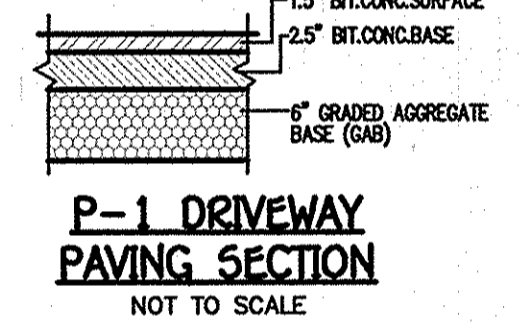
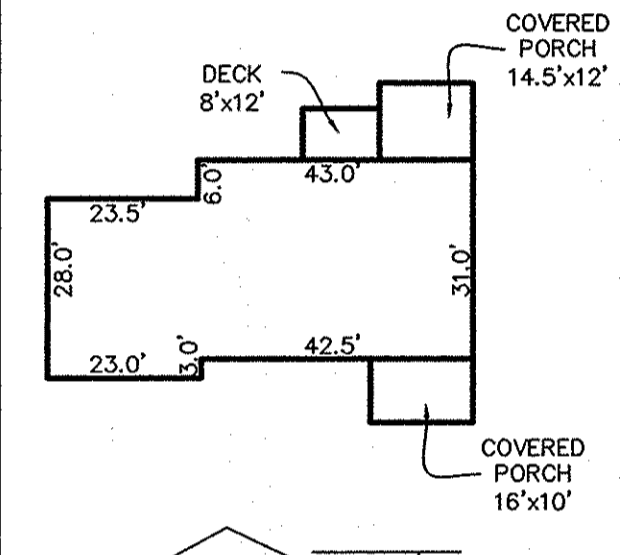
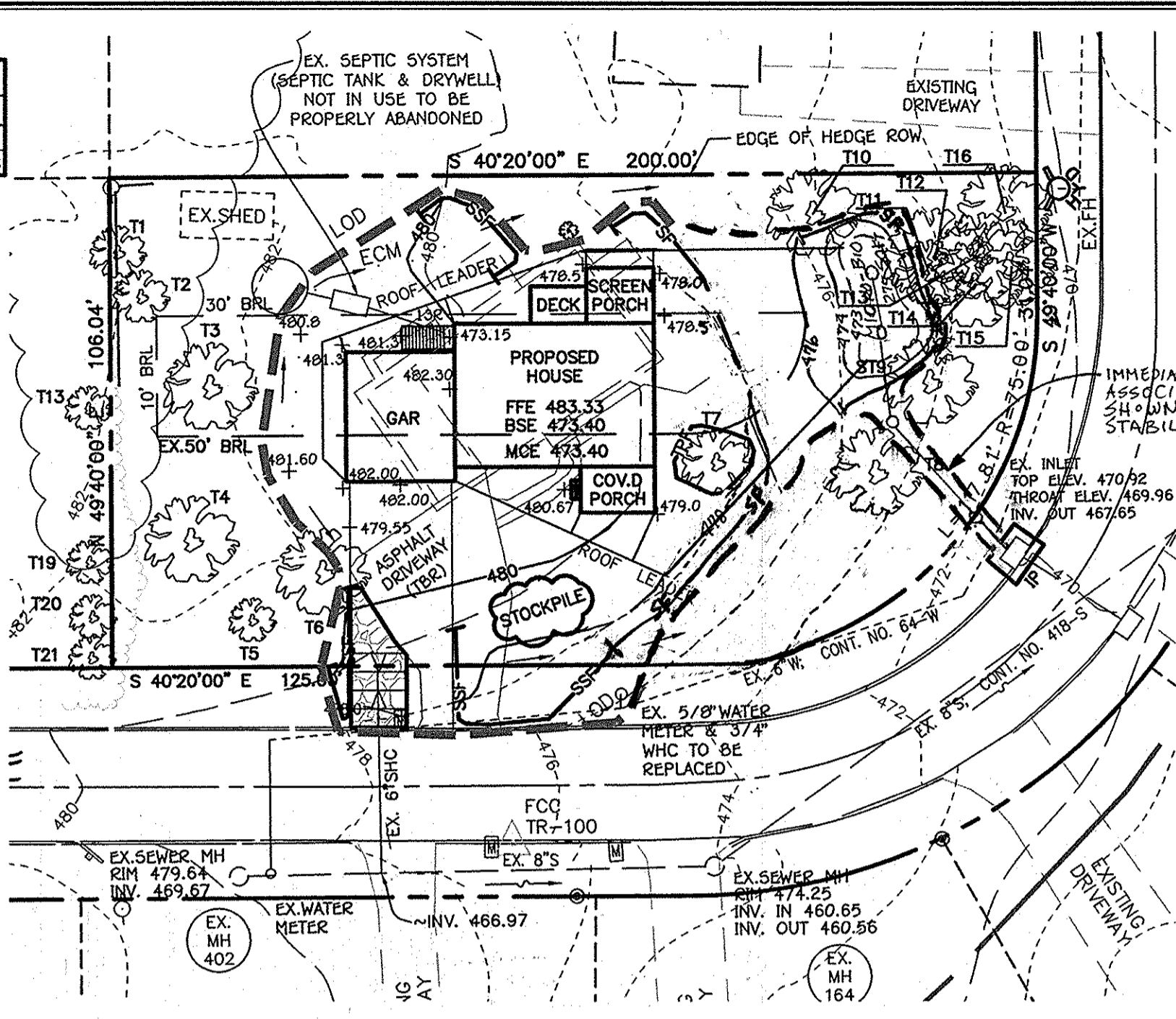


SHEET INDEX	
SHEET No.	SHEET TITLE
1	SITE DEVELOPMENT PLAN
2	SEDIMENT & EROSION CONTROL NOTES & DETAILS

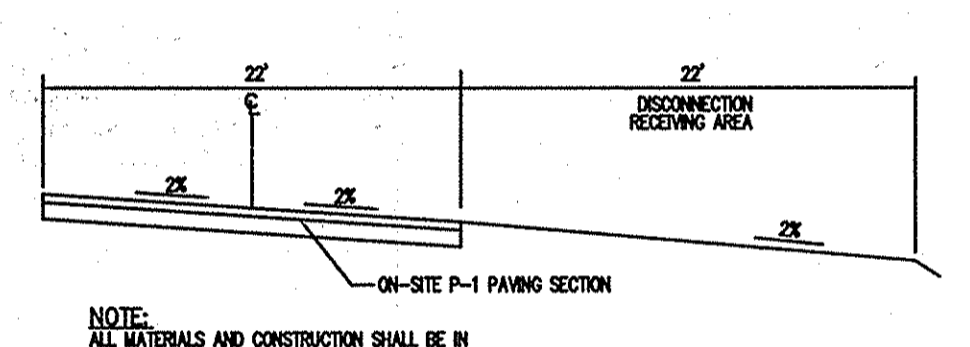
ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
8	5148 BONNIE ACRES DRIVE

- LEGEND**
- EXISTING 2' CONTOURS
 - EXISTING 10' CONTOURS
 - o- EXISTING TREE LINE
 - o- SOIL LINES AND TYPES
 - STABILIZED CONSTRUCTION ENTRANCE
 - SF SILT FENCE
 - SSF SUPER SILT FENCE
 - TPF TREE PROTECTIVE FENCING
 - LIMIT OF DISTURBANCE



SITE ANALYSIS DATA CHART

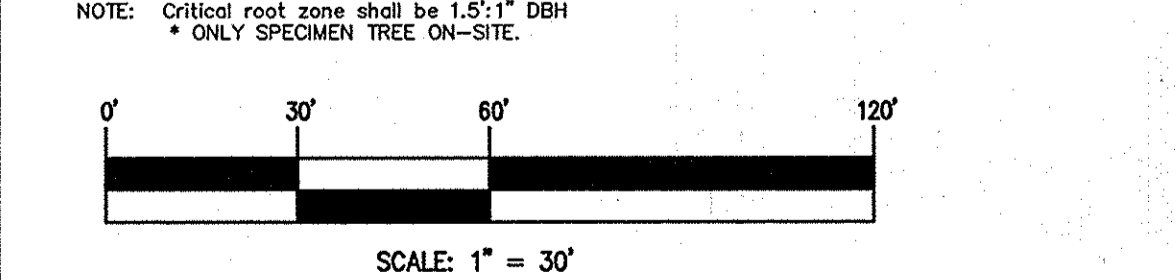
- TOTAL AREA OF THIS SUBMISSION = 20,000 SQ.FT. OR 0.46 AC.±
- LIMIT OF DISTURBED AREA = 11,040 SQ.FT. OR 0.25 AC.±
- PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
- PROPOSED USE: RESIDENTIAL
- PREVIOUS HOWARD COUNTY FILES: EOP-14-043.
- TOTAL AREA OF FLOODPLAIN LOCATED ON SITE = 0.00 SQ.FT.±
- TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 SQ.FT.±
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.00 SQ.FT.±
- TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0.00 SQ.FT.±
- TOTAL AREA OF EXISTING FOREST = 0.00 SQ.FT.±
- TOTAL AREA OF FOREST TO BE RETAINED = 0.00 SQ.FT.±
- TOTAL AREA OF LOTS / BUILDABLE PARCELS = 20,000 SQ.FT.± OR 0.46 AC.±
- TOTAL GREEN OPEN AREA = 16,487 SQ.FT.± OR 0.38 AC.±
- TOTAL IMPERVIOUS AREA = 3,513 SQ.FT.± OR 0.08 AC.±
- TOTAL AREA OF ERODIBLE SOILS = 0.00 SQ.FT.±



OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED, DISCONNECTION OF NONROOFTOP RUNOFF (N-2)

- MAINTENANCE OF AREAS RECEIVING DISCONNECTION RUNOFF IS GENERALLY NO DIFFERENT THAN THAT REQUIRED FOR OTHER LAWN OR LANDSCAPED AREAS. THE AREAS RECEIVING RUNOFF SHOULD BE PROTECTED FROM FUTURE COMPACTATION OR DEVELOPMENT OF IMPERVIOUS AREA. IN COMMERCIAL AREAS FOOT TRAFFIC SHOULD BE DISCOURAGED AS WELL.

KEY	SPECIES, SIZE (DBH)	CONDITION	STATUS
T1	Black Cherry, 6"	-	TO BE REMOVED
T2	Black Cherry, 5.5"	-	-
T3	White Oak, 22"	FAIR CONDITION	-
T4	Black Oak, 29"	FAIR CONDITION-SOME LIMB DIEBACK	-
T5	Flowering Dogwood, 3"	-	-
T6	White Oak, 27"	-	-
T7	Japanese Maple, 6"	MULTI-STEM	-
T8	Black Oak, 17.18"	FAIR, LIMB DIEBACK	-
*ST9	Black Oak, 33"	POOR CONDITION-TRUNK ROT	-
T10	White Oak, 3"	-	-
T11	Black Oak, 3"	-	-
T12	Tulip Poplar, 20"	-	-
T13	Black Oak, 6"	-	-
T14	Black Gum, 11"	-	-
T15	White Oak, 22.5"	-	-
T16	White Oak, 15.5"	FAIR CONDITION-LIMB DIEBACK	-
T17	Mockernut Hickory, 17"	-	-
T18	Black Oak, 3"	OFFSITE	-
T19	Black Oak, 6"	OFFSITE	-
T20	Black Oak, 3"	OFFSITE	-
T21	Hemlock, 6"	OFFSITE	-

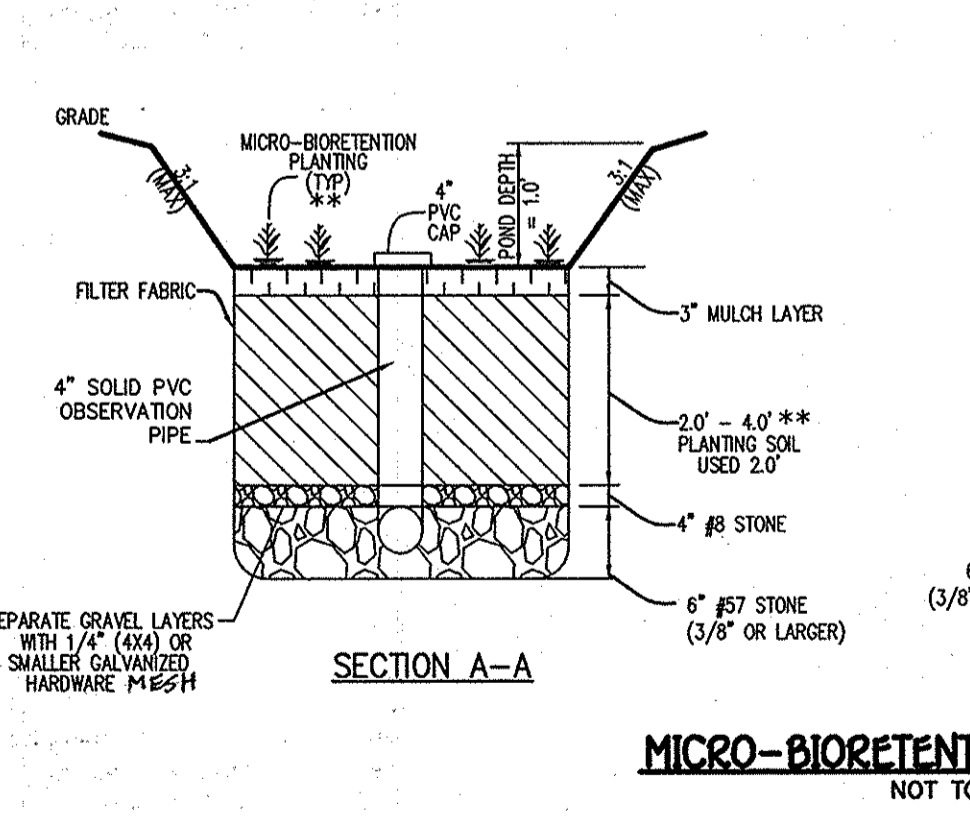


MICRO-BIORETENTION DETAIL (M-6)
NOT TO SCALE

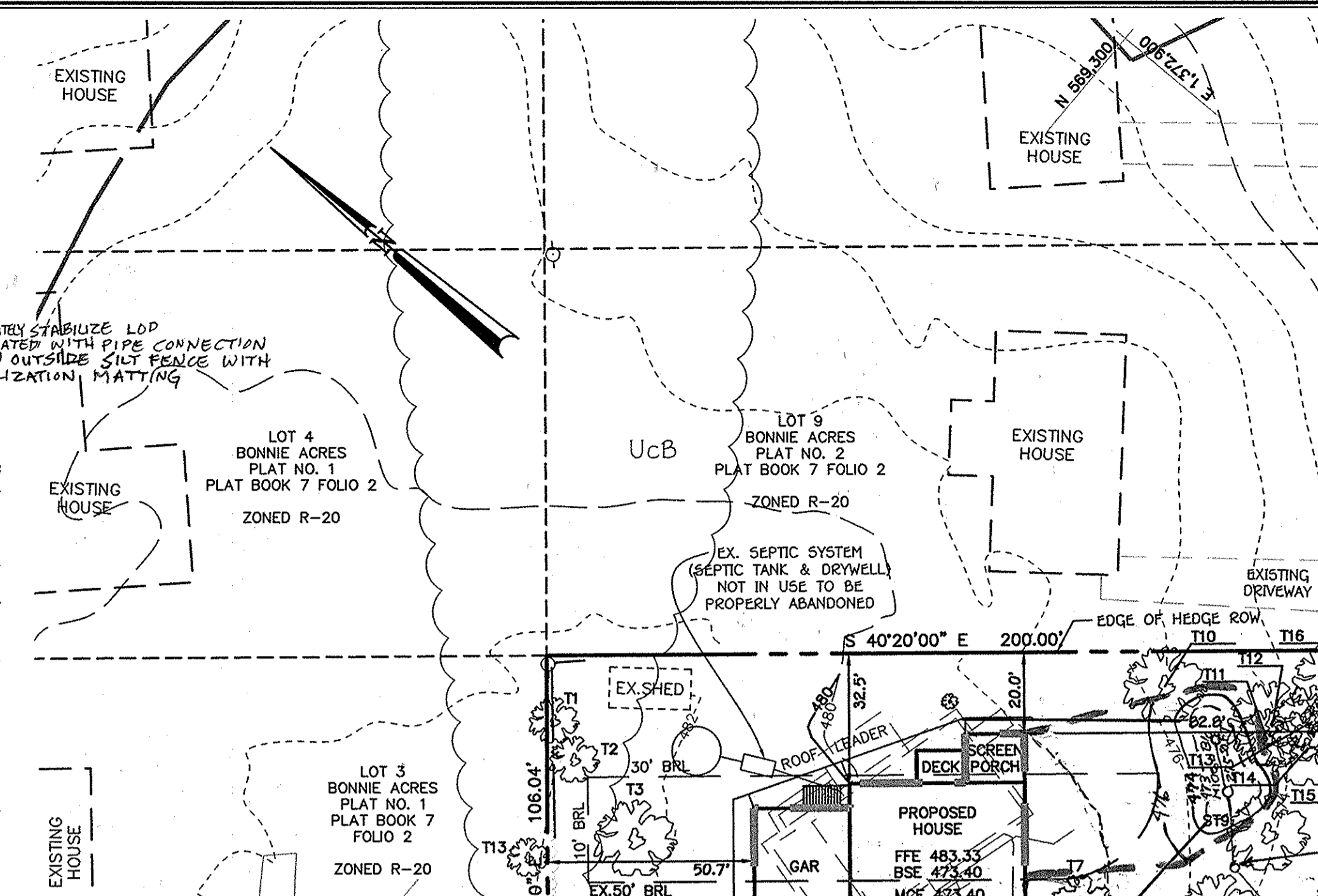
DATE	DESCRIPTION	REVISION BLOCK
10/22/14	REVISE LOCATION OF MICRO-BIO, ASSOC. DRAINAGE AREA, GRADING & SEDIMENT CONTROLS	

MICRO-BIORETENTION PLANT MATERIAL

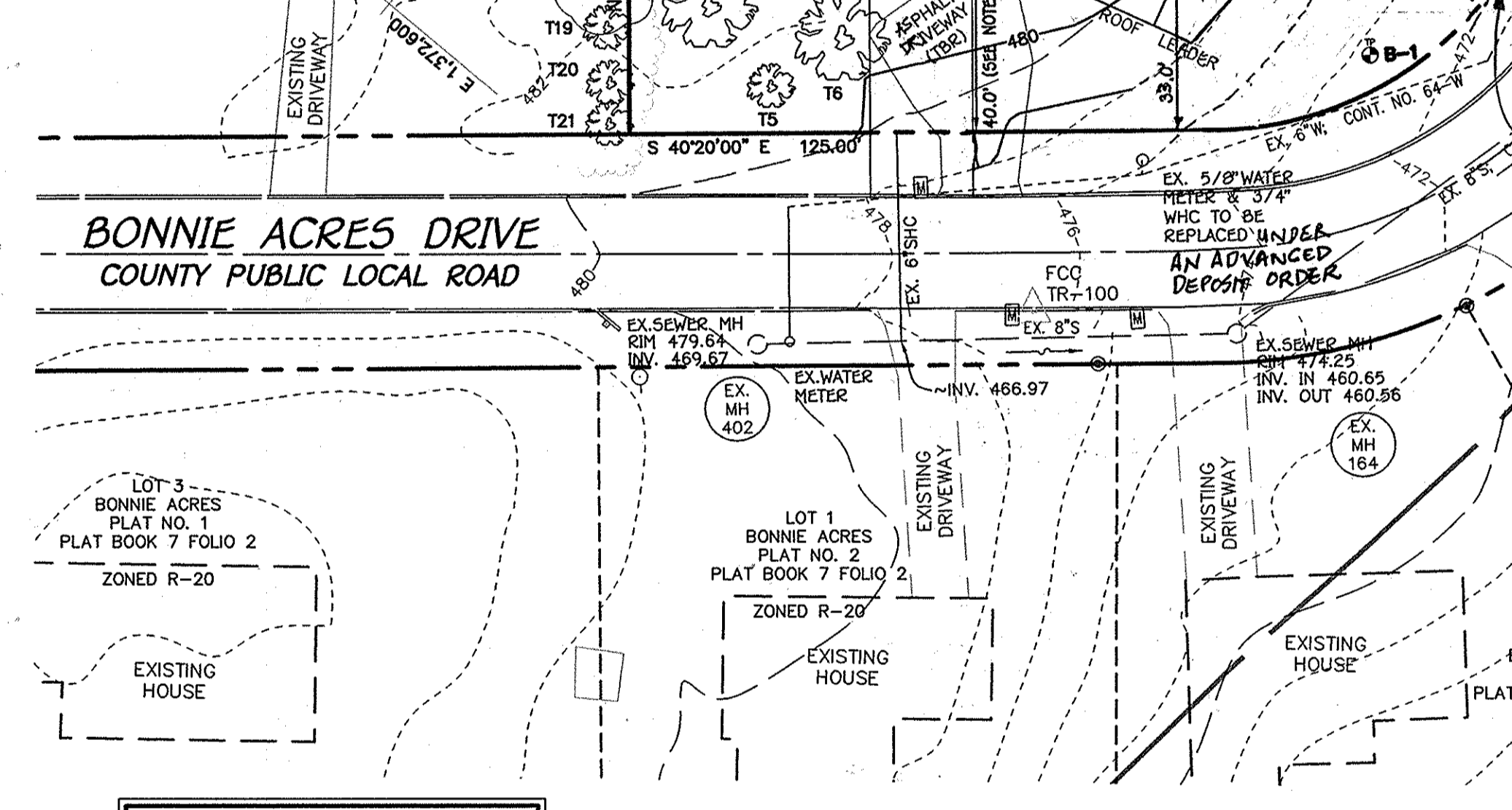
QUANTITY	NAME	MAXIMUM SPACING (FT.)
25	MIXED PERENNIALS	1.5 TO 3.0 FT.
1	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION



MICRO-BIORETENTION PLANTING DETAIL
NOT TO SCALE

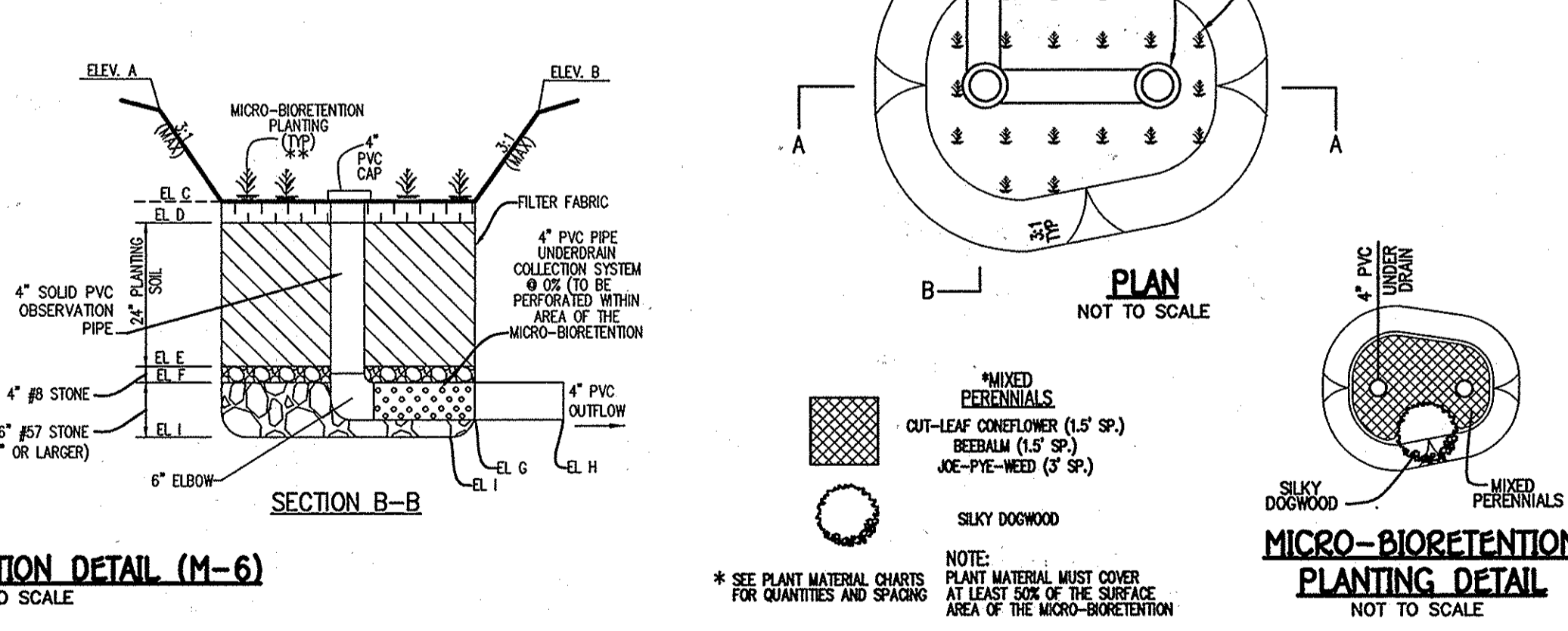


BONNIE ACRES DRIVE COUNTY PUBLIC LOCAL ROAD



SOILS LEGEND

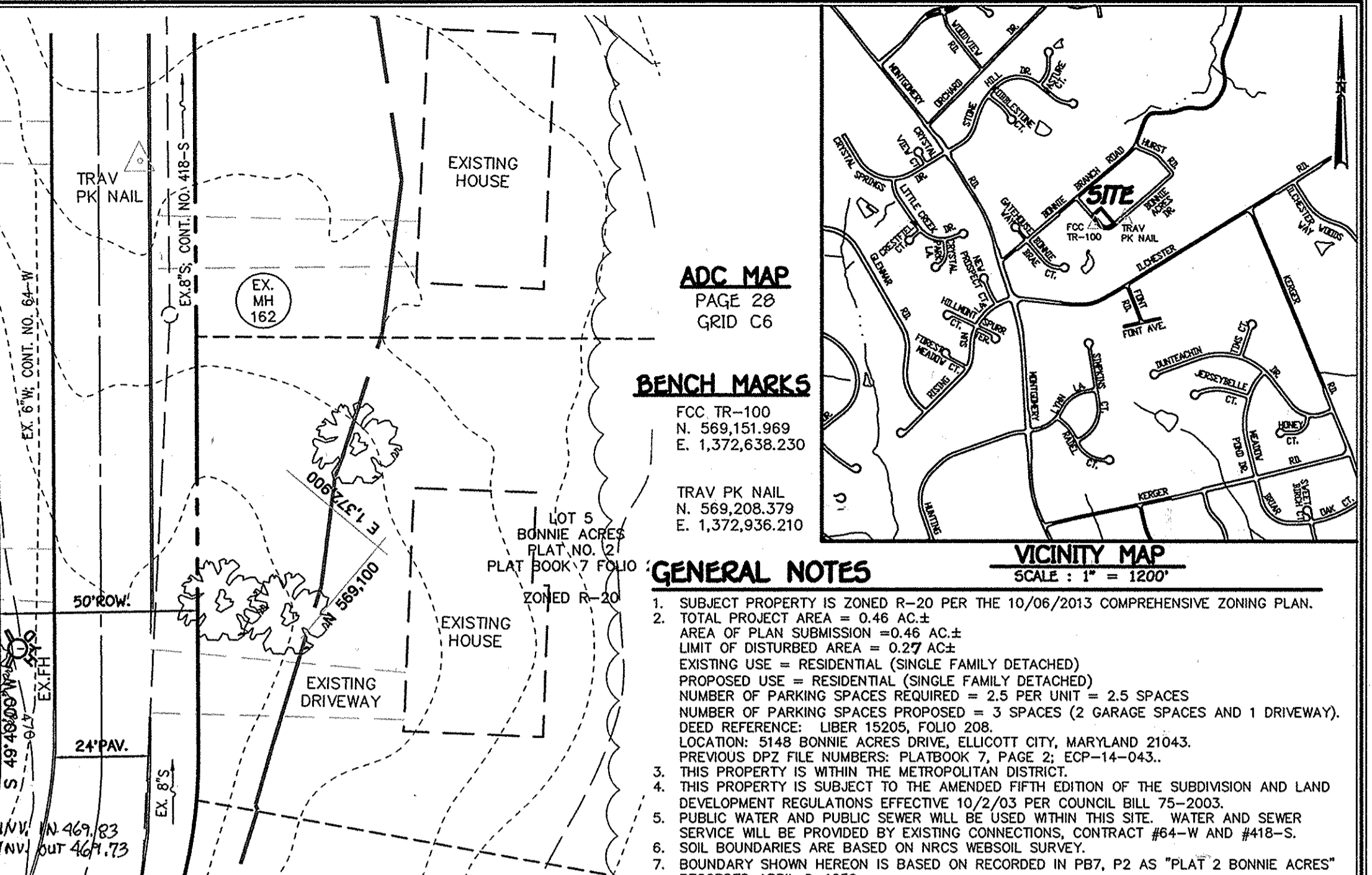
SOIL	NAME	CLASS	KFACTOR
UcB	Urban land-Chillum-Beltville complex, 0 to 5 percent slopes	D	0.37



MICRO-BIORETENTION PLANTING DETAIL
NOT TO SCALE

OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE ORDERED FOR DISEASE AND INSECT RESISTANT AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PREPARE ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.1.1 AND 2.
- THE OWNER SHALL PERFORM A PLAN IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS AND REPLACE ALL DEFICIENT STAVES AND BRACES.
- THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.



GENERAL NOTES

- SUBJECT PROPERTY IS ZONED R-20 PER THE 10/06/2013 COMPREHENSIVE ZONING PLAN.
- TOTAL PROJECT AREA = 0.46 AC.±
- AREA OF PLAN SUBMISSION = 0.46 AC.±
- LIMIT OF DISTURBED AREA = 0.27 AC.±
- EXISTING USE = RESIDENTIAL (SINGLE FAMILY DETACHED)
- PROPOSED USE = RESIDENTIAL (SINGLE FAMILY DETACHED)
- NUMBER OF PARKING SPACES REQUIRED = 2.5 PER UNIT = 2.5 SPACES
- NUMBER OF PARKING SPACES PROPOSED = 3 SPACES (2 GARAGE SPACES AND 1 DRIVEWAY).
- DEED REFERENCE: LIBER 15205, FOLIO 206
- THIS PROPERTY IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/2/03 PER COUNCIL BILL 75-2003.
- PUBLIC WATER AND PUBLIC SEWER WILL BE USED WITHIN THIS SITE. WATER AND SEWER SERVICE EXISTING CONNECTIONS CONTRACT #64-W AND #418-S.
- SOIL BOUNDARIES ARE BASED ON NRCS WEBSOIL SURVEY.
- BOUNDARY SHOWN HEREON IS BASED ON RECORDED IN PBT, P2 AS "PLAT 2 BONNIE ACRES" RECORDED APRIL 2, 1958.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PERFORMED BY FREDERICK WARD ASSOCIATES DATED OCTOBER 25, 2013 AND SUPPLEMENTED WITH HOWARD COUNTY GIS TOPOGRAPHY AT 5' CONTOUR INTERVAL INTERPOLATED FOR 2' CONTOUR INTERVAL AND WETLANDS OR FOREST STANDS EXIST PER FIELD INVESTIGATION BY ECO-SCIENCE PROFESSIONALS DATED DECEMBER 2013.
- EXISTING STRUCTURE AND DRIVEWAY PAVING TO BE REMOVED.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITY COMPANIES OR AGENCIES AT LEAST FIVE (5) WORKING DAYS BEFORE STARTING WORK SHOWN ON THESE PLANS:
 - STATE HIGHWAY ADMINISTRATION 410.531.5533
 - BGE (UNDERGROUND DAMAGE CONTROL) 410.850.4620
 - MISS UTILITY PIPELINE COMPANY 1.800.257.7777
 - HOWARD COUNTY, DEPT. OF PUBLIC WORKS, BUREAU OF UTILITIES 410.795.1390
 - HOWARD COUNTY HEALTH DEPARTMENT 410.313.4900
 - AT&T 1.800.252.1133
 - VERIZON 1.800.743.0033/410.224.9210
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP, WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY IN ADDITION TO MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- EXISTING UTILITIES ARE LOCATED BY THE USE OF ANY OR ALL OF THE FOLLOWING: ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND SEWER PLANS AND OTHER AVAILABLE RECORD DRAWINGS, AND MISS UTILITY MARKINGS. APPROXIMATE LOCATION OF THE EXISTING UTILITIES SHALL BE SHOWN FOR CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO THE CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- ALL TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- DRIVEWAY(S) 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 REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE);
 - SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1" MINIMUM);
 - GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;
 - STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (HVS-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.
- ALL DITCHES AND SWALES WILL HAVE EROSION CONTROL MATTING.
- STORMWATER MANAGEMENT (SWM) IS PROVIDED FOR THIS PROJECT. THE ON-SITE P-1 OF 1.0" IS BEING TREATED THROUGH USE OF MICRO-BIORETENTION AND NON-ROOFTOP DISCONNECTION.
- IN ACCORDANCE WITH SECTION 16.124 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 SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- EXISTING DRIVEWAY ENTRANCE IS BEING UTILIZED.
- THIS SITE IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202(a)(1)(v) OF THE HOWARD COUNTY CODE, SINCE IT IS DEVELOPMENT OF LAND WHICH IS LESS THAN 40,000 SQ.FT.
- SEWER HOUSE CONNECTION (SHC) TO BE AT 2.0% UNLESS OTHERWISE NOTED. CLEANOUTS ARE TO BE PROVIDED AT ALL BENDS.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. THIS LOT IS EXEMPT FROM THE PROVISIONS OF THE LANDSCAPE MANUAL SINCE IT IS AN EXISTING LOT OF RECORD.
- 95% COMPACTION IN FILL AREAS SHALL BE IN ACCORDANCE WITH ASTM D 1585 STANDARDS.
- AN ADMINISTRATIVE ADJUSTMENT HAS BEEN APPROVED FOR THE REDUCTION IN ZONING SETBACKS FROM 50' TO 30' FROM 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 SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. APPROVAL WAS GRANTED WITH THE FOLLOWING CONDITIONS:
 - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
 - THE GRANTED ADMINISTRATIVE ADJUSTMENT SHALL APPLY SOLELY TO THE SINGLE-FAMILY DETACHED DWELLING AS DEPICTED ON THE ADMINISTRATIVE ADJUSTMENT PLAN SUBMITTED BY THE PETITIONER AND NOT TO ANY OTHER STRUCTURE, ADDITION, BUILDING OR USE.
 - THIS DECISION AND ORDER SHALL BE MAINTAINED IN THE OWNER'S PROPERTY RECORDS AND SHALL BE TRANSFERRED TO ANY SUCCEEDING OWNER OF THE PROPERTY.
- THE PRIVATE SEPTIC TO BE PROPERLY ABANDONED AT THE DESTRUCTION PERMIT. THE SEPTIC WELL LOCATION NOT OBSERVED, TO BE DISCOVERED AND PROPERLY ABANDONED IN ACCORDANCE WITH HEALTH DEPARTMENT REQUIREMENTS.

VICINITY MAP

SCALE: 1" = 1200'

DESIGN BY:
DRAWN BY:
CHECKED BY:

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 38386. EXPIRATION DATE: 01/12/2016.

ENGINEER'S CERTIFICATE
I certify that this plan for sediment and erosion 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 Howard Soil Conservation District.

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan for sediment and erosion control, and that all 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 Howard Soil Conservation District.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Director - Department of Planning and Zoning
Chief, Division of Land Development
Chief, Development Engineering Division

SITE DEVELOPMENT PLAN
5148 BONNIE ACRES DRIVE
LOT 8
TAX MAP No.: 31 GRID NO. 15 PARCEL No.: 413
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: APRIL, 2014

DEVELOPER/OWNER
JASON SCOTT STEINHORN & CAROL JEAN SCOTT
5148 BONNIE ACRES DRIVE
ELLCOTT CITY, MARYLAND 21043
770-905-6390

SUBDIVISION
BONNIE ACRES
SECTION/AREA N/A
LOT NO. 8
PLAT BOOK 7 BLOCK NO. 15 ZONE R-20 TAX/PARCEL 31/413 ELEC. DIST. FIRST CENSUS TR. 601104

SHEET 1 OF 2 **SOP-14-045**

