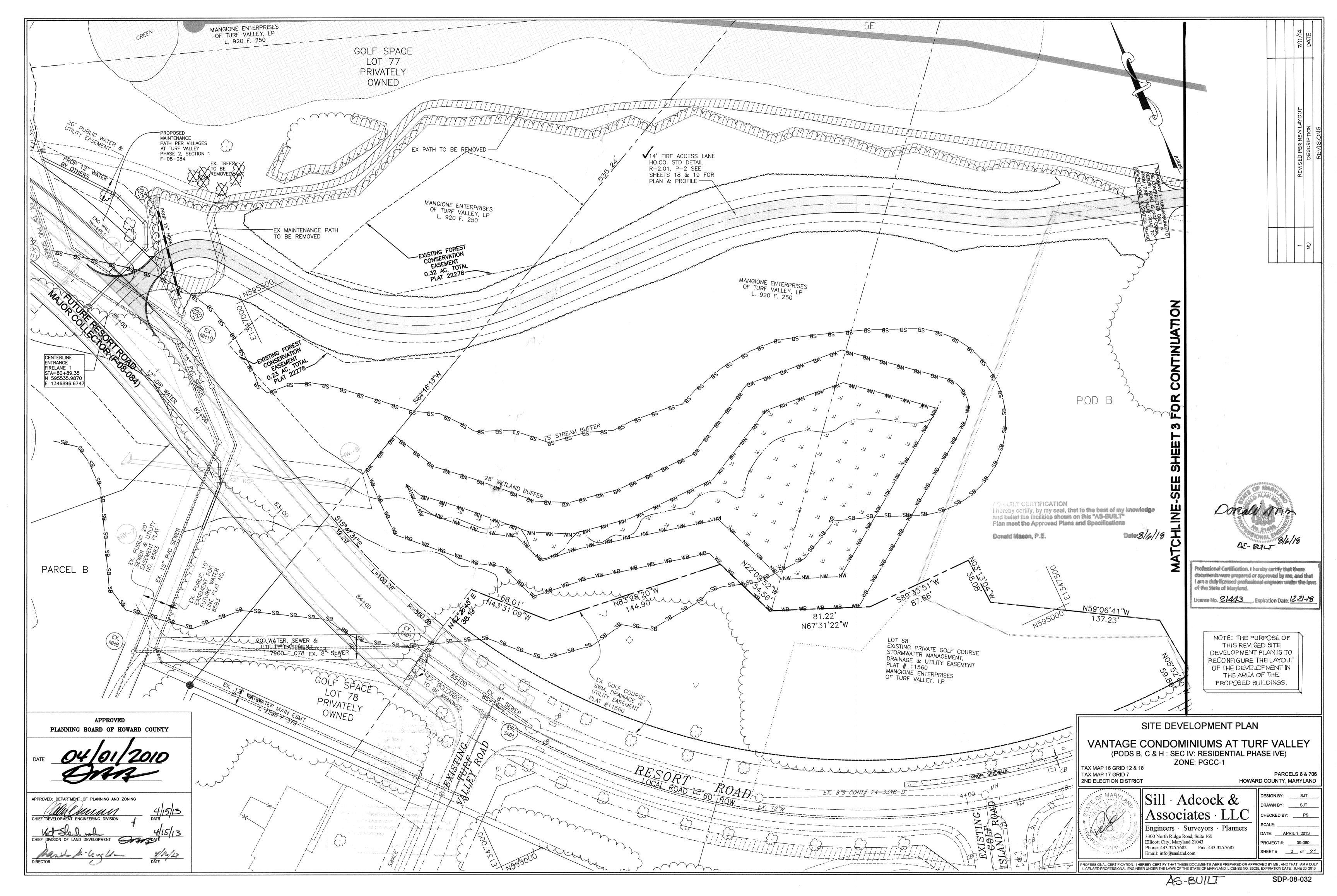
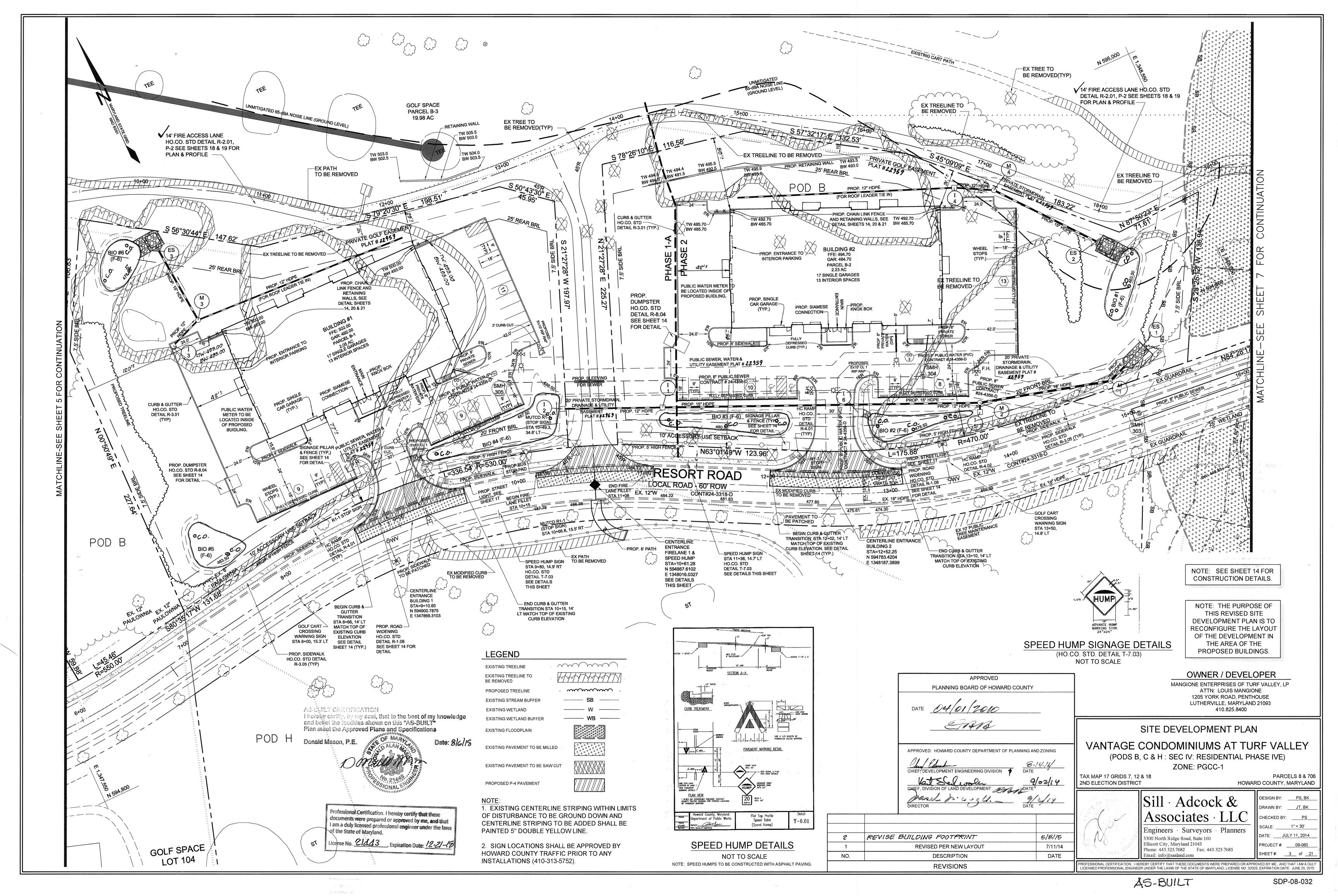
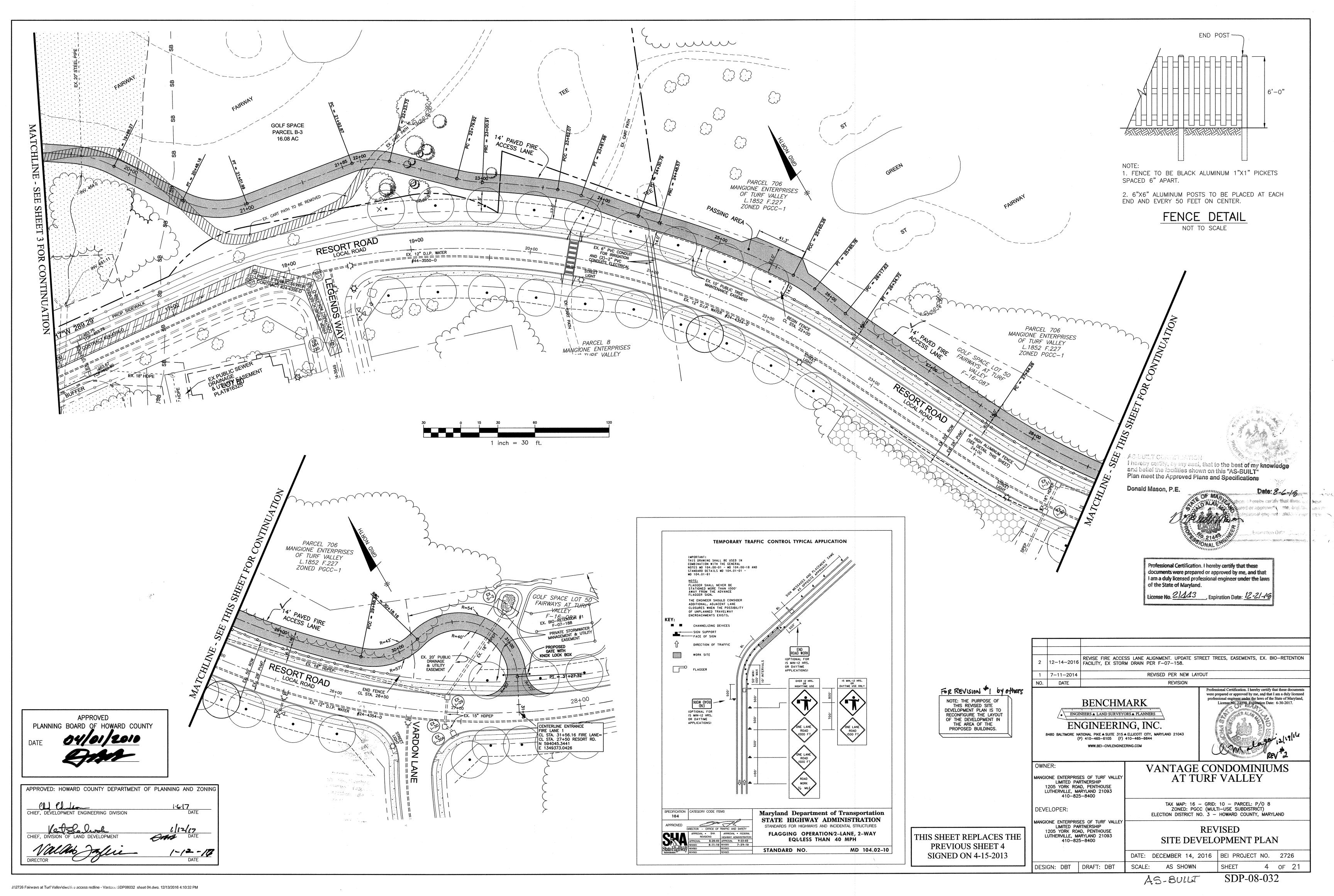
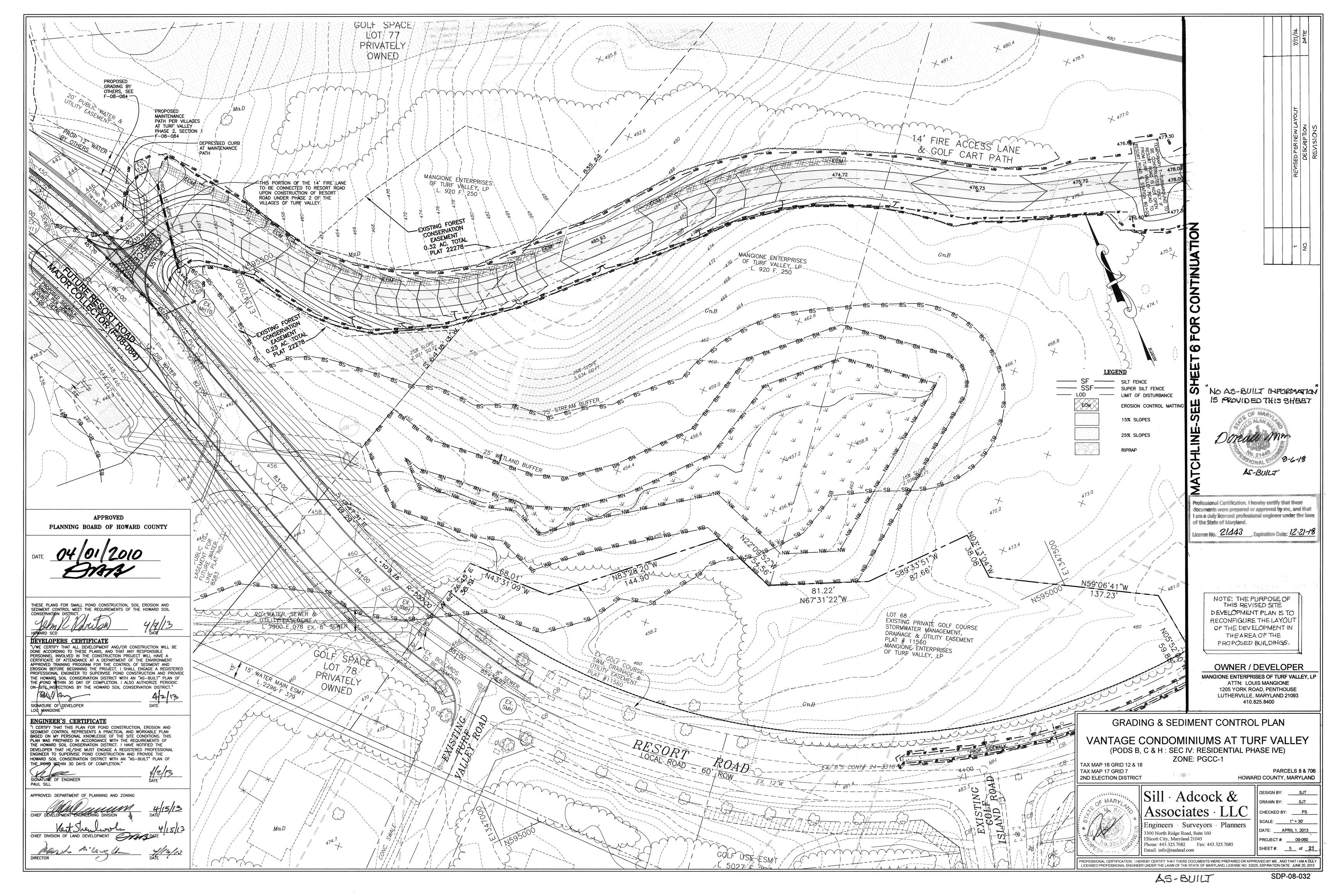
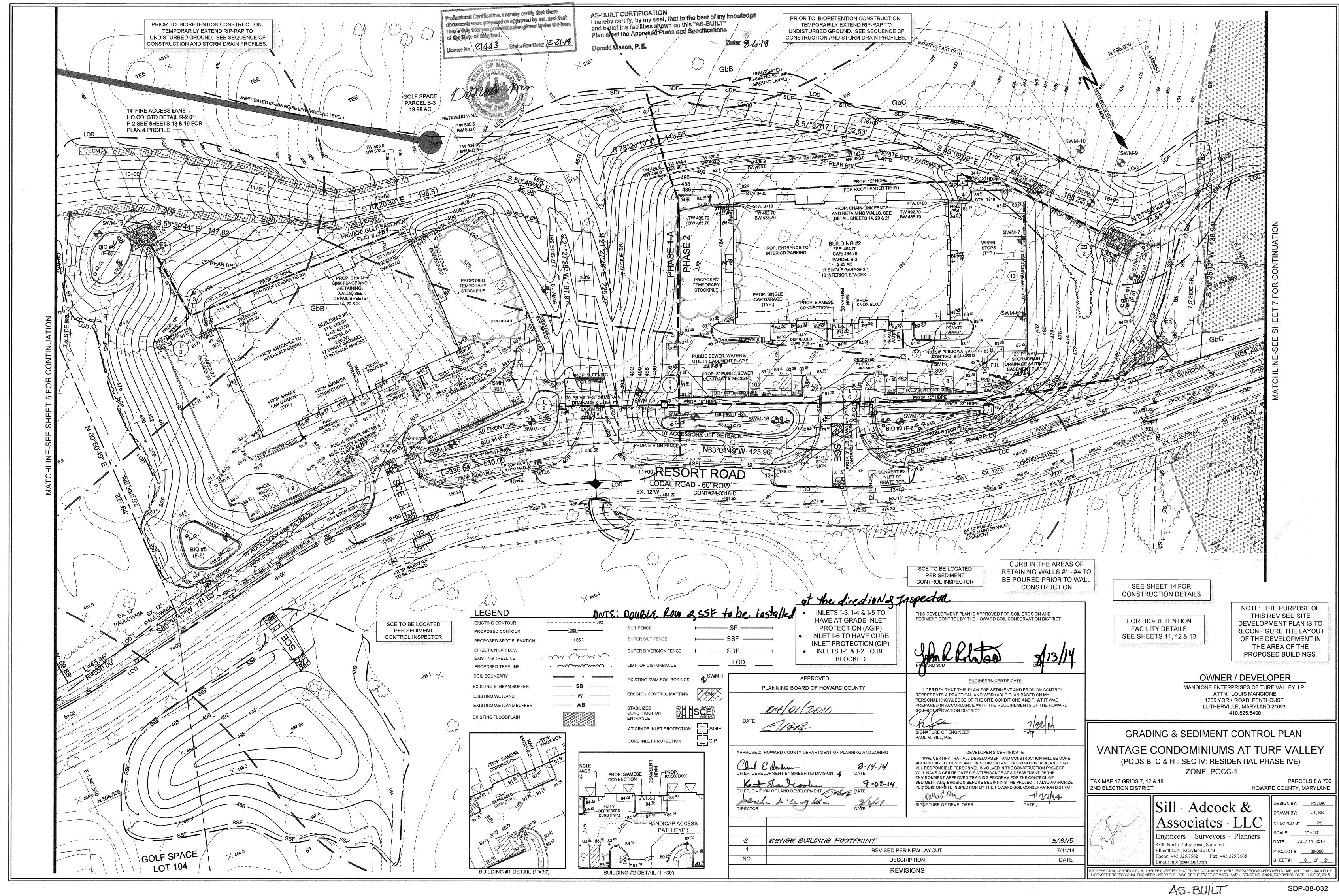
LEGEND GENERAL NOTES: DESCRIPTION 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE. SITE DEVELOPMENT PLAN ----- PROPERTY LINE 2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION A (410)313-1880 AT LEAST FIVE(5) WORKING DAYS PROIR TO THE START OF WORK 3. TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES(MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO PLACEMENT OF ANY ASPHALT. TREE LINE VANTAGE CONDOMINIUMS AT TURF VALLEY 4. PROJECT BACKGROUND: LOCATION: GRID 16-12 & 16-18. - P/O PARCEL 8 -TAX MAP 16 & 17 PROP. 8"W ZONING: PGCC RESIDENTIAL SUBDISTRICT ELECTION DISTRICT: SECOND PROP. 15" S DPZ REFERENCE: S-86-13 (PB 181, PB 294, PB 300); F-94-06; SDP-95-121; S-94-45; SP-95-14; F-96-107; F-96-150; F-96-151; SP-97-12; S-04-12, S-06-09, P-06-010, F-08-057, PB 351 & PB 368; PLAT #20286-20287; WP-09-211; WP-10-159; WP-11-168; WP-12-129 __ G ___ G __ DEED REFERENCE: LIBER 0920, FOLIO 250 REFER TO DENSITY TABULATION FOR DENSITY REQUIRED TO SUPPORT THIS DEVELOPMENT --- OH------OH ----AREA OF TRACT: 24.0 ACRES (POD B = 7.3 AC., POD H = 16.7 AC.) SECOND ELECTION DISTRICT LIMIT OF SUBMISSION: 9.46ACRES. UGT UNDERGROUND TELEPHONE OPEN SPACE REQUIRED (15%): 3.6 ACRES ----- UGT -----OPEN SPACE/GOLF SPACE PROVIDED: 19.98 ACRES, RIGHT OF WAY DEDICATION: O ACRES, CATV — CABLE T.V. MAXIMUM NUMBER OF UNITS ALLOWED: POD B: 70, POD H: 0 UTILITY POLE TOTAL ALLOWED: 70 TOTAL NUMBER OF UNITS PROPOSED FOR VANTAGE CONDOMINIUMS: 60 LIMIT OF DISTURBANCE: 9.46 ACRES HOWARD COUNTY, MARYLAND PARCELS B-1. B-2, B-3 & NON-BUILD ABLE BULK PARCEL C-1 PROPOSED USE: RESIDENTIAL-CONDOMINIUMS (MULTI-FAMILY APARTMENTS) 5. THE FLOODPLAIN STUDY FOR THIS PROJECT WAS PREPARED BY R.M. MOCHI GROUP, P.C., DATED & APPROVED ON OCTOBER 23, 1995. ======== CURB & GUTTER 6. TOPOGRAPHIC INFORMATION IS BASED ON AERIAL TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO., INC. DATED APRIL 23, 1992. VERTICAL DATUM IS NAD 83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS CONTOUR LINE _x156.50 ADDRESS CHART ELEV.=486.20 INTERSTATE 70 8. BOUNDARY INFORMATION IS BASED ON A FIELD RUN SURVEY BY JOHN E. HARMS, JR. & ASSOCIATES, INC. AUGUST 2007. STREET ADDRESS DEWATERING BASIN), PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT, WATER AND SEWER ARE PUBLIC. EXTENSIONS OF SEWER CONTRACT #24-3549-D, #24-4356D AND CONTRACT #44-3550-D FOR WATER WILL BE PROVIDED. 2000 MARYLAND STORMWATER DESIGN MANUAL. VOLUMES LAND I 10530 RESORT ROAD 10. STORMWATER MANAGEMENT FOR THIS PROJECT IS PROVIDED "NACCOPPANCE WITH THE BY MORE TENTION BACK." AND NON-PROFIDE DISCONNECTION OF THE PROVIDED IN ACCOPPANCE WITH THE SOIL BORING LOCATION BY BIORETENTION PACILITES, SHEET FLOW TO CONSERVATION MEAS AND NON-ROOFTOP DISCONNECTION CREDITS. THE FACILITIES OWNED AND MAINTAINED BY VANTAGE CONDOMINIUMS A 10520 RESORT ROAD ----- NON TIDAL WETLANDS WETLANDS BUFFER 11. NO CEMETERIES, HISTORIC STRUCTURES OR EXISTING STRUCTURES ARE ON LOCATED WITHIN THE PROJECT BOUNDARIES 12 THIS PROJECT IS EXEMPT FROM HOWARD COUNTY FOREST CONSERVATION REQUIREMENTS LINDER SECTION 16 1202(b)(1)(iv) OF THE PERMIT INFORMATION CHART HOWARD COUNTY CODE SINCE IT IS A PLANNED UNIT DEVELOPMENT WHICH HAD PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND WAS RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE DECEMBER 31, 1992. CONTROL STATION NO. 0012, PROJECT NAME SECTION/AREA LOT/PARCEL# 0012)MONUMENT STAMPED BRASS / 13. PROPERTY IS NOT ADJACENT TO ANY SCENIC ROADS. DISC SET IN CONCRETE. PARCELS B-1 & B-14. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE(5) DAYS PRIOR TO ANY EXCAVATION WORK: N596,502 E1,340,192 ELEV. 486,20 CONDOMINIUMS OF PARCEL 8 C&P TELEPHONE CO. HOWARD COUNTY BUREAU OF LITHTIES ZONE TAX MAP ELEC. DIST. CENSUS TRAC STABILIZED CONSTRUCTION AT&T CABLE LOCATION DIVISION 410)393-3533 410)685-0123 ENTRANCE (410)531-5535 22336 HO. CO. DEPT. OF PUBLIC WORKS/CONSTRUCTION INSPECTION DIVISION (410) 313-1880 HOWARD COUNTY GEODETIC ASPHALT PAVING 15. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION CONTROL STATION 16E1 SEWER CODE 401200 MONUMENT STAMPED BRASS CONCRETE SIDEWALK CODE AND THE LANDSCAPE MANUAL FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (29 SHADE TREES, 6 EVERGREENS, AND 22 SHRUBS) WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF 10,260-00 PROPOSED IMPROVEMENTS DISC SET IN CONCRETE OR PAVING N593,250 E1,340,192 ELEV. 463(89 ั CONSTRUCT NEW RESIDENTIAL CONDOMINIUMS, GRADE, 15% SLOPES 17. <u>BULK REGULATIONS:</u> PERMITTED USES: ALL USES AS PER TURF VALLEY PGCC DISTRICT, RESIDENTIAL SUBDISTRICT FINAL DEVELOPMENT PLAN, PROVIDE PARKING. SHC. WHC. STORM DRAIN & SWMF 25% SLOPES PROPOSED USE: CONDOMINIUM/APARTMENT UNIT: PERMITTED HEIGHT: APARTMENT BUILDINGS - 40 FEET **EXISTING EASEMENTS** ACCESSORY STRUCTURES - 15 FEET PROPOSED HEIGHT: CONDOMINIUM/APARTMENT BUILDINGS - 40 FEET MEAN HEIGHT SOILS CHART (LOWER LEVEL SINGLE GARAGES, 1ST, 2ND & 3RD FLOOR LIVING AREAS) PRIVATE SWM, ACCESS, DRAINAGE, & UTILITY EASEMENT MAXIMUM DENSITY FOR TOTAL PGCC RESIDENTIAL SUBDISTRICT IS 1.75 DWELLING UNITS PER ACRE. **TYPE** DESCRIPTION EXISTING DENSITY FOR TOTAL PGCC RESIDENTIAL SUBDISTRICT IS 0.75 DWELLING UNITS PER ACRE. (EXCLUDES THIS PROJECT) PROPOSED DENSITY FOR TOTAL PGCC RESIDENTIAL SUBDISTRICT IS 1.75 DWELLING UNITS PER ACRE. (INCLUDES THIS PROJECT). EROSION CONTROL MATTING GbA BAILE SILT LOAM, O TO 3 PERCENT SLOPES- TYPE B GbB GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES- TYPE B . APARTMENTS LESS THAN 40 FEET IN HEIGHT- 24 UNITS PER STRUCTURE APARTMENTS 40 FEET OR GREATER IN HEIGHT- 120 UNITS PER STRUCTURE GbC BAILE SILT LOAM, 8 TO 15 PERCENT SLOPES- TYPE B PLANNING BOARD OF HOWARD COUNTY MAXIMUM BUILDING LENGTH FOR RESIDENTIAL STRUCTURE = 120 FEET, UNLESS APPROVED BY PLANNING BOARD TO A MAXIMUM OF 300 GmB GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES— TYPE C PROPOSED BUILDING LENGTH FOR CONDOMINIUM STRUCTURE = 159 FEET. PERMITTED SETBACKS: GLENVILLE-BAILE SILT LOAM, O TO 8 PERCENT SLOPES- TYPE C FROM INTERNAL ROADS RESIDENTIAL STRUCTURES (FRONT OR SIDE) - 20 FEET ACCESSORY STRUCTURES (REAR) - 10 FEET MANOR LOAM, 15 TO 25 PERCENT SLOPES- TYPE B OTHER - 20 FEFT FROM LOT LINES WITHIN PGCC RESIDENTIAL SUBDISTRIC PRINCIPAL STRUCTURE - RESIDENTIAL (SIDE) - 7.5 FEET ZERO LOT LINE AND ALL OTHER USES - SIDE - 0 FEET A MINIMUM OF 15 FEET MUST BE PROVIDED BETWEEN STRUCTURES THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND DETACHED ACCESSORY GARAGES OR SHEDS - RESIDENTIAL SIDE OR REAR - 0 FEET OTHER ACCESSORY STRUCTURES TO RESIDENTIAL USES (SIDE) - 7.5 FEET NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET OTHER ACCESSORY STRUCTURES TO RESIDENTIAL USES (REAR) - 5 FEET 144 W THERE IS A 60% MAXIMUM LOT COVERAGE REQUIREMENT FOR SFA LOTS AND NO SPECIFIED COVERAGE REQUIREMENT FOR APARTMENTS. DEVELOPERS CERTIFICATE BUILDING #1-30 UNITS X 2 = 60 PARKING SPACES (INCLUDING 2 HANDICAPP SPACES) BUILDING #2-30 UNITS X 2 = 60 PARKING SPACES (INCLUDING 2 HANDICAPP SPACES) I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE TOTAL = 120 PARKING SPACES (INCLUDING 4 HANDICAPP SPACES documents and or approved by me, and that VICINITY MAP CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT lam a du professional engineer under the laws BUILDING #1 — IN GARAGES: 20 SPACES + SURFACE PARKING: 29 SPACES = 59 SPACES (INCLUDING 2 HANDICAPP SPACES) BUILDING #2 — IN GARAGES: 30 SPACES + SURFACE PARKING: 31 SPACES = 61 SPACES (INCLUDING 2 HANDICAPP SPACES) APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE TOTAL PARKING PROVIDED = 120 SPACES (INCLUDING 4 HANDICAPP SPACES) THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF 20. SLOPES GREATER THAN 15% HAVE BEEN SHOWN ON-SITE. HE POND WITHIN 30 DAY OF COMPLETION, I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT. 21. THIS PROJECT CONSTITUTES 60 CONDOMINIUM UNITS, 45 OF WHICH MEET THE MILESTONE DATE OF 1/1/04 THROUGH 6/30/05 FOR PHASE IVD AS ESTABLISHED BY THE REVISED PLAN DATED 6/29/04, 3 OF WHICH MEET THE SDP MILESTONE DATE OF 2/1/07 THROUGH 7/31/08 FOR PHASE IVE AS ESTABLISHED BY THE REVISED PLAN DATED 6/29/04. AND 12 OF ~ 48.46° an/ and 48.46' WHICH MEET THE MILESTONE DATE OF 12/1/09 THROUGH 5/31/11 FOR PHASE IVE AS ESTABLISHED BY THE REVISED PHASING SIGNATURE OF DEVELOPER 0.50 INDEX TO SHEETS LOU MANGIONÉ Sheet 22. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOLUME III (2006), SECTION 5.5.A. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE. ENGINEER'S CERTIFICATE COVER SHEET "I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND **GENERAL NOTES (CONTINUED):** SITE DEVELOPMENT PLAN 2 - 4SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN 23. THIS PROJECT IS SUBJECT TO THE 2004 ZONING REGULATIONS, EFFECTIVE JULY 28, 2006. 0.500 BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS GRADING & SEDIMENT CONTROL PLAN 5-7 43. THIS PLAN IS SUBJECT TO WAIVER PETITION, WP-09-211, TO WAIVE SUBSECTION 16.144(a)(3)(iii) A PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF 24. A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) WILL BE REQUIRED TO BE PLACED ON THE FRONT OF EACH BUILDING. IT SHALL BE IT APPLIES TO S-08-001, SUBSECTION 16.144(k)(3)(i) AS IT APPLIES TO SP-08-005 AND SP-08-006, THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE PLACED TO THE RIGHT OF THE MAIN ENTRANCE TO THE BUILDINGS AT A RANGE OF 4' TO 5' IN HEIGHT AND NO MORE THAN 6' LATERALLY AND SUBSECTIONS 16.144(o), 16.144(p), AND 16.144(q) AS THEY APPLY TO F-07-158, F-08-057, F-08-060, F-08-085, AND F-08-086 OF THE HOWARD COUNTY CODE AND WAS APPROVED ON JUNE 12, 2009, SUBJECT TO THE FOLLOWING CONDITIONS: 1. PETITIONER SHALL SUBMIT TO THE DEPARTMENT OF PLANNING AND ZONING A PRELIMINARY PLAN IN SEDIMENT CONTROL NOTES & DETAILS DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE INLET DRAINAGE AREA MAP HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF 25. A SECOND MEANS OF ACCESS WILL BE PROVIDED FOR FIRE AND RESCUE ALONG RESORT ROAD BY WIDENING A PORTION OF THE THE POND WITHIN 30 DAYS OF COMPLETION." ACCORDANCE WITH APPROVED SKETCH PLAN SP-08-001 AND THE REQUIREMENTS OF SECTION STORM DRAIN, WATER & SEWER PROFILES EXISTING CART PATH TO 14' IN WIDTH AND CREATING A NEW 14' WIDE PATH THAT WILL SUPPORT A 66,000 LB VEHICLE. THE WESTERN 16.146 OF THE HOWARD COUNTY CODE ON OR BEFORE APRIL 6, 2010: PETITIONER SHALL SUBMIT TO THE DEPARTMENT OF PLANNING AND ZONING FINAL PLANS IN ACCESS POINT WILL CONNECT WITH FUTURE RESORT ROAD WHICH WILL BE CONSTRUCTED UNDER VILLAGES AT TURF VALLEY, PHASE 2 17.78 17.50 (F-08-084). THE FIRE LANE WILL BE MAINTAINED BY THE OWNER, MANGIONE ENTERPRISES OF TURF VALLEY, LP ACCORDANCE WITH APPROVED PRELIMINARY EQUIVALENT SKETCH PLANS SP-08-005 AND PROP. ENTRANCE TIG.OD SP-08-006 AND THE REQUIREMENTS OF SECTION 16.147 OF THE HOWARD COUNTY CODE ON OR LPROP. DECK BORINGS & SITE DETAILS BEFORE APRIL 6, 2010. 3. PETITIONER SHALL SUBMIT FINAL CONSTRUCTION DRAWING ORIGINALS FOR FINAL PLANS F-07-0158, F-08-057, F-08-060, F-08-084, F-08-085, AND F-08-086 TO THE DEPARTMENT OF PLANNING 26. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY THE TRAFFIC GROUP, DATED JANUARY 7, 2005, AND WAS APPROVED CANAPY (TYP) LANDSCAPE PLAN APPROVED: DEPARTMENT OF PLANNING AND ZONING 27. THE SOILS INFORMATION IS BASED ON THE NRCS WEB SOILS SURVEY 2.0 FOR HOWARD COUNTY, MARYLAND AND ZONING FOR SIGNATURE ON OR BEFORE APRIL 6, 2010. 4. PETITIONER SHALL PAY ALL REQUIRED FEES TO THE COUNTY, SUBMIT DEVELOPER'S AGREFMENTS TO SITE LIGHTING PLAN THE DEPARTMENT OF PUBLIC WORKS, REAL ESTATE SERVICES DIVISION, AND POST FINANCIAL SURETY FOR CONSTRUCTION OF PUBLIC FACILITIES RELATING TO FINAL PLANS F-07-158, F-08-057, PLAN VIEW 2"GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE | FIRE LANE PLAN & PROFILE TUBE SLEEVE (12 GUAGE-3'LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST. F-08-060, F-08-084, F-08-085, AND F-08-086 ON OR BEFORE JUNE 5, 2010. 5. PETITIONER SHALL SUBMIT FINAL PLAT ORIGINALS FOR FINAL PLANS F-07-158, F-08-057, F-08-060, F-08-084, F-08-085, AND F-08-086 TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURE ON OR BEFORE AUGUST 3, 2010. 29. ALL PLAN DIMENSIONS ARE TO FACE OF CURB, UNLESS OTHERWISE NOTED. WALL ELEVATIONS & DETAILS 30. THE SUBJECT PROPERTY IS ZONED PGCC PER THE 2/2/04 COMPREHENSIVE ZONING PLAN AND PER THE "COMP LITE" ZONING PENDING PLANNING BOARD APPROVAL. SINCE THESE PROJECTS MAY NOT PROCEED UNTIL FINAL PLANS F-08-057, F-08-060, AND F-08-084 ARE APPROVED, PLACEMENT OF THESE PLANS ON CHIEF DIVISION OF LAND DEVELOPMENT WALL ELEVATIONS PROPOSED 4 STORY BUILDING 1. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF (40' MEAN HEIGHT) GROUND (REAR) 7. PETITIONER IS ADVISED THAT PLANS FAILING TO COMPLY WITH CONDITIONS 1 THROUGH 5 SHALL BE SUBJECT TO THE TERMS OF SUBSECTION 16.144(R) OF THE CODE. STORM DRAINAGE, OTHER PUBLIC UTILITIES AND FOREST CONSERVATION (DESIGNATED AS "FOREST CONSERVATION AREA"), LOCATED IN, ON, 8. PETITIONER IS ADVISED TO CONSULT PREVIOUS DEPARTMENT CORRESPONDENCE (e.g. RESPECTIVE OVER AND THROUGH PARCELS, ANY CONVEYANCES EXPRESSLY STATED IN THE DEED(S) CONVEYING SAID PARCELS, DELEVOPER SHALL PLAN "TECHNICALLY COMPLETE" LETTERS) FOR ADDITIONAL INFORMATION REGARDING SUBMISSION EXECUTE AND DELIVER DEEDS FOR THE EASEMENTS HEREIN RESERVED TO HOWARD COUNTY WITH A METES AND BOUNDS DESCRIPTION O HE FOREST CONSERVATION AREA. UPON COMPLETION OF THE PUBLIC UTILITIES AND THEIR ACCEPTANCE BY HOWARD COUNTY, AND IN THE ASE OF THE FOREST CONSERVATION INSTALLATION AND MAINTENANCE AGREEMENT EXECUTED BY THE DEVELOPER AND THE COUTNY, AND FRONT ELEVATION **COVER SHEET** 44. THIS PLAN IS SUBJECT TO WAIVER PETITION WP-10-159, A WAIVER PETITION TO SUBDIVISION AND THE RELEASE OF DEVELOPER'S SURETY POSTED WITH SAID AGREEMENT, THE COUNTY SHALL ACCEPT TEH EASEMENTS AND RECORD THE LAND DEVELOPMENT REGULATION SECTION 16.144(p) AND 16.144(q) WAS APPROVED ON JUNE 2, 2010 DEED(S) OF EASEMENT INT HE LAND RECORDS OF HOWARD COUNTY. WITH THE FOLLOWING CONDITIONS: REVISE BUILDING FOOTPRINT PETITIONER SHALL PAY ALL REQUIRED FEES TO THE COUNTY, SUBMIT DEVELOPER'S AGREEMENTS TO THE DEPARTMENT OF PUBLIC WORKS, REAL ESTATE SERVICES DIVISION, AND POST FINANCIAL SURETY FOR CONSTRUCTION OF PUBLIC FACILITIES ON OR BEFORE JUNE 5, 2011. 33. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS VANTAGE CONDOMINIUMS AT TURF VALLEY 7/11/14 REVISE NOTES PER NEW LAYOUT (PODS B, C & H : SEC IV: RESIDENTIAL PHASE IVE) PETITIONER SHALL SUBMIT ORIGINAL MYLAR PLANS OF SDP-08-032 TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURE ON OR BEFORE AUGUST 3, 2011. PROPOSED 4 STORY BUILDING 35. THE WETLAND STUDY FOR THIS PROJECT WAS PREPARED BY ECO-SCIENCE PRFESSIONALS, INC. DATED JULY 2004 AND WAS DATE DESCRIPTION NO. (40' MEAN HEIGHT) **ZONE: PGCC-1** 36. EACH BUILDING WILL BE PROVIDED WITH AN AUTOMATIC FIRE PROTECTION SPRINKLER SYSTEM 45. THIS PLAN IS SUBJECT TO WAIVER PETITION WP-11-168, A WAIVER PETITION TO SUBDIVISION AND REVISIONS PROP. GROUND TAX MAP 16 GRID 12 & 18 LAND DEVELOPMENT REGULATION SECTION 16.144(p) AND 16.144(q) WAS APPROVED ON MAY 25, 2011 37. THE 65 dBA NOISE CONTOUR LINE DRAWN ON THIS DEVELOPMENT PLAN IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN TAX MAP 17 GRID 7 WITH THE FOLLOWING CONDITIONS: PARCELS 8 & 706 MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65 dBA NOISE EXPOSURE. 65 dBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS, AND FUTURE RESIDENTS THAT AREAS 1. PETITIONER SHALL PAY ALL REQUIRED FEES TO THE COUNTY, SUBMIT DEVELOPER'S AGREEMENTS TO 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND THE DEPARTMENT OF PUBLIC WORKS, REAL ESTATE SERVICES DIVISION, AND POST FINANCIAL SURETY THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE US DEPARTMENT OF HOUSING AND OR CONSTRUCTION OF PUBLIC FACILITIES ON OR BEFORE JUNE 5, 201 NOTE: THE PURPOSE OF PETITIONER SHALL SUBMIT ORIGINAL MYLAR PLANS OF SDP-08-032 TO THE DEPARTMENT OF THIS REVISED SITE PLANNING AND ZONING FOR SIGNATURE ON OR BEFORE AUGUST 3, 2012. 38. IN ACCORDANCE WITH THE NOISE STUDY PREPARED BY POLYSONIC DATED AUGUST 13, 2008, |Sill · Adcock & ALL OF THE PROPOSED OUTDOOR RECREATIONAL ACTIVITY AREAS WILL BE OUTSIDE THE DEVELOPMENT PLAN IS TO 46. THIS PLAN IS SUBJECT TO WAIVER PETITION WP-12-129, A WAIVER PETITION TO SUBDIVISION AND 65 DBA LON NOISE IMPACTIONE. NOISE MITIGATION MEASURES SUCH AS BARRIERS. LAND DEVELOPMENT REGULATION SECTION 16.144(p) AND 16.144(q) WAS APPROVED ON APRIL 10, 2012 RECONFIGURE THE LAYOUT BERNS OR A COMBINATION OF BARNERS AND BERNS WILL NOT BE NEEDED, SOME WITH THE FOLLOWING CONDITIONS: Associates · LLC FACAPES OF BUILDINGS B-1 AND B-2 WILL BE IMPACTED BY THE FUTURE TRAFFIC NOISE PETITIONER SHALL PAY ALL REQUIRED FEES TO THE COUNTY, SUBMIT DEVELOPER'S AGREEMENTS TO THE DEPARTMENT OF PUBLIC WORKS, REAL ESTATE SERVICES DIVISION, AND POST FINANCIAL SURETY CHECKED BY: PS OF THE DEVELOPMENT IN LEVELS HIGHERTHAN 45 DBA LON INTERIOR MOISE LEVEL REQUIREMENTS OF 45 DBA LON FOR CONSTRUCTION OF PUBLIC FACILITIES ON OR BEFORE JUNE 5, 2013. 2. PETITIONER SHALL SUBMIT ORIGINAL MYLAR PLANS OF SDP-08-032 TO THE DEPARTMENT OF PLANNING AND ZONING FOR SIGNATURE ON OR BEFORE APRIL 19, 2013. 46. THE TURF VALLEY DENSITY TABULATION CHART IS LOCATED WITHIN THE HOWARD COUNTY, DEPARTMENT CAN BE ACHIEVED WITH MODIFIED CONSTRUCTION MATERIALS. PROPOSED 4 STORY BUILDING THE AREA OF THE SCALE: AS SHOWN OWNER / DEVELOPER Engineers Surveyors Planners (40' MEAN HEIGHT) 39. THIS PLAN IS SUBJECT TO A DESIGN MANUAL WAIVER FOR A 85 PERCENTILE SPEED STUDY APPROVED ON FEBRUARY 2008. PROPOSED BUILDINGS. DATE: ____APRIL 1, 2013 3300 North Ridge Road, Suite 160 40. ALL WATER METERS ARE TO BE LOCATED INSIDE PROPOSED UNITS. MANGIONE ENTERPRISES OF TURF VALLEY, LP Ellicott City, Maryland 21043 PROJECT#: 09-060 41. THESE CONDOMINIUM UNITS ARE TO RECEIVE COUNTY REFUSE COLLECTION SERVICES. PROP. GROUND ATTN: LOUIS MANGIONE Phone: 443.325.7682 Fax: 443.325.7685 42. PRIVATE RANGE OF ADDRESS SIGNS AND/OR PRIVATE ROAD STREET NAME SIGNS (SNS) SHALL BE FABRICATED AND INSTALLED BY 1205 YORK ROAD, PENTHOUSE SHEET#: __1__ of __21_ Email: info@saaland.com SIDE ELEVATION HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. LUTHERVILLE, MARYLAND 21093 LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2013

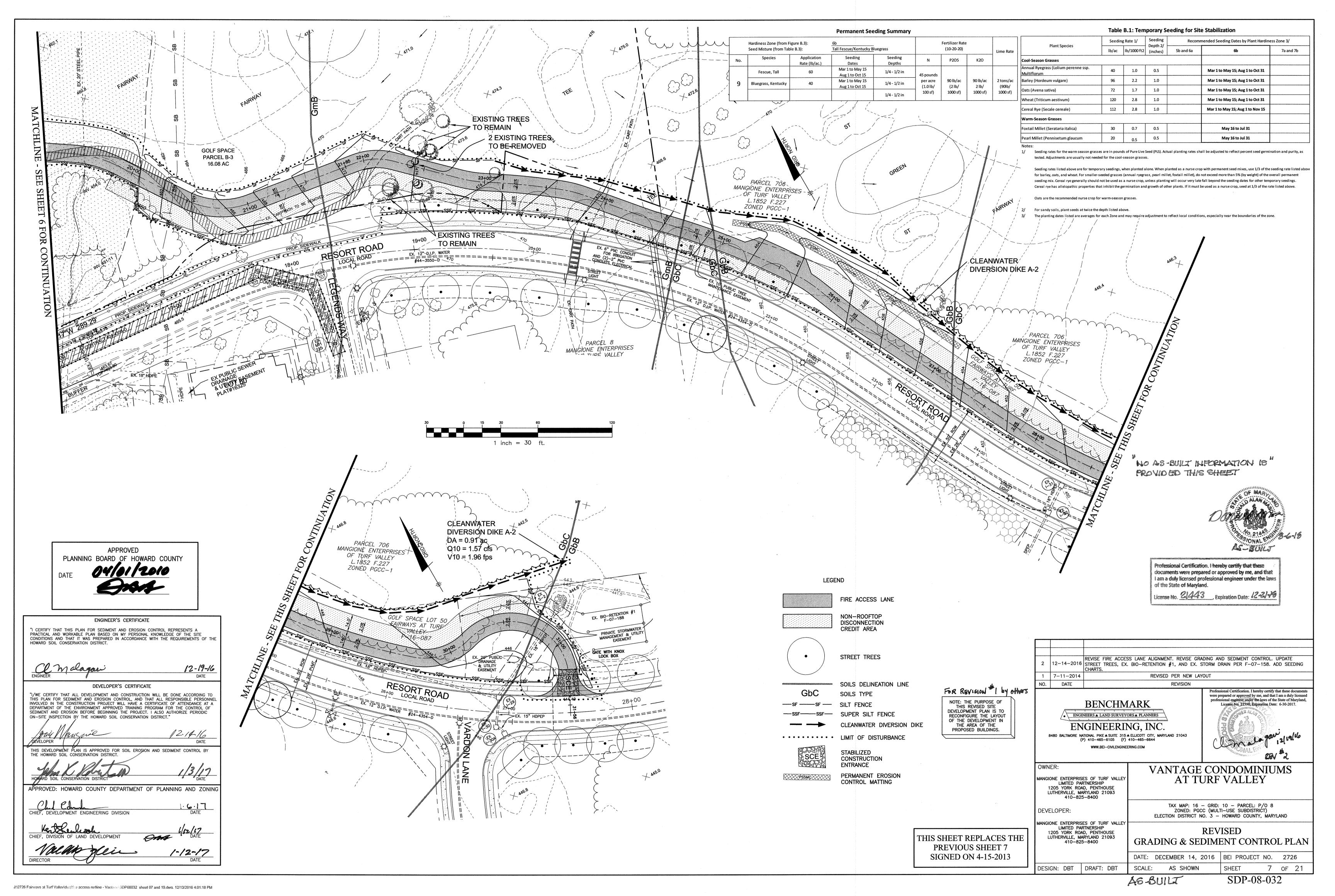












B-4-5 STANDARDS AND SPECIFICATIONS PERMANENT STABILIZATION

To stabilize disturbed soils with permanent vegetation.

To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils. Conditions Where Practice Applies Exposed soils where ground cover is needed for 6 months or more.

A. Seed Mixtures 1. General Use

- a Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
- b Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical
- Field Office Guild, Section 342 Critical Area Planting. c For sites having disturbed areas over 5 acres, use and show the rates recommended by the soil testing agency.
- d For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 ½ pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.
- Turfgrass Mixtures a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
- b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary The summary is to be placed on the plan.
- i. Kentucky Bluegrass: Full sun Mixture: For use in areas that receive intensive management Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
- ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky Bluegrass Cultivars with each ranging from 10 to 35 percent of the total mixture by weight.
- iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended. iv.Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns.
- 1 ½ to 3 pounds per 1000 square feet. Notes:Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland" Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of

For establishment in high quality, intensively managed turf area. Mixture includes Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate:

- consumer protection and assures a pure genetic line. c. Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a)
- Central MD:March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b) d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level
- and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 ½ inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (1/2 to 1 inch
- every 3 to 4 days depending on soil texture) until they are firmly established. This is not especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.
- B. Sod: to provide quick cover on disturbed areas (2:1 grade or flatter). 1. General Specifications
- a. Class of turfgrass must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector. b. Sod must be machine cut at a uniform soil thickness of ¾ inch, plus or minus ¼ inch, at the time of
- cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn c. Standard size sections of sod must be strong enough to support their own weight and retain their
- size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section. d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival. e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted
- within this period must be approved by an agronomist or soil scientist prior to its installation. . Sod Installation a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the
- subsoil immediately prior to laying the sod. b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength.
- Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots. . Wherever possible, lay sod with the long edges parallel to the contour and with staggering join Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact
- exists between sod roots and the underlying soil surface. d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.
- a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to
- prevent wilting. b. After the first week, sod watering is required as necessary to maintain adequate moisture content. c. Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

B-4-4 STANDARDS AND SPECIFICATIONS TEMPORARY STABLIZATION

To stabilize disturbed soils with vegetation for up to 6 months

To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

- . Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.
- For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding. 3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch

alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

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 PERSONNE NVOLVED 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." DATE THIS DEVELOPMENT FLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 1.6.17 HIEF, DEVELOPMENT ENGINEERING DIVISION

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

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.

A. Soil Preparation Temporary Stabilization

- a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.
- Apply fertilizer and lime as prescribed on the plans. c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
- Permanent Stabilization
- a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are: i. Soil pH between 6.0 and 7.0. ii. Soluble salts less than 500 parts per million (ppm).
 - iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable. iv. Soil contains 1.5 percent minimum organic matter by weight.
- v. Soil contains sufficient pore space to permit adequate root penetration. Application of amendments or topsoil is required if on-site soils do not meet the above
- Graded areas must be maintained in a true and even grade as specified on the
- approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches. d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
- e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.
- Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil
- Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
- Topsoiling is limited to areas having 2:1 or flatter slopes where: a. The texture of the exposed subsoil/parent material is not adequate to produce
 - vegetative growth. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
- The original soil to be vegetated contains material toxic to plant growth. The soil is so acidic that treatment with limestone is not feasible. Areas having slopes steeper than 2:1 require special consideration and design.
- Topsoil Specifications: Soil to be used as topsoil must meet the following criteria: a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 11/2 inches in diameter
- b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack
- grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of
- a. Erosion and sediment control practices must be maintained when applying topsoil. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any
- irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- Soil Amendments (Fertilizer and Lime Specifications) Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for
- engineering purposes may also be used for chemical analyses. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and
- warranty of the producer. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
- Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of

B-4-8 STANDARDS AND SPECIFICATIONS STOCKPILE AREA

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

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

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

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan 2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material

and based on a side slope ratio no steeper than 2:1. Benching must be provided in

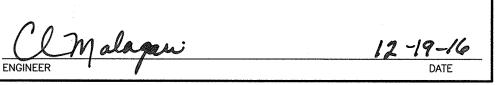
- accordance with Section B-3 Land Grading. 3. Runoff from the stockpile area must drain to a suitable sediment control practice.
- 4. Access the stockpile area from the upgrade side. 5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
- 6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sedimen control practice must be used to intercept the discharge. 7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as
- Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization. 8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

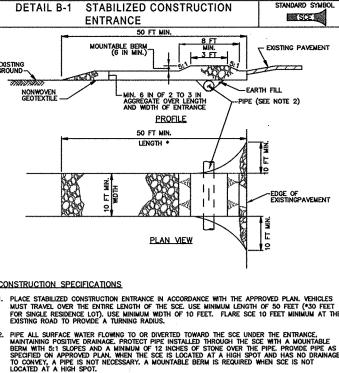
Maintenance The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

APPROVED PLANNING BOARD OF HOWARD COUNTY

ENGINEER'S CERTIFICATE

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



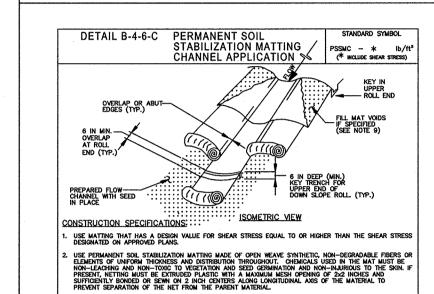


STANDARD SYMBO

2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE, PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5: 1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE, PROVIDE PIPE A SPECIFIED ON APPROVED PLAN, WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINA TO CONVEY, A PIPE IS NOT NECESSARY, A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (MITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAK OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE
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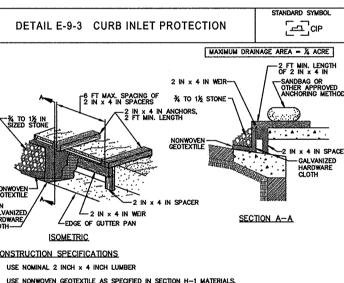


- I, SECURE MATTING USING STEEL STAPLES OR WOOD STAKES. STAPLES MUST BE "U" OR "I" SHAPED STEEL WIRE HAVING A MINIMUM CAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1 ½ INCHES WIDE AND BE A MINIMUM OF 8 INCHES LONG. "I" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPE AT THE BOTTOM.
- . Unroll matting in direction of water flow, centering the first roll on the channel center line. Work from center of channel outward when placing rolls. Lay matting smoothly and firmly upon the seeded surface. Avoid stretching the matting. OVERLAP OR ABUT EDGES OF MATTING ROLLS PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT. KEY IN THE TOP OF SLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
- STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS. IF SPECIFIED BY THE DESIGNER OR MANUFACTURER AND DEPENDING ON THE TYPE OF MAT BEING INSTALLET ONCE THE MATTING IS KEYED AND STAPLED IN PLACE, FILL THE MAT VOIDS WITH TOP SOIL OR GRANULAR MATERIAL AND LICHTLY COMPACT OR ROLL TO MANUFACH ALT CONTACT WITHOUT CRUSHING MAT. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION 8-4 VEGETATIVE STABILIZATION.

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- ONSTRUCTION SPECIFICATIONS USE NOMINAL 2 INCH x 4 INCH LUMBER
- NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
- PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
- I. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER ADEPROVED ANCHORING HETHOD. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING
- FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE. D. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

SEQUENCE OF CONSTRUCTION

PHASE 1A

- 1. OBTAIN GRADING PERMIT, CONTRACTOR TO CONFORM TO CONDITIONS OF MARYLAND DEPARTMENT OF THE ENVIRONMENT NONTIDAL WETLANDS AND WATERWAYS PERMIT 02-NT-0009/200261454 AND U.W. ARMY CORPS OF ENGINEERS PERMIT 02-61454-16. (1DAY) 2. CONTRACTOR SHALL NOTIFY MISS UTILITY, 1-800-257-7777 (A MINIMUM OF 3 WORKING
- 3. NOTIFY THE HOWARD COUNTY INSPECTIOSN OFFICE AT 410-313-1523 TO SCHEDULE A PRE-CONSTRUCTION MEETING
- 4. CONDUCT PRE-CONSTRUCTION MEETING; RECEIVE APPROVAL TO BEGIN INSTALLATION OF EROSION AND SEDIMENT CONTROLS. 5. STONE CONSTRUCTION ENTRANCES TO PHASE ONE AND TOPSOIL DISPOSAL AREA WERE
- INSTALLED UNDER PREVIOUSLY APPROVED HOWARD COUTNTY SEDIMENT CONTROL 6. INSTALL PERIMETER SEDIMENT CONTROLS WITHIN AND CLEAR AS NECESSARY TO
- COMPLETE THIS WORK (8 DAYS). 7. WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR. CLEAR AND MASS GRADE PHASE 1A (35 DAYS)

10. BEGIN CONSTRUCTION OF BUILDING, WATER, SEWER, & STORM DRAIN. (30 DAYS)

11. BEGINC ONSTRUCTION OF STORM DRAIN SYSTEMS 12. INSTALL SIDEWALKS, SURFACE PAVEMENT, STRIPE PARKING LOT AND PERMANENT HANDICAP PARKING. (14 DAYS)

8. INSTALL TEMPORARY CART PATH.

9. COMPLETE INSTALLATION OF FIRE LANE.

13. INSTALL LANDSCAPING SEED & MULCH. (7 DAYS) 14. INSTALL SWM PONDS. (7 DAYS) 15. COMPLETE FINAL GRADING OF SITE AREAS & STABILIZE, SEED & MULCH. (11 DAYS)

16. NOTIFY INSPECTOR AND REQUEST PERMISSION TO REMOVE ALL REMAINING SDIMENT

CONTROL DEVICES. 17. AS-BUILT SITE AND PREPARE AS-BUILT DRAWINGS. (14 DAYS)

PHASE 2

PHASE 2 WORK IS INDEPENDENT OF PHASE 1A WORK AND CAN BE PERFORMED PRIOR TO, CONCURRENT WITH, OR AFTER THE WORK BEING PERFORMED IN PHASE 1A.

STANDARD SYMBOL

-----SSF-----

STANDARD SYMBOL

EMBED GEOTEXTILE LINING A MIN. OF 4 IN

SECTION A-A

CHANNEL CROSS SECTION WILL TRANSITION FROM A-A TO B-

SECTION B-B

CLASS THICKNESS (T)

STANDARD SYMBOL

AGIP

MAXIMUM DRAINAGE AREA ...

-- ¾ TO 1½ IN STONE

- 14 TO 11/2 IN STON

---INLET GRATE

ROP1

DETAIL E-3 SUPER SILT FENCE

CHAIN LINK FENCING-

WOVEN SLIT FILM GEOTEXTILE-

FLOW

10 FT MAX.

ELEVATION

CROSS SECTION

. INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART, DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.

FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THUPSLOPE SIDE OF CHÂIN, LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION, EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.

5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DECREES TO THE MAIN FENCE ALICHMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.

PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

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DETAIL D-4-1-A ROCK OUTLET PROTECTION I

L12 IN MIN.

EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF THE RIPRAP.

CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNE AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS, PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENJURE THAT IT IS REASONABLY HOMOGENOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVEN DAMAGE TO THE STONE FILTER BLANKET OR GEOTEVILLE. HAND PLACE TO THE EXTENT CESSEARY.

WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.

CONSTRUCT APRON WITH OX SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE S THAT IT BLENDS IN WITH EXISTING GROUND.

. MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULA SEDIMENT AND DEBRIS. AFTER HIGH FLOWS INSPECT FOR SCOUR AND DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

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PLAN / CUT AWAY VIEW

CROSS SECTION

LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS, SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.

PLACE CLEAN % TO 1% INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.

CONSTRUCTION SPECIFICATIONS

/-- ¾ IN HARDWARE CLOTH

DETAIL E-9-2 AT-GRADE INLET PROTECTION

RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.

FLOW

PLAN VIEW

PROFILE

CONSTRUCTION SPECIFICATIONS

GALVANIZED CHAIN LINK FENCE WITH WOVEN SLIT FILM GEOTEXTILE

DETAIL C-1 EARTH DIKE

A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.

PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.

DETAIL D-3-1 RIPRAP INFLOW PROTECTION

ISOMETRIC VIEW

PROFILE ALONG CENTERLINE

INSTALL ENTRANCE AND EXIT SECTIONS AS SHOWN ON THE PROFILE

DETAIL C-9 DIVERSION FENCE

BLEND RIPRAP INTO EXISTING GROUND.

CROSS SECTION

2:1 SLOPE OR FLATTER-

CONTINUOUS GRADE 0.5% MIN. TO 10% MAX. SLOPE

^ * * * * * * * * *

PLAN VIEW

FLOW CHANNEL STABILIZATION

CONSTRUCTION SPECIFICATIONS

A-3/B-3

2:1 SLOPE OR FLATTER

SEED WITH STRAW MULCH AND TACK. (NOT ALLOWED FOR CLEAR WATER DIVERSION.)

4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL A MINIMUM OF 7 INCHES AND FLUSH WITH GROUND.

REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.

CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.

STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION, STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.

MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

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WATER MANAGEMENT ADMINISTRATION

PROVIDE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, UNDER THE BOTTOM AND ALONG SIDES OF ALL RIPRAP.

CONSTRUCT INFLOW CHANNEL WITH CLASS I RIPRAP OR EQUIVALENT RECYCLED CONCRETE LINING TO A MINIMUM DEPTH OF 19 INCHES $(2\times D_{20})$ and a 1 foot deep flow Channel Inflow Riprap Protection Channel Must have a trapezoidal cross section with 2:1 or flatter side slopes and a 4 foot minimum bottom width.

MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. KEEP POINTS OF INFLOW AND OUTFLOW FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE 2011 MARYLAND DEPARTMENT OF ENVIRONMENT
MATER MANAGEMENT ADMINISTRATION

EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.

DIKE TYPE

STANDARD SYMBOL

RRP

CROSS SECTION

├── DF ───

MAXIMUM DRAINAGE AREA = 2 ACRE

a - DIKE HEIGHT 18 IN MIN. 30 IN MIN.

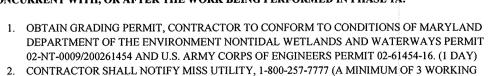
b - DIKE WIDTH 24 IN MIN. 36 IN MIN.

c - FLOW WIDTH 4 FT MIN. 6 FT MIN.

d - FLOW DEPTH 12 IN MIN. 24 IN MIN.

- DAYS). 3. NOTIFY THE HOWARD COUNTY INSPECTIONS OFFICE AT 410-313-1523 TO SCHEDULE A PRE-CONSTRUCTION MEETING.
- OF EROSION AND SEDIMENT CONTROLS. 5. INSTALL STONE CONSTRUCTION ENTRANCE TO ACCESS.
- 7. AFTER APPROVAL OF SEDIMENT CONTROL INSPECTOR, BEGIN CLEARING AND MASS GRADING WITHIN PHASE 2 (35 DAYS).
- 8. BEGIN CONSTRUCTION OF BUILDING, WATER, SEWER, & STORM DRAIN. COMPLETE INSTALLATION OF FIRE LANE (30 DAYS). 9. INSTALL SIDEWALKS, SURFACE PABVEMENT, STRIPE PARKING LOT AND PERMANENT
- HANDICAP PARKING, (14 DAYS) 10. INSTALL LANDSCAPING SEED & MULCH. (7 DAYS) 11. INSTALL SWM PONDS, (7 DAYS)
- 14. AS-BUILT SITE AND PREPARE AS-BUILT DRAWINGS. (14 DAYS) State a state of the state of the second

CONTROL DEVICES.

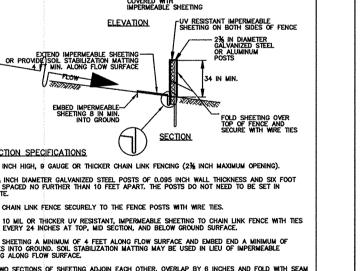


6. WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR AND PERMISSION TO PROCEED, INSTALL TEMPORARY SEDIMENT CONTROLS (20 DAYS). CLEAR ONLY AS NECESSARY FOR I am a duly licensed professional engineer under the laws THIS WORK

4. CONDUCT PRE-CONSTRUCTION MEETING; RECEIVE APPROVAL TO BEGIN INSTALLATION

12. COMPLETE FINAL GRADING OF SITE AREAS & STABILIZE, SEED & MULCH (11 DAYS

13. NOTIFY INSPECTOR AND REQUEST PERMISSION TO REMOVE ALL REMAINING SEDIMENT



CONSTRUCTION SPECIFICATIONS USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2% INCH MAXIMUM OPENING). USE 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN

FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES

SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE. 5. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND, SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.

WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. REPLACE IMPERMEABLE SHEETING IF TORN, IF UNDERWINING OCCURS. REINSTAIL FENCE. MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE
WATURAL RESOURCES CONSERVATION SERVICE

2011

MARYLAND DEPARTMENT OF ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

"NO AS-BUILT IN FORMATION IS PROVIDED ON THIS SHEET



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that of the State of Maryland.

> THIS SHEET REPLACES THE PREVIOUS SHEET 8 SIGNED ON 9-2-2014

1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-3133-1855 after the future LOD and protected areas are marked clearly in the field. A minimum of 48 hours notice to CID must be given at the following stages:

HOWARD SOIL CONSERVATION DISTRICT (HSCD)
STANDARD SEDIMENT CONTROL NOTES

- a. Prior to the start of earth disturbance, b. Upon completion of the installation of perimeter erosion and sediment controls, but
- before proceeding with any other earth disturbance or grading, c. Prior to the start of another phase of construction or opening of another grading d. Prior to the removal or modification of sediment control practices.
- 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 <u>2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL</u>, and revisions thereto.
- 3. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active aradina.
- 4. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for topsoil (Sec. B-4-2), permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3). Temporary stabilization with mulch alone can only be applied between the fall and spring seeding dates if the ground is frozen. Incremental stabilization (Sec. B-4-1) specifications shall be enforced in areas with >15' of cut and/or fill. Stockpiles (Sec. B-4-8) in excess of 20 feet must be benched with stable outlet. All concentrated flow, steep slope, and highly erodible areas shall receive soil stabilization matting (Sec. B-4-6).

5. All sediment control structures are to remain in place, and are to be maintained in operative condition until permission for their removal has been obtained from the CID.

6. Site Analysis 24.28 Acres Total Area of Site: 9.46 Area Disturbed: 3.56 *CUT/FILL NUMBERS Area to be roofed or paved: ARE FOR SEDIMENT 5.90 CONTROL PURPOSES Area to be vegetatively stabilized: ONLY. CONTRACTOR 39,591* Cu Yds TO VERIFY.

22,046*

Total fill TO BE DETERMINED BY CONTRACTOR/ SITE WITH AN ACTIVE GRADING PERMIT Off-site waste/borrow area location: 7. Any sediment control practice which is disturbed by grading activity for placement of

utilities must be repaired on the same day of disturbance 8. Additional sediment control must be provided, if deemed necessary by the CID. The site and all controls shall be inspected by the contractor weekly, and the next day after each rain event. A written report by the contractor, made available upon request, is part of every

Inspection type (routine, pre-storm event, during rain event)

• Identification of sediment controls that require maintenance

Total cut:

• Weather information (current conditions as well as time and an=mount of last recorded Brief description of project's status (e.g. percent complete) and/or current activities Evidence of sediment discharges Identification of plan deficiencies

• Identification of missing or improperly installed sediment controls • Compliance status regarding the sequence of construction and stabilization requirements Photographs Monitoring/sampling Maintenance and/or corrective action performed

• Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MDE). 9. Trenches for the construction of utilities is limited to three pipe lengths or that which can and shall be back filled and stabilized by the end of each work day, whichever is shorter.

10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be allowed by the CID per the list of HSCD—approved field changes. 11. Disturbance shall not occur outside the L.O.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at

a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the CID. Unless otherwise specified and approved by the CID, no more than 30 acres cumulatively may be disturbed at a given time.

12. Wash water from any equipment, vehicles, wheels, pavement, and other sources must be

13. Topsoil shall be stockpiled and preserved on—site for redistribution onto final grade. 14. All silt fence and super silt fence shall be placed on-the-contour, and be imbricated at 25' minimum intervals, with lower ends curled uphill by 2' in elevation.

15. Stream channels must not be disturbed during the following restricted time periods • Use I and IP March 1 - June 15

• Use III and IIIP October 1 — April 30

treated in a sediment basin or other approved washout structure.

• Use IV March 1 - May 31 16. A copy of this plan, the <u>2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL</u>, and associated permits shall be on—site and available when the site is active.

FOR REVISION # 1 by others INLETS 1-3, I-4 & I-5 TO

HAVE AT GRADE INLET

PROTECTION (AGIP)

INLET PROTECTION (CIP)

INLETS I-1 & I-2

TO BE BLOCKED

DATE

OWNER:

INLET I-6 TO HAVE CURB

STANDARD STABILIZATION NOTE

INSPECT AND PROVIDE NECESSARY MAINTENANCE TO THE SEDIMENT

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN: . THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1): AND . SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING DURING GRADING AND AFTER EACH RAINFALL, CONTRACTOR WILL

12-14-2016 DELETE SEDIMENT TRAP, BAFFLE, AND PUMPING STATION DETAILS. ADD EARTH DIKE DETAIL. JPDATE S.O.C. PER REDLINE TO HSCD SIGNED ON 7-14-2016. REVISED PER NEW LAYOUT 1 7-11-201

Professional Certification. I hereby certify that these documen

were prepared or approved by me, and that I am a duly licens ional engineer under the laws of the State of Maryland License No. 22390, Expiration Date: 6-30-2017.

VANTAGE CONDOMINIUMS AT TURF VALLEY MANGIONE ENTERPRISES OF TURF VALLE LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410-825-8400

DEVELOPER: ANGIONE ENTERPRISES OF TURF VALLE LIMITED PARTNERSHIP 1205 YORK ROAD, PENTHOUSE

DESIGN: DBT | DRAFT: DBT

LUTHERVILLE, MARYLAND 21093 410-825-8400

BENCHMARK

ENGINEERING, INC.

8480 BALTIMORE NATIONAL PIKE A SUITE 315 A ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644

WWW.BEI-CIVILENGINEERING.COM

ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS

TAX MAP: 16 - GRID: 10 - PARCEL: P/O 8 ZONED: PGCC (MULTI-USE SUBDISTRICT) ELECTION DISTRICT NO. 3 - HOWARD COUNTY, MARYLAND **REVISED**

SEDIMENT CONTROL NOTES & DETAILS DATE: DECEMBER 14, 2016 | BEI PROJECT NO. 2726

AS-BUILD

AS SHOWN

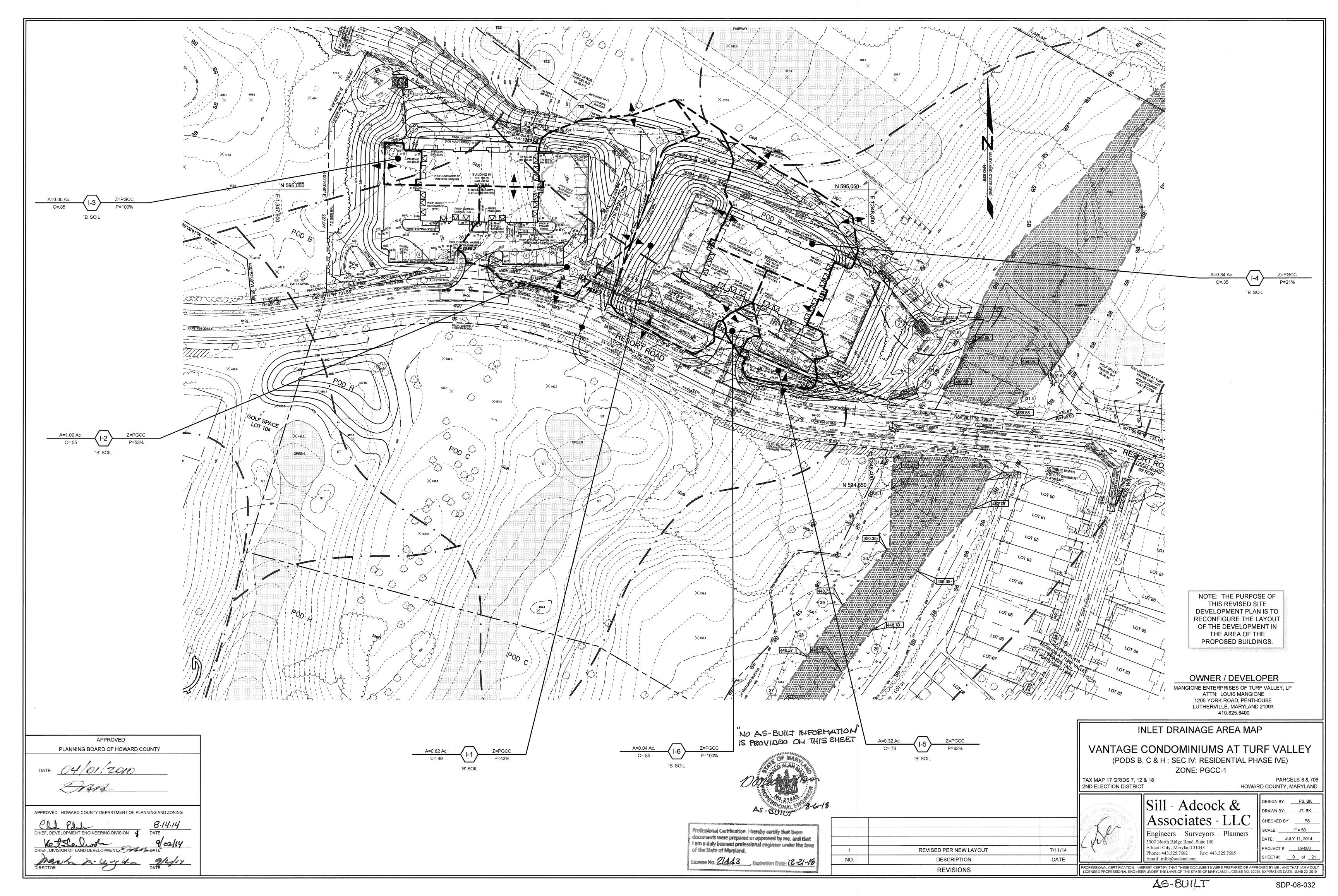
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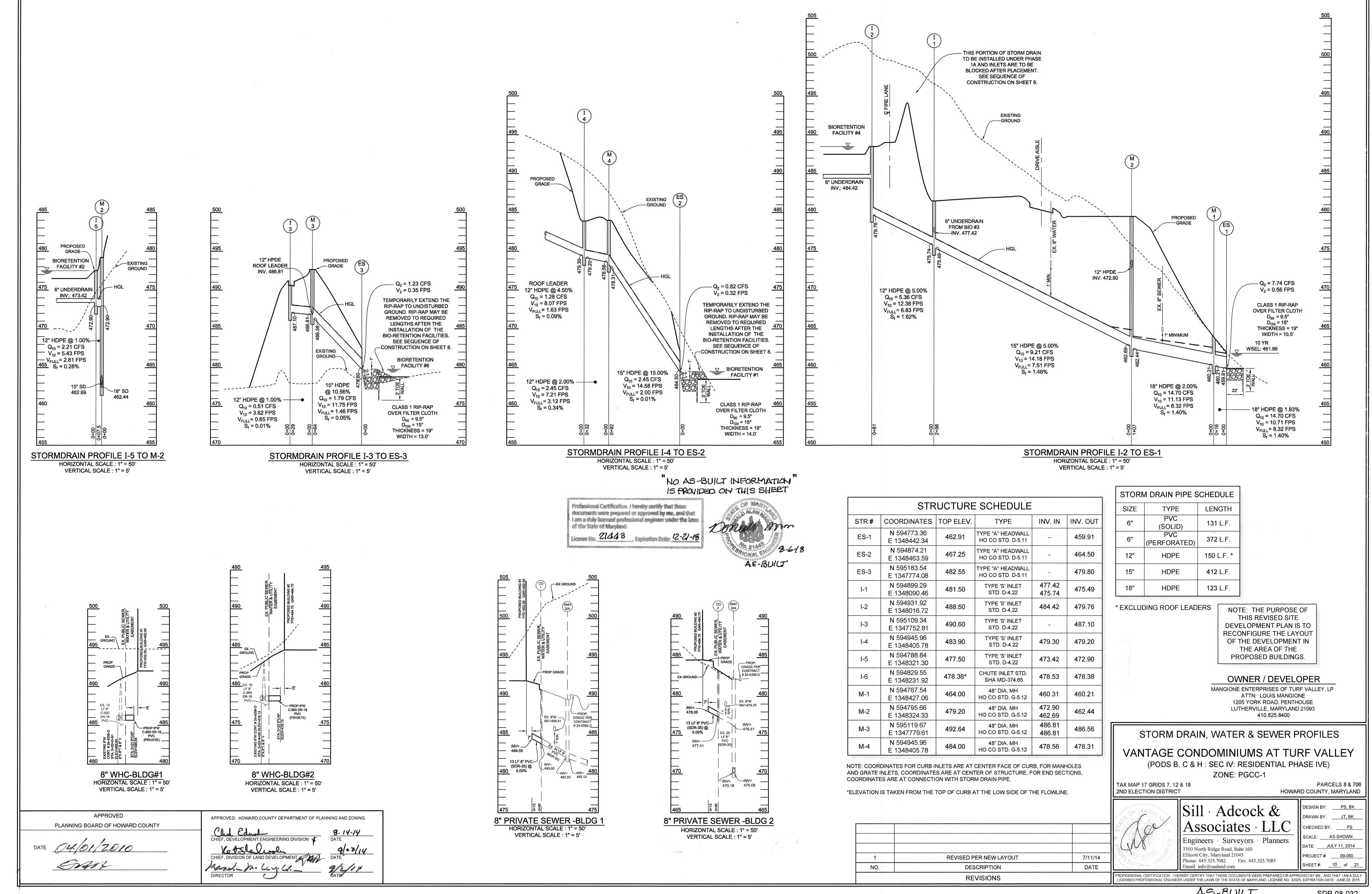
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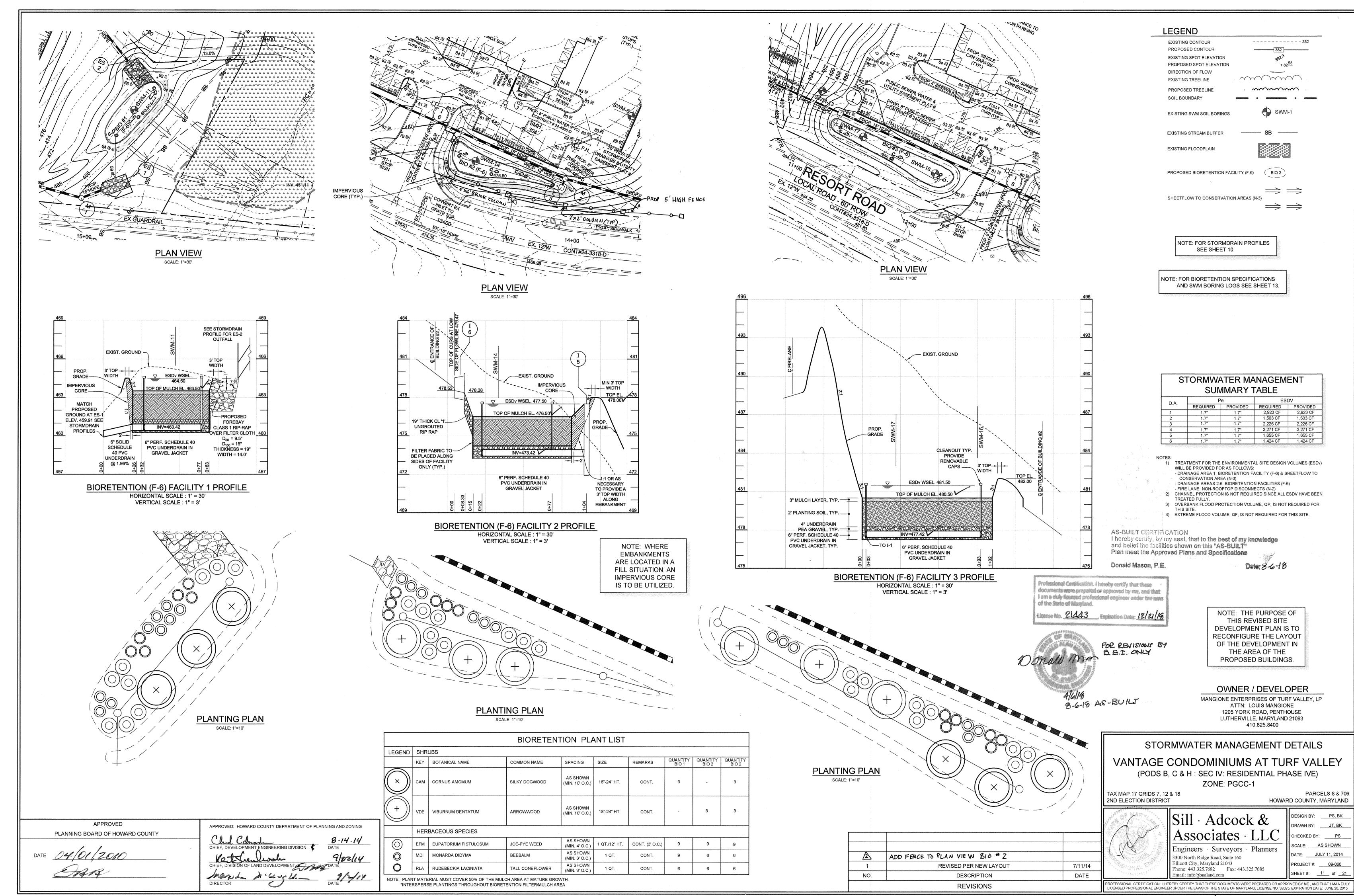
CONTROL MEASURES ON THIS PLAN.

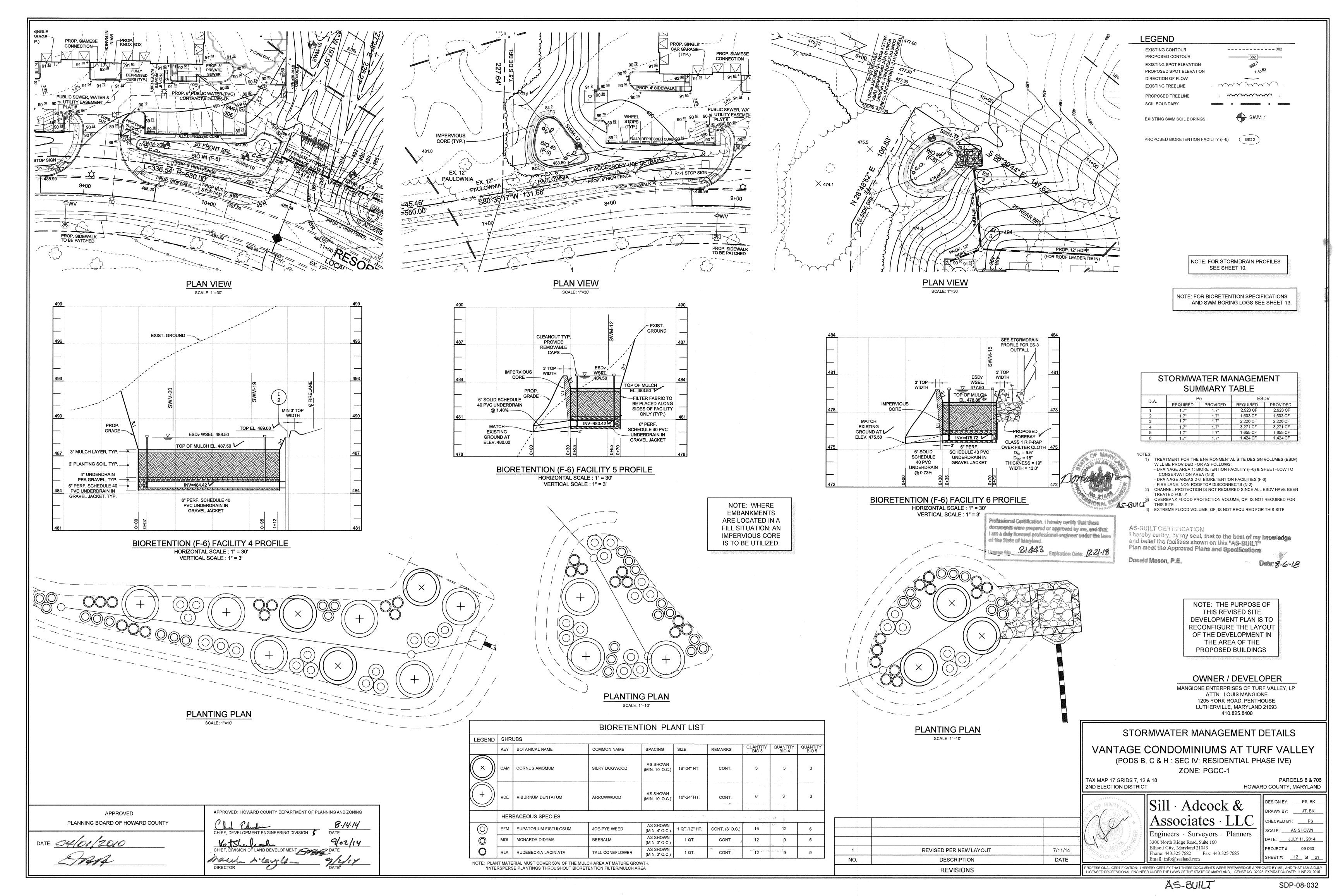
REVISION

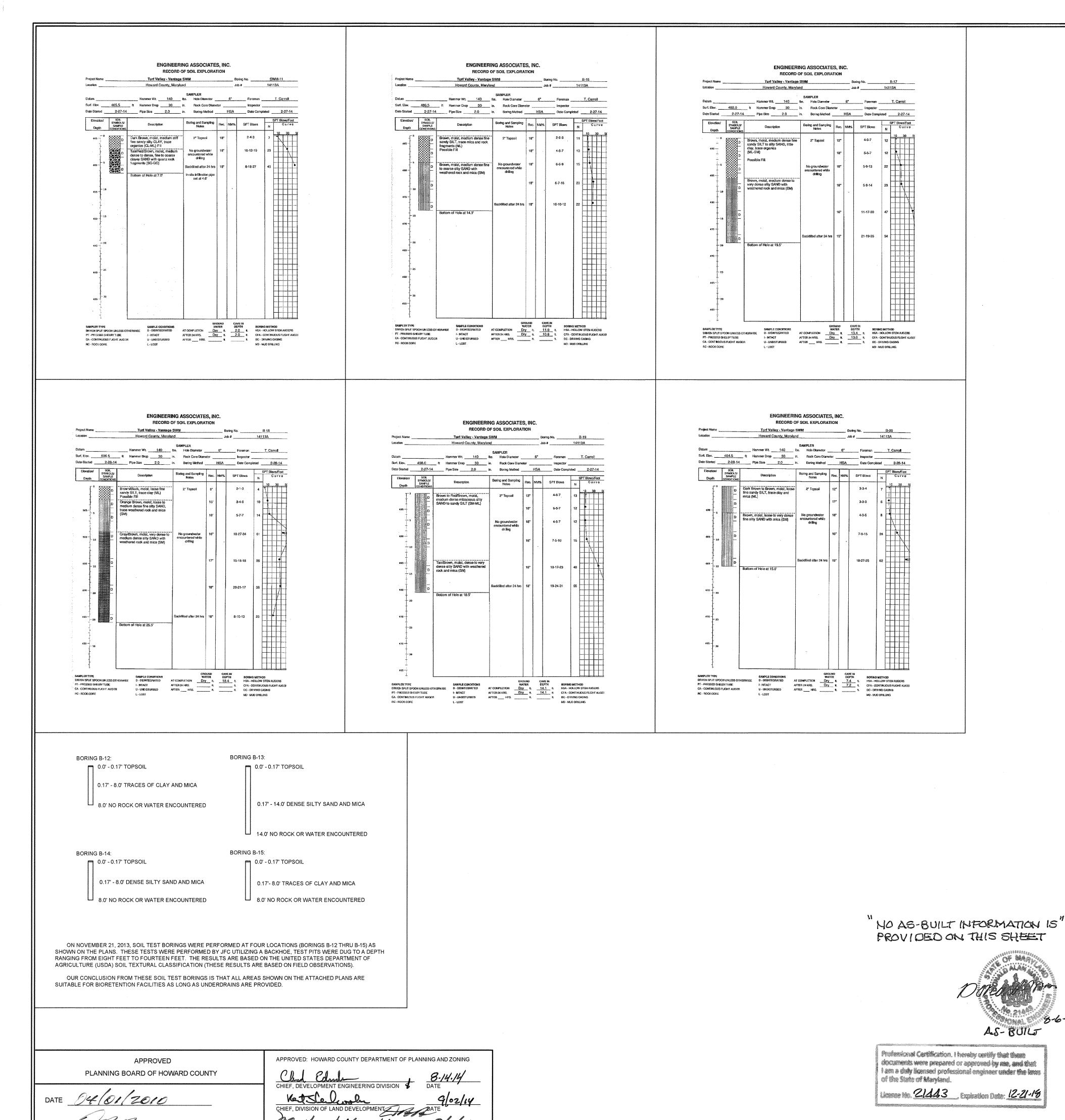
8 of 21











	BIORETENTION PLANT LIST											
SHR	SHRUBS											
KEY	BOTANICAL NAME	COMMON NAME	SPACING	SIZE	REMARKS	QUANTITY BIO 1	QUANTITY BIO 2	QUANTITY BIO 3	QUANTITY BIO 4	QUANTITY BIO 5	QUANTITY BIO 6	TOTAL
CAM	CORNUS AMOMUM	SILKY DOGWOOD	MIN. 10' O.C.*	18"-24" HT.	CONT.	3	-	3	3	3	3	15
VDE	VIBURNUM DENTATUM	ARROWWOOD	MIN. 10' O.C.*	18"-24" HT.	CONT.	-	3	3	6	3	3	18
HERBACEOUS SPECIES												
EFM	EUPATORIUM FISTULOSUM	JOE-PYE WEED	MIN. 4' O.C.*	1 QT./12" HT.	CONT. (3' O.C.)	9	9	9	15	12	6	60
MDI	MONARDA DIDYMA	BEEBALM	MIN. 3' O.C.*	1 QT.	CONT.	9	6	6	12	9	6	48
RLA	RUDEBECKIA LACINIATA	TALL CONEFLOWER	MIN. 3' O.C.*	1 QT.	CONT.	6	6	6	12	9	9	48

NOTES: *INTERSPERSE PLANTINGS THROUGHOUT BIORETENTION FILTER/MULCH AREA PLANT MATERIAL MUST COVER 50% OF THE MULCH AREA AT MATURE GROWTH

> SEE SHEETS 11 & 12 FOR PLANTING PLANS

MATERIAL	SPECIFICATION	SIZE	NOTES
PLANTINGS	SEE PLANT LIST THIS SHEET	N/A	PLANTINGS ARE SITE-SPECIFIC, SEE PLANT LIST THIS SHEET
PLANTING SOIL [2.0' DEEP]	SAND 35% - 60% SILT 0% - 25% GROUND COMPOST 40%-50%	N/A	EXISTING SOIL SUITABLE TO MEET PLANTING SOIL SPECIFICATIONS TO BE STOCKPILED IN DESIGNATED AREA & SUPPLEMENTED WITH COMPOST AS NECESSARY
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM
PEA GRAVEL DIAPHRAGM AND CURTAIN DRAIN,	PEA GRAVEL: ASTM-D-448		
IF REQUIRED	ORNAMENTAL STONE: WASHED COBBLES	PEA GRAVEL: NO. 6 STONE: 2"TO 5"	
HARDWARE CLOTH	0.035" THICK - 1/4" MESH OR SMALLER GALVANIZED WIRE HARDWARE CLOTH		FOR USE AS A WRAP AROUND PERFORATED UNDERDRAIN PIPING
UNDERDRAIN PEA GRAVEL	#7 OR #8 STONE	0.25" TO 0.50"	CLEAN WASHED STONE
UNDERDRAIN GRAVEL	AASHTO M-43	0.375" TO 0.75"	CLEAN WASHED STONE
UNDERDRAIN PIPING	F 758, TYPE PS 28 OR AASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	- 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; - SLOTTED PIPE MAY BE USED IN-LIEU OF PERFORATED PIPE (HARDWARE CLOTH WRAP NOT REQUIRED) - MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED BIORETENTION FACILITIES (F-6)

a. 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 CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL, VOLUME II, TABLE A.4.1 AND 2.

b. THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR.

- DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD OR DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES. 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
- d. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

STORMWATER MANAGEMENT SUMMARY TABLE										
D.A.	Р	'e	ESDV							
D.A.	REQUIRED	PROVIDED	REQUIRED	PROVIDED						
1	1.7"	1.7"	2,923 CF	2,923 CF						
2	1.7"	1.7"	1,503 CF	1,503 CF						
3	1.7"	1.7"	2,226 CF	2,226 CF						
4	1.7"	1.7"	3,271 CF	3,271 CF						
5	1.7"	1.7"	1,655 CF	1,655 CF						
6	1.7"	1.7"	1,424 CF	1,424 CF						

1) TREATMENT FOR THE ENVIRONMENTAL SITE DESIGN VOLUMES (ESDV) WILL BE PROVIDED FOR AS FOLLOWS: - DRAINAGE AREA 1: BIORETENTION FACILITY (F-6) & SHEETFLOW TO CONSERVATION AREA (N-3) - DRAINAGE AREAS 2-6: BIORETENTION FACILITIES (F-6)

- FIRE LANE: NON-ROOFTOP DISCONNECTS (N-2)

- 2) CHANNEL PROTECTION IS NOT REQUIRED SINCE ALL ESDV HAVE BEEN TREATED FULLY.
- 3) OVERBANK FLOOD PROTECTION VOLUME, QP, IS NOT REQUIRED FOR
- 4) EXTREME FLOOD VOLUME, QF, IS NOT REQUIRED FOR THIS SITE.

			· ~
		5.77	
			9
			,
1	REVISED PER NEW LAYOUT	7/11/14	17
NO.	DESCRIPTION	DATE	_
	REVISIONS		Ρ

NOTE: THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO RECONFIGURE THE LAYOUT OF THE DEVELOPMENT IN THE AREA OF THE PROPOSED BUILDINGS.

OWNER / DEVELOPER

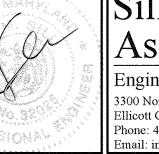
MANGIONE ENTERPRISES OF TURF VALLEY, LP ATTN: LOUIS MANGIONE 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400

STORMWATER MANAGEMENT DETAILS

VANTAGE CONDOMINIUMS AT TURF VALLEY (PODS B, C & H : SEC IV: RESIDENTIAL PHASE IVE) ZONE: PGCC-1

TAX MAP 17 GRIDS 7, 12 & 18 2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND DESIGN BY: PS, BK DRAWN BY: ____JT, BK__



||Sill · Adcock & Engineers · Surveyors · Planners

3300 North Ridge Road, Suite 160 Ellicott City, Maryland 21043 Phone: 443.325.7682 Fax: 443.325.7685

Email: info@saaland.com PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2015

AS-BUILT

SDP-08-032

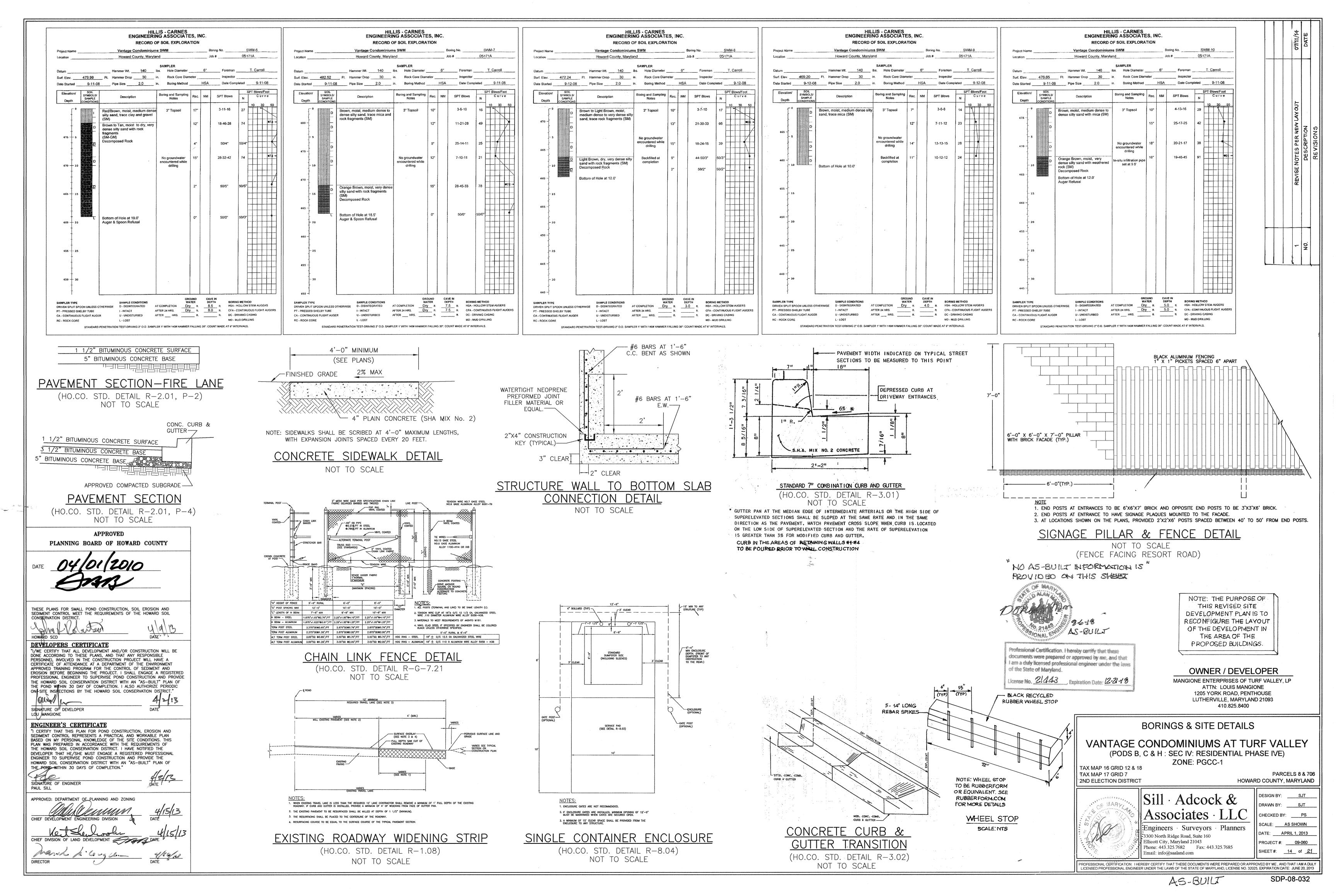
PARCELS 8 & 706

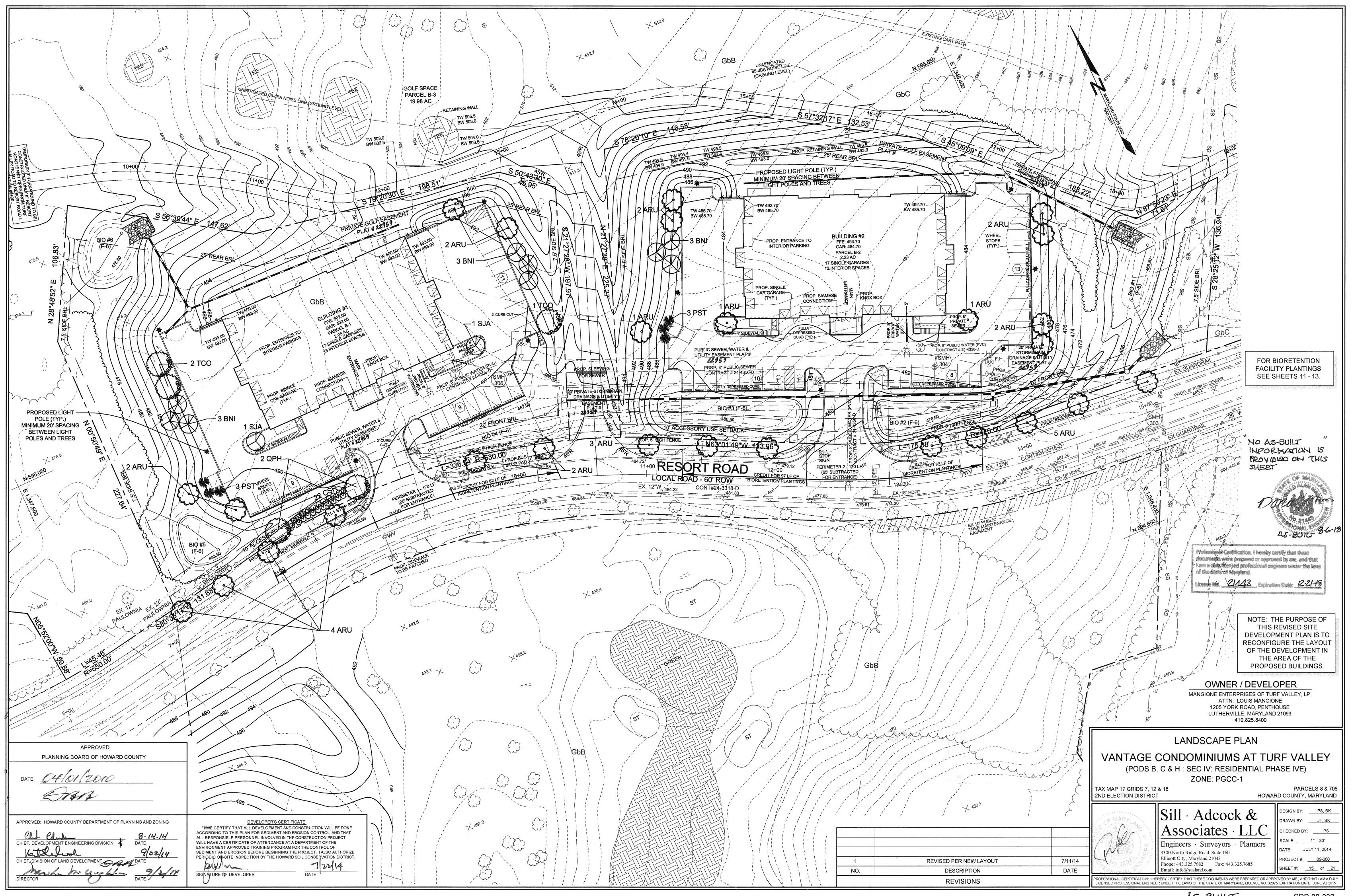
SCALE: AS SHOWN

DATE: ____JULY 11, 2014

PROJECT #: ____09-060

SHEET#: 13 of 21





LANDSCAPING GENERAL NOTES

THE LANDSCAPE CONTRACTOR WILL BE RESPONSIBLE FOR AND REQUIRED TO COMPLETE THE FOLLOWING CONDITIONS.

1. VERIFY THE NUMBER OF PLANTS ON THE PLANS. IF DIFFERS FROM THE PLANT SCHEDULE, NOTIFY THE LANDSCAPE ARCHITECT BEFORE BID DATE. THE PLAN SHALL GOVERN.

2. IF A PLANT OR SPECIES IS FOUND NOT TO BE SUITABLE OR AVAILABLE, NOTIFY THE LANDSCAPE ARCHITECT.

3. PROVIDE PROTECTIONS NECESSARY, IF NOT ALREADY IN PLACE, TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS OR ELEMENTS INDICATED TO REMAIN IN

4. RESTORE DAMAGE TO IMPROVEMENTS OR EXISTING ELEMENTS IDENTIFIED TO REMAIN CAUSED BY THEM OR PERSONS UNDER THEIR DIRECTION TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.

5. PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SUPPLIES IN PERFORMING ALL OPERATIONS AS IDENTIFIED HEREON.

6. IT SHALL BE DISTINCTLY UNDERSTOOD THAT THE FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NATURALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.

7. VERIFY ALL UTILITIES, GRADES, DIMENSIONS AND EXISTING CONDITIONS. ALL DISCREPANCIES SHALL BE REPORTED PRIOR TO COMMENCEMENT OF WORK. COORDINATE WITH THE GENERAL CONTRACTOR FOR REPLACEMENT OF SLEEVES AND TIMELY INSTALLATION OF THE LANDSCAPING.

8. ENSURE WORK DOES NOT INTERFERE WITH PROPOSED DRAINAGE PATTERNS AND ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING.

9. PROVIDE GEO-FABRIC UNDERLAYMENT UNDER ALL AREAS TO RECEIVE MULCH, RIVER ROCK OR GRAVEL TO PREVENT WEEDS, ETC. FROM GROWING IN THESE AREAS.

10. PROVIDE MAINTENANCE FOR A PERIOD OF THREE MONTHS AFTER FINAL ACCEPTANCE. THIS WILL INCLUDE BUT NOT TO BE LIMITED TO MOWING, WATERING, FERTILIZING, WEEDING AND MULCHING TO ENSURE HEALTHY VIGOROUS PLANT GROWTH. PROVIDE CONTINUOUS MAINTENANCE, IF REQUESTED BY THE OWNER. NO CONTRACTOR SHALL BID ON THIS PROJECT UNLESS THEY CAN PROVIDE CONTINUOUS MAINTENANCE. CONTRACTOR SHALL BE RESPONSIBLE FOR WINTERIZATION OF THE IRRIGATION SYSTEM FOR THE FIRST WINTER AFTER FINAL ACCEPTANCE.

11. THE CONTRACTOR SHALL WARRANTEE ALL WORK AND MATERIALS, INCLUDING PLANTS, UNDER THIS CONTRACT FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE IN ACCORDANCE WITH LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL. WHEN CONTACTED BY THE OWNER OR REPRESENTATIVE, IMMEDIATELY REPLACE ANY PLANT MATERIAL IN UNSATISFACTORY CONDITION. IN EVERY INSTANCE, ANY OF SUCH WARRANTED WORK AND TO MAKE GOOD ALL DAMAGE TO THE BUILDING AND GROUNDS, ARE WITHOUT COST TO OWNER.

12. CONTRACTOR IS SUBJECT TO ALL OTHER GENERAL NOTES, STATED ON THIS SET OF PLANS OF WHICH THIS SHEET IS A PART, AS THEY APPLY TO HIM.

13. ALL ON-SITE PLANTINGS AND TREES TO BE OWNED AND MAINTAINED BY PROPERTY OWNER.

14. AVOID ALL CONFLICTS. THERE SHALL BE A MINIMUM TEN (10) FOOT SEPARATION MAINTAINED BETWEEN THE CENTER OF ALL TREES AND ANY PRIVATE AND PUBLIC UTILITY LINES AND STRUCTURES (UNDERGROUND AND ABOVE

15. THE LANDSCAPE PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING (29) SHADE TREES, 6 EVERGREENS, AND 22 SHRUBS) WILL BE POSTED AS PART OF THE DPW DEVELOPERS AGREEMENT IN THE AMOUNT OF \$ 10,260.00

PLANTING NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 72 HOURS PRIOR TO BEGINNING WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES DUE TO NON-COORDINATED WORK. CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES.

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

3. PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS PLANTS FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BOXERS, INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. PLANTS SHALL BE FRESHLY DUG; NO HEELED-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

4. UNLESS OTHERWISE SPECIFIED, PLANT MATERIAL SHALL CONFORM TO "AMERICAN STANDARD FOR NURSERY STOCK" ANSI Z60.1-1990, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INCLUDING ALL ADDENDA.

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

6. PLANTING BEDS SHALL BE MULCHED AS SPECIFIED TO THE LIMITS OF THE PLANTING BEDS AS SHOWN ON THE PLAN AND TO THE DEPTH AS SHOWN ON THE DETAILS.

7. PROTECTION OF EXISTING VEGETATION TO REMAIN SHALL BE ACCOMPLISHED BY THE TEMPORARY INSTALLATION OF 4' STANDARD CONSTRUCTION FENCE OR OTHER APPROVED FENCING SUCH AS TURKY WIRE MESH FENCE FOR THE AFFORESTATION AREAS, IN LOCATIONS SHOWN ON THE PLAN, AT THE DRIP LINE.

8. CONTRACTOR IS RESPONSIBLE FOR INSTALLING PLANT MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE.

9. PLANTING MIX SHALL BE AS FOLLOWS:

DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW MANURE. ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX.

TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

10. THIS PLAN IS INTENDED FOR LANDSCAPE USE ONLY, SEE OTHER PLAN SHEETS FOR MORE INFORMATION ON GRADING, SEDIMENT CONTROL, UTILITIES, LAYOUT, ETC.

SCHEDULE A: PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO ROADWAY	ADJACENT TO ROADWAY	TOTAL
LANDSCAPE TYPE	PERIMETER 1- TYPE E	PERIMETER 2- TYPE E	
LINEAR FEET OF PERIMETER	170 LF	1.70 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	NO	NO	
CREDIT FOR BIORETENTION PLATINGS (YES, NO, LINEAR FEET)	YES, .82 LF (88 LF REMAINING)	YES, 170 LF (O LF REMAINING)	
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 22 SHRUBS	O SHADE TREES O EVERGREEN TREES O SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 22 SHRUBS
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (2:1 SUBSTITUTION) SHRUBS (10:1 SUBSTITUTION)	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 22 SHRUBS	O SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES O SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 22 SHRUBS

COMMON NAME

"HERITAGE" RIVER BIRCH

WILLOWLEAF COTONEASTER

EASTERN WHITE PINE

JAPANESE PAGODA TREE

"GREENSPIRE" LINDEN

WILLOW OAK

"OCTOBER GLORY" RED MAPLE AS SHOWN

SCHEDULE B: PARKING LOT INTERNAL LANDSCAPING

PLANT LIST

KEY BOTANICAL NAME

ARU ACER RUBRUM "OCTOBER GLORY"

BETULA NIGRA "HERITAGE"

PINUS STROBUS

QUERCUS PHELLOS

SOPHORA JAPONICA

TILIA CORDATA "GREENSPIRE"

COTONEASTER SALICIFOLIUS 'REPENS

NUMBER OF PARKING SPACES	60
NUMBER OF TREES REQUIRED	. 6
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	6 SHADE TREES 0 OTHER TREES

SCHEDULE C: RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

NUMBER OF DWELLING UNITS	60
NUMBER OF TREES REQUIRED (1:DU SFA; 1:3 DU APTS)	20 SHADE TREES
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	20 SHADE TREES 0 OTHER TREES

SCREEN CALCULATIONS

SCREEN BUILDING #1
DUMPSTER - 30 LF - TYPE D SCREEN
3 EVERGREENS PROVIDED
SCREEN BUILDING #2
DUMPSTER - 30 LF - TYPE D SCREEN
3 EVERGREENS PROVIDED

REMARKS

BB/LIMB TO 7'

STREET TREES, 6 EVERGREENS, 22 SHRUBS

STREET TREES

RES	SORT I	ROAD										***************************************
1	TREE	PER	40	LF	Χ	547	LF	=	14	STREET	TREES	REQUIR
									14	STREET	TREES	PROVIDI

SPACING

AS SHOWN

AS SHOWN

AS SHOWN

AS SHOWN

AS SHOWN

AS SHOWN

SIZE

2.5"-3" CAL.

10'-12' HT.

18"-24" SP

6'-8' HT.

2.5"-3" CAL.

2.5"-3" CAL.

2.5"-3" CAL.

TOTAL 29 SHADE TREES,

RE:	SORT I	ROAD										
1	TREE	PER	40	LF	Χ	547	LF	=	14	STREET	TREES	REQUIRE
									14	STREET	TREES	PROVIDE

			ž .
BB/LOW BRANCHED	27		
MULTI-STEM/BB	9		
CONTAINER	22	0	_
er i desa ur	, 0		
BB/UNSHEARED	6	*	L
BB	2		
		\bigcirc	

QUANTITY SYMBOL

FOR BJORETENTION PLANTINGS SEE SHEET 13

> NOTE: THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO RECONFIGURE THE LAYOUT OF THE DEVELOPMENT IN THE AREA OF THE PROPOSED BUILDINGS.

OWNER / DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY, LP ATTN: LOUIS MANGIONE 1205 YORK ROAD, PENTHOUSE LUTHERVILLE, MARYLAND 21093 410.825.8400

LANDSCAPE PLAN

VANTAGE CONDOMINIUMS AT TURF VALLEY (PODS B, C & H : SEC IV: RESIDENTIAL PHASE IVE)

ZONE: PGCC-1

TAX MAP 16 GRID 12 & 18 TAX MAP 17 GRID 7 2ND ELECTION DISTRICT

-LEADER MUST REMAIN INTACT

OR WEAK BRANCHES

BURLAP FROM BALL.

FORM 3" MULCH SAUCER

FORM 2" EARTH SAUCER

XI WAXI WAXI WAX

TREE PLANTING DETAIL

NOT TO SCALE

FINISH GRADE

-BACKFILL MIX - SEE NOTES

-LOOSENED SUBSOIL

ROOT PENETRATION

-CLEANLY PRUNE ONLY DAMAGED

-CAREFULLY REMOVE TOP 1/3 OF CONTAINER OR

CUT SLITS IN ORGANIC CONTAINER TO FACILITATE

SET PLANTS AT ORIGINAL PLANTING DEPTH

IF CONTAINER IS NON-ORGANIC, REMOVE COMPLETELY

HOWARD COUNTY, MARYLAND

Sill · Adcock & Associates · LLC Engineers · Surveyors · Planners 3300 North Ridge Road, Suite 160 Ellicott City, Maryland 21043

DRAWN BY: CHECKED BY: PS SCALE: NOT TO SCALE DATE: APRIL 1, 2013 PROJECT#: 09-060 Phone: 443.325.7682 Fax: 443.325.7685 SHEET#: 16 of 21

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT LAM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 32025, EXPIRATION DATE: JUNE 20, 2013

Email: info@saaland.com

REVISED PER NEW LAYOUT 7/11/14 DESCRIPTION DATE NO.

HO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET

Professional Certification, I hereby certify that these documents were prepared or approved by me, and that I am a duty licensed professional engineer under the laws of the State of Maryland. License No. 21443 _ Expiration Date: 12-21-19

AS-BUILD

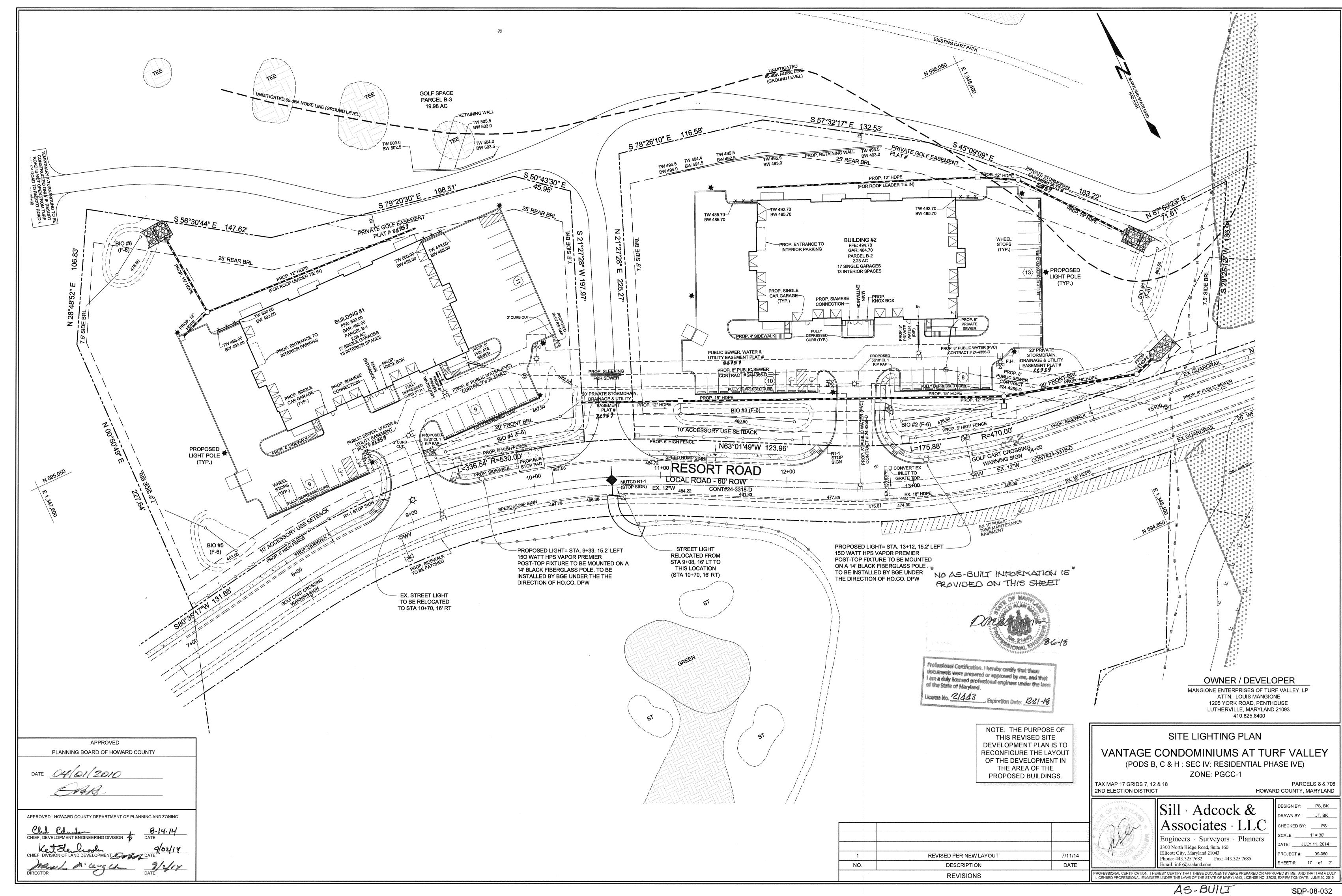
REVISIONS

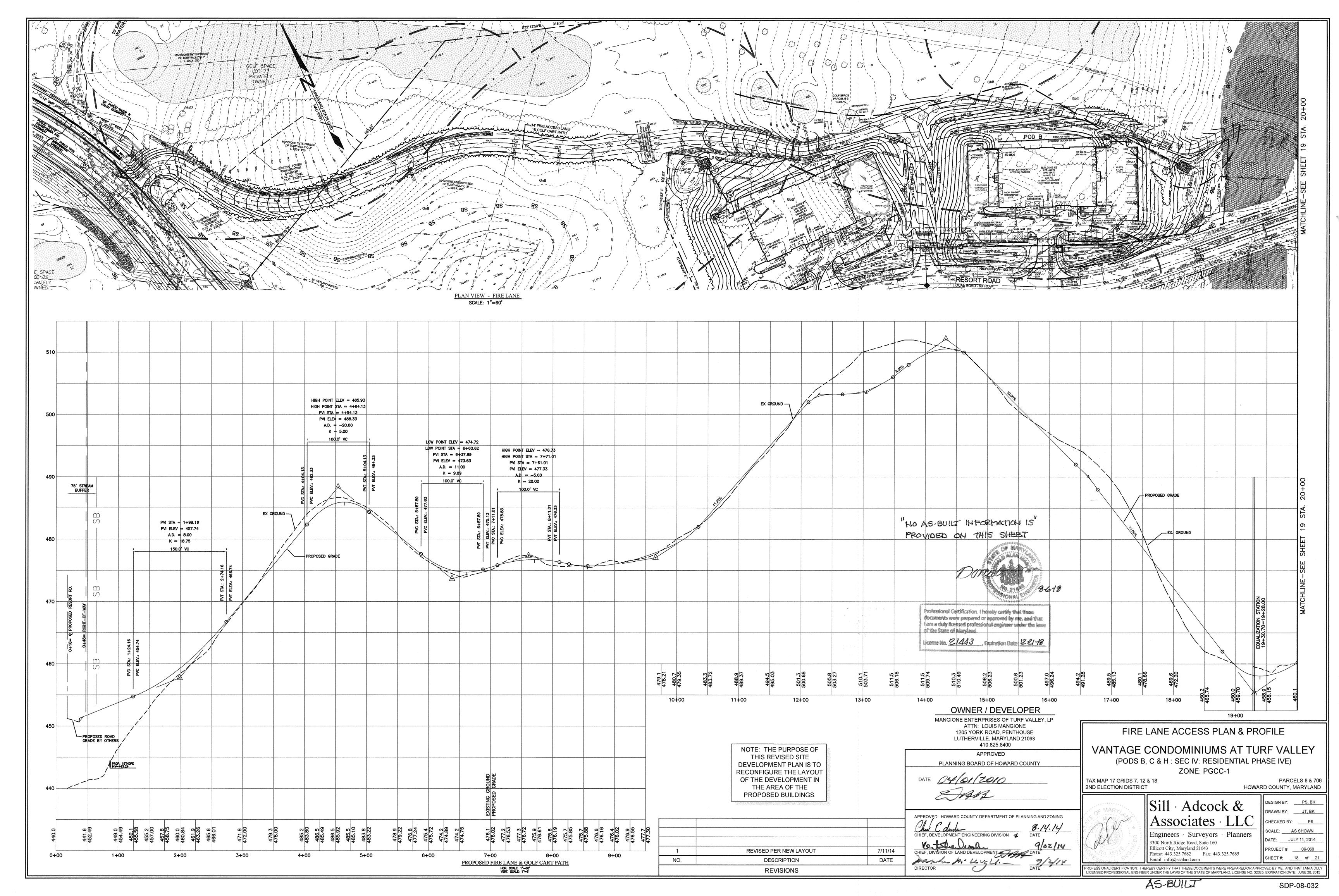
PLANNING BOARD APPROVAL BLOCK

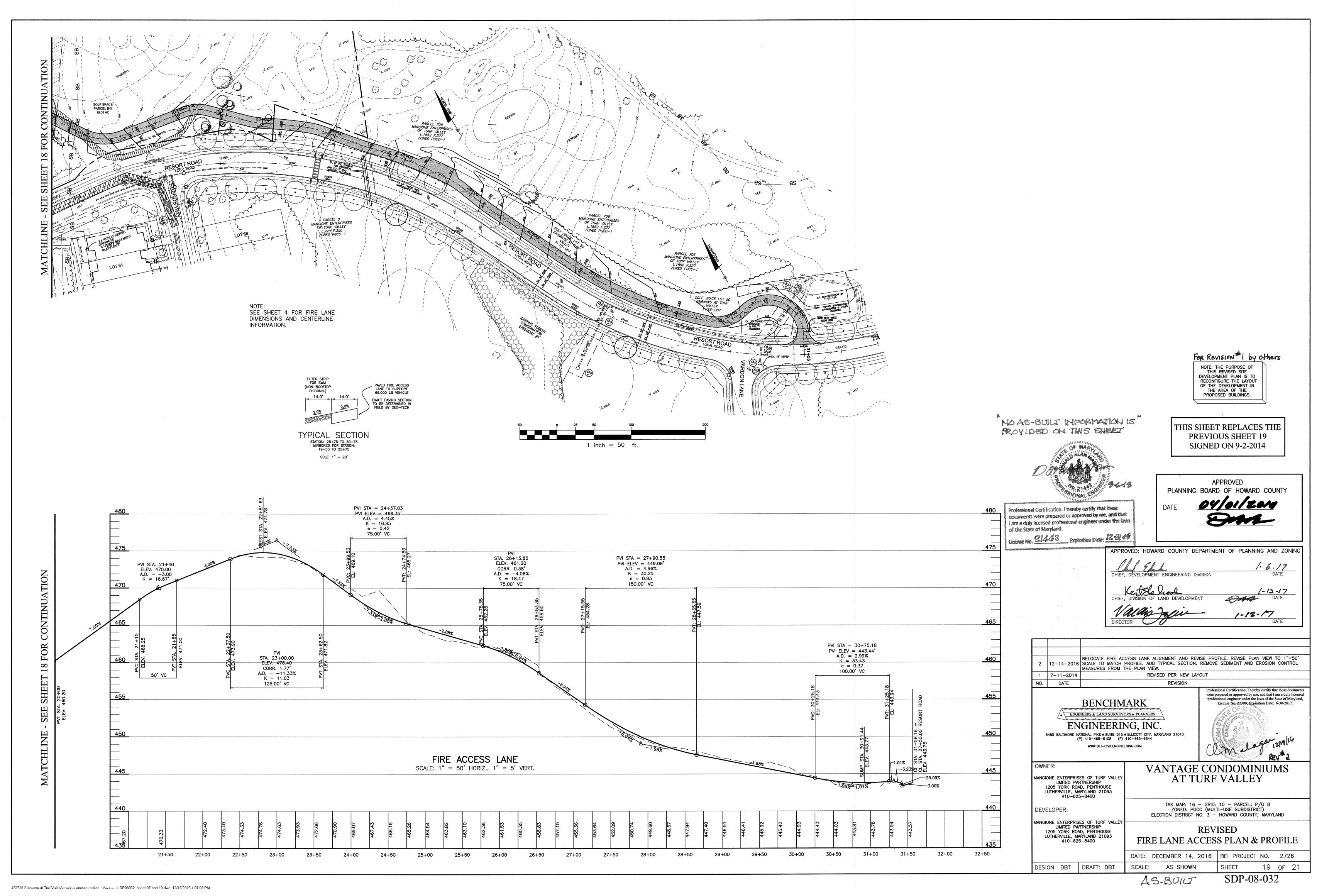
DEVELOPER'S CERTIFICATE I CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

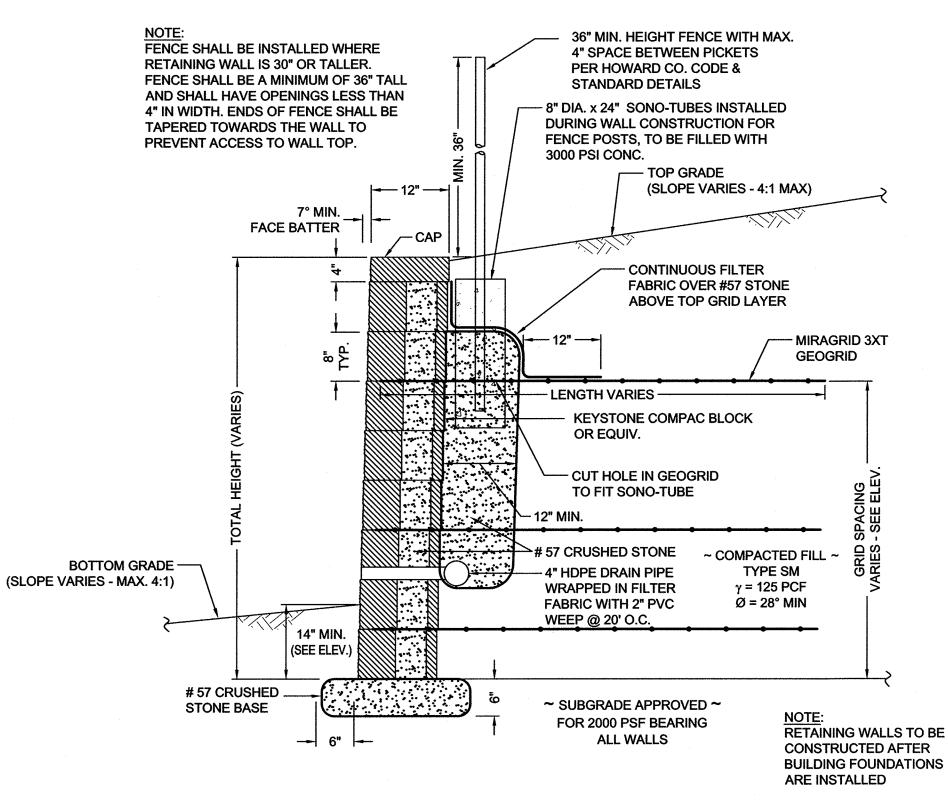
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PARCELS 8 & 706









TYPICAL WALL SECTION N.T.S

SPECIFICATIONS

MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

1.01 Description

A. Work shall consist of furnishing and construction of a Modular Retaining Wall System in accordance with these specifications and in reasonably close conformity with the lines, grades, design, and dimensions shown on the plans.

B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit drainage fill and backfill to the lines and grades shown on the construction drawings. C. Work includes furnishing and installing geogrid soil

reinforcement of the type, size, location, and lengths designated on the construction drawings.

1.02 Delivery, Storage and Handling A. Contractor shall check all materials upon delivery to

assure that the proper type, grade, color, and certification has been received. B. Contractor shall protect all materials from damage due to

job site conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

PART 2: PRODUCTS

2.01 Modular Concrete Retaining Wall Units A. Modular concrete units shall conform to the following

architectural requirements: face color - tan - standard manufacturers' color may be specified by the Owner. face finish - sculptured rock face in angular tri-planer or

flat configuration. Other face finishes will not be allowed without written approval of Owner. bond configuration - running with bonds nominally located

at midpoint vertically adjacent units, in both straight and curved alignments. exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 10

feet under diffused lighting. B. Modular concrete materials shall conform to the requirements of ASTM C1372 - Standard Specifications

for Segmental Retaining Wall Units. C. Modular concrete units shall conform to the following

structural and geometric requirements measured in accordance with appropriate references: compressive strength = 3000 psi minimum; absorption = 8 % maximum (6% in northern states) for standard weight aggregates;

dimensional tolerances = $\pm 1/8$ " from nominal unit dimensions not including rough split face, ±1/16" unit height - top and bottom planes: unit size - 8" (H) x 18" (W) x 12" (D) minimum; unit weight - 75 lbs/unit minimum for standard weight

inter-unit shear strength - 1000 plf minimum at 2 psi normal pressure: geogrid/unit peak connection strength - 1000 plf minimum

at 2 psi normal force. D. Modular concrete units shall conform to the following constructability requirements: (if applicable) vertical setback = 1/8"± per course (near vertical) or 1"+ per course per the design; alignment and grid positioning mechanism - fiberglass

pins, two per unit minimum; maximum horizontal gap between erected units shall be -

2.02 Shear Connectors (if applicable) A. Shear connectors shall be 1/2 inch diameter thermoset isopthalic polyester resin-protruded fiberglass reinforcement rods or equivalent to provide connection

between vertically and horizontally adjacent units. Strength of shear connectors between vertical adjacent units shall be applicable over a design temperature of 10 degrees F to + 100 degrees F.

B. Shear connectors shall be capable of holding the geogrid in the proper design position during grid pre-tensioning and backfilling.

2.03 Base Leveling Pad Material

A. Material shall consist of a compacted #57 crushed stone base as shown on the construction drawings.

2.04 Unit Drainage Fill

A. Unit drainage fill shall consist of #57crushed stone

2.05 Reinforced Backfill

A. Reinforced backfill shall type SM, be free of debris and meet the following gradation tested in accordance with ASTM D-422 and meet other properties shown on the

Percent Passing 3/4 inch 100-75 No. 40 No. 200

Plasticity Index (PI) <10 and Liquid Limit <35 per ASTM B. Material can be site excavated soils where the above requirements can be met. Unsuitable soils for backfill (high plastic clays or organic soils) shall not be used in the

2.06 Geogrid Soil Reinforcement

reinforced soil mass.

A. Geosynthetic reinforcement shall consist of geogrids manufactured specifically for soil reinforcement applications and shall be manufactured from high tenacity

2.07 Drainage Pipe

A. The drainage pipe shall be perforated corrugated HDPE pipe manufactured in accordance with ASTM D-1248.

PART 3 EXECUTION

3.01 Excavation

A. Contractor shall excavate to the lines and grades shown on the construction drawings. Owner's representative shall be responsible for inspecting and approving the excavation prior to placement of leveling material or fill

3.02 Base Leveling Pad A. Leveling pad material shall be placed to the lines and grades shown on the construction drawings, to a minimum thickness of 6 inches and extend laterally a minimum of 6"

in front and behind the modular wall unit. B. Leveling pad shall be prepared to insure full contact to the

base surface of the concrete units.

3.03 Modular Unit Installation

A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in

full contact with the base and properly seated. **B.** Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's

recommendations. C. Install shear/connecting devices per manufacturer's

recommendations. **D.** Place and compact drainage fill within and behind wall units. Place and compact backfill soil behind drainage fill. Follow wall erection and drainage fill closely with structure backfill.

E. Maximum stacked vertical height of wall units, prior to unit drainage fill and backfill placement and compaction, shall not exceed three courses.

3.04 Structural Geogrid Installation

A. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment. B. Geogrid reinforcement shall be placed at the strengths,

lengths, and elevations shown on the construction design drawings or as directed by the Engineer. C. The geogrid shall be laid horizontally on compacted backfill and attached to the modular wall units. Place the next course of modular concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to

backfill placement on the geogrid. D. Geogrid reinforcements shall be continuous throughout

their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps between adjacent pieces of geogrid are not permitted.

3.05 Reinforced Backfill Placement

A. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation

B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches where hand compaction is used, or 8 - 10 inches where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required

density as required. C. Reinforced backfill shall be compacted to 95% of the maximum density as determined by ASTM D698. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each

laver and shall be + 3% to - 3% of optimum. D. Only lightweight hand-operated equipment shall be allowed within 3 feet from the tail of the modular concrete

E. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from

displacing the fill and damaging the geogrid. F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH. Sudden

braking and sharp turning shall be avoided. G. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

3.06 Cap Installation

NO.

A. Cap units shall be glued to underlying units with an all-weather adhesive recommended by the manufacturer.

3.07 Field Quality Control

A. The Owner shall engage inspection and testing services,

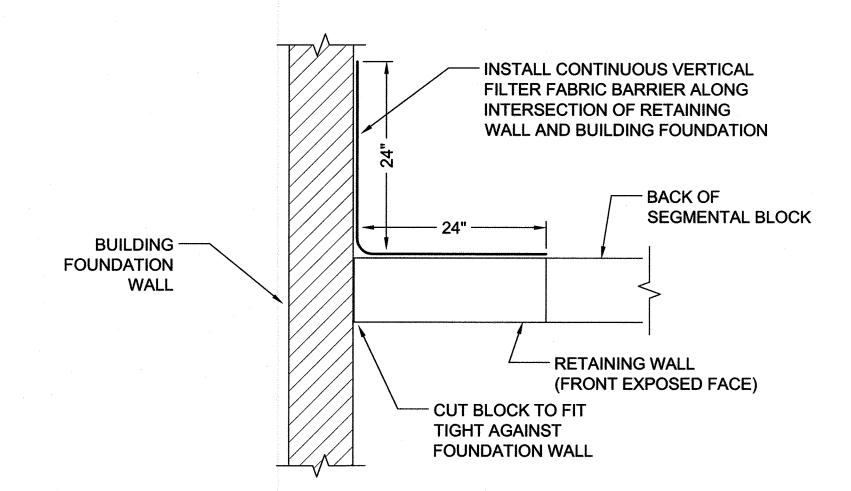
REVISED PER NEW LAYOUT

DESCRIPTION

REVISIONS

including independent laboratories, to provide quality assurance and testing services during construction. B. As a minimum, quality assurance testing should include foundation soil inspection, soil and backfill testing,

verification of design parameters, and observation of construction for general compliance with design drawings and specifications.



BUILDING / WALL INTERFACE PLAN VIEW NTS

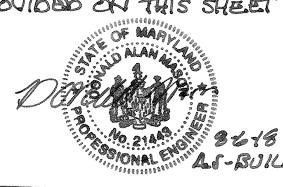
NOTES:

APPROVED: DEPARTMENT OF PLANNING AND ZONING

7/11/14

- 1. No trees shall be planted within 10 feet of the top of the retaining wall.
- 2. Retaining walls shall only be constructed under the observation of a registered professional engineer and a (NICET, WACEL, or equiv.) certified soils technician.
- 3. One soil boring shall be required every one hundred feet along the entire length of the wall. Copies of all boring reports shall be provided to the Howard County Inspector Prior to the start of construction.
- 4. The required bearing pressure beneath the wall system shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to start of construction. The required bearing test shall be the Dynamic Cone Penetrometer test ASTM STP-399.
- 5. The suitability of fill material shall be confirmed by the on-site soils technician. Each 8" lift must be compacted to a minimum 95% standard proctor density and the testing report shall be made available to the Howard County Inspector upon completion of construction.
- 6. Walls shall not be constructed on uncertified fill materials.
- 7. Walls shall not be constructed within a Howard Co. right-of-way or

NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET



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. 21443 Expiration Date: 12-21-48

PLANNING BOARD APPROVAL BLOCK

NOTE: THE PURPOSE OF THIS REVISED SITE DEVELOPMENT PLAN IS TO RECONFIGURE THE LAYOUT of the development in THE AREA OF THE proposed buildings.

OWNER / DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY, LP ATTN: LOUIS MANGIONE 1205 YORK ROAD, PENTHOUSE **LUTHERVILLE, MARYLAND 21093** 410.825.8400

WALL ELEVATIONS & DETAILS

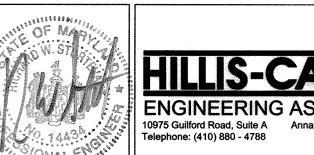
VANTAGE CONDOMINIUMS AT TURF VALLEY (PODS B, C & H : SEC IV: RESIDENTIAL PHASE IVE)

ZONE: PGCC-1

TAX MAP 16 GRID 12 & 18

TAX MAP 17 GRID 7 2ND ELECTION DISTRICT

HOWARD COUNTY, MARYLAND DESIGN BY: AM



10975 Guilford Road, Suite A Annapolis Junction, Maryland Fax: (410) 880 - 4098

CHECKED BY: RWS SCALE: AS SHOWN DATE: FEBRUARY, 2013 PROJECT#: 05171-B SHEET#: 20 of 21

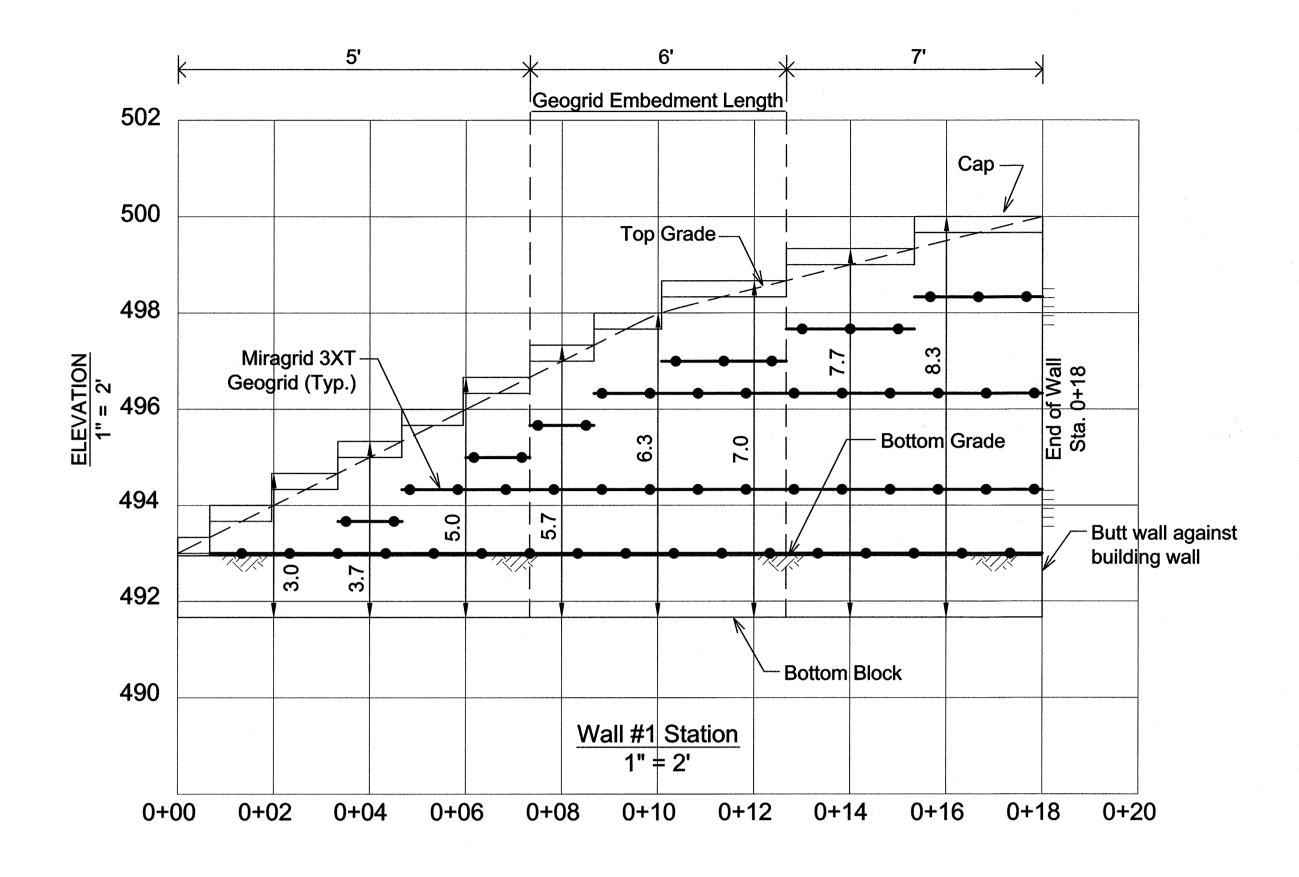
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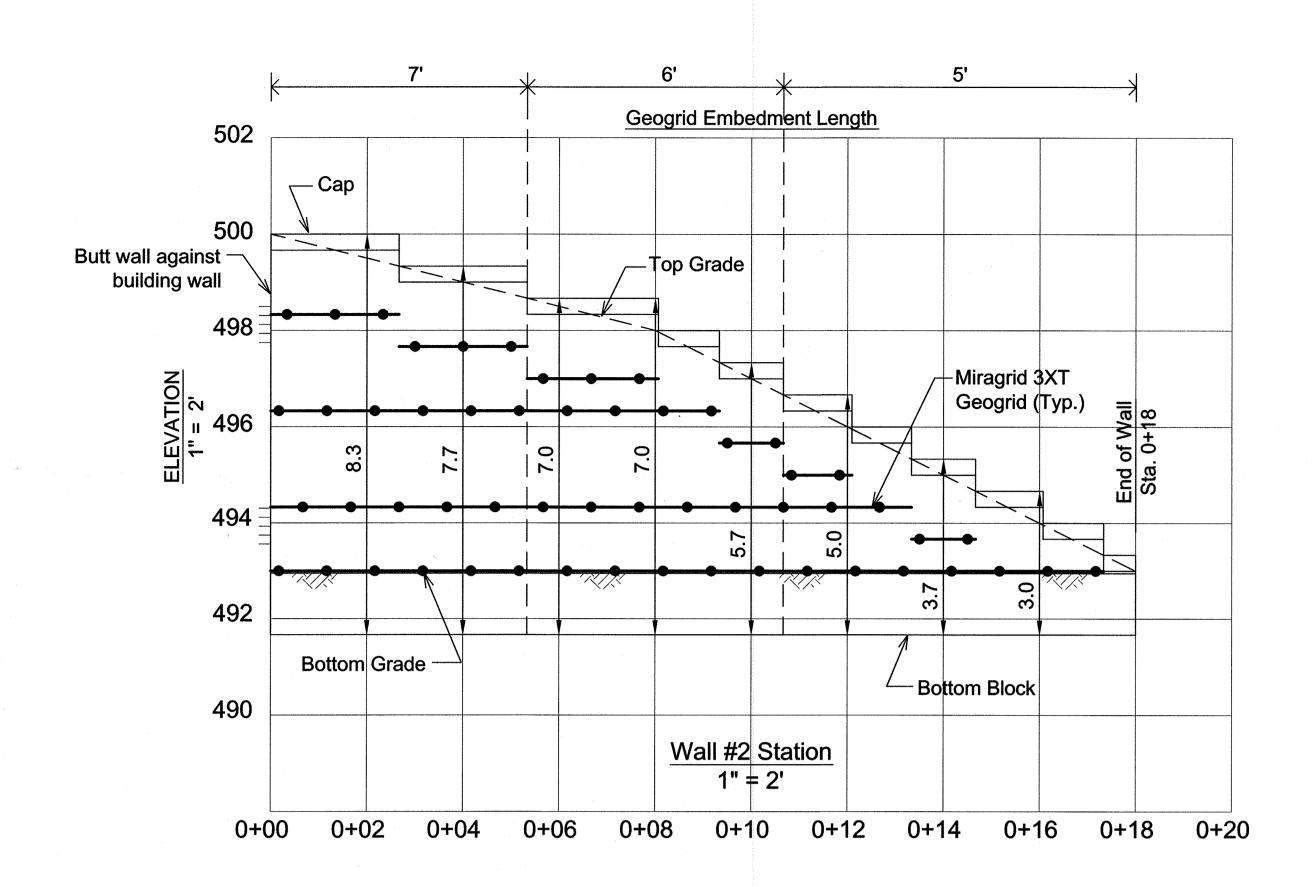
PARCEL 8

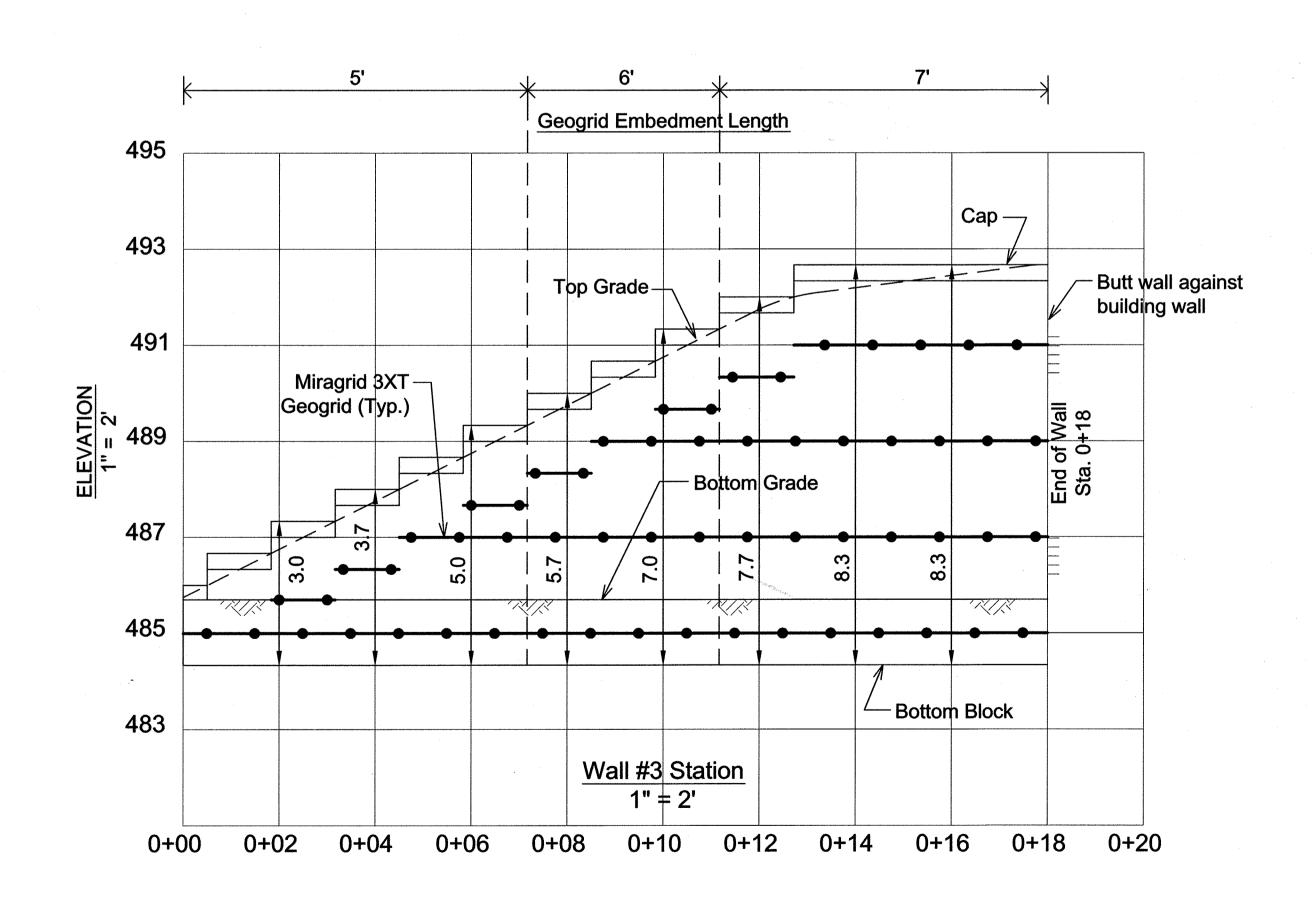
LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 14434, EXPIRATION DATE: 05-13-13

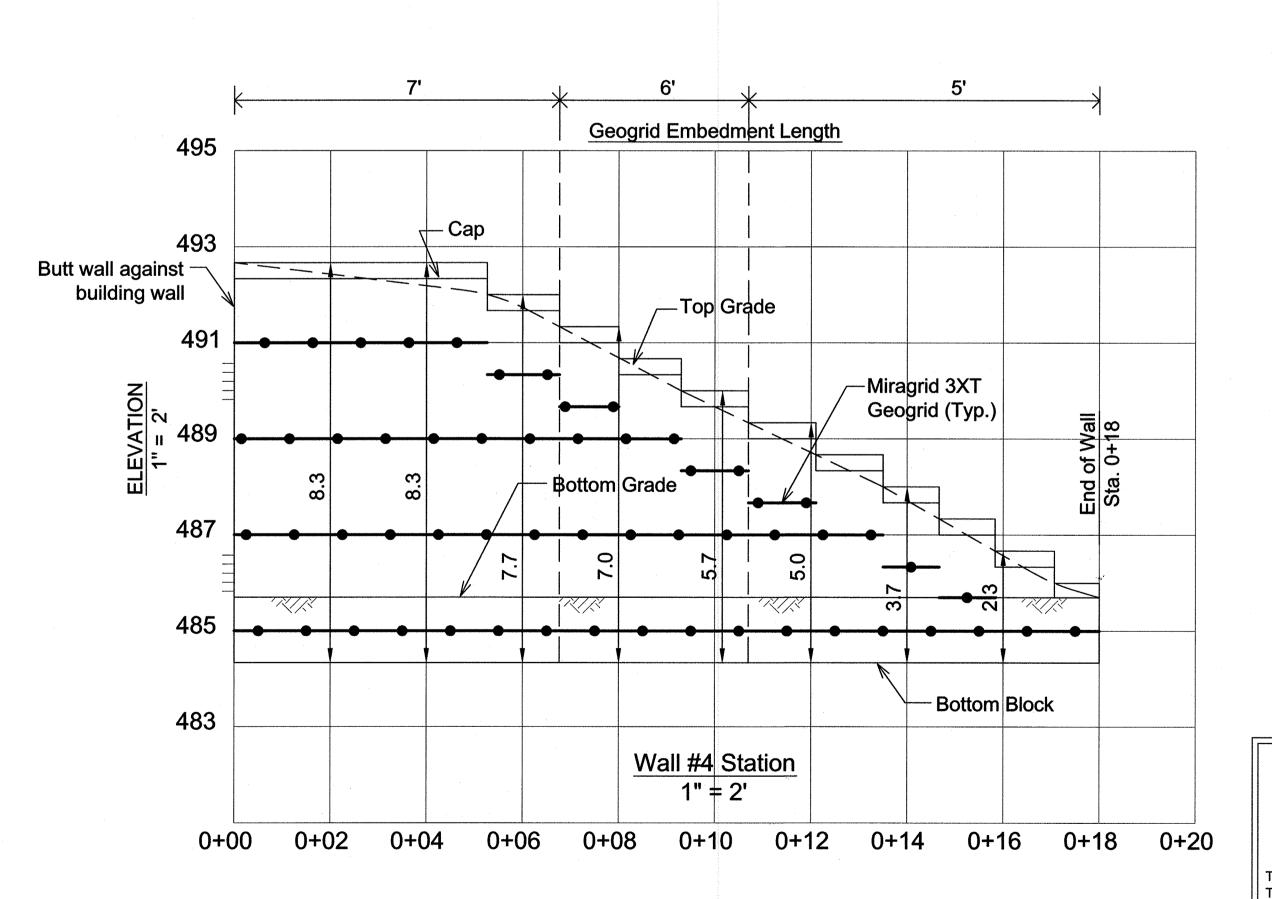
PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY

AS-BUILT









APPROVED: DEPARTMENT OF PLANNING AND ZONING

7/11/14

DATE

REVISED PER NEW LAYOUT

Description

ren bons

NO.

NO AS-BUILT INFORMATION IS PROVIDED ON THIS SHEET



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. 21443 Expiration Date: 12-4-18

> NOTE: THE PURPOSE OF This revised site development plan is to RECONFIGURE THE LAYOUT of the development w THE AREA OF THE proposed buildings

OWNER / DEVELOPER

MANGIONE ENTERPRISES OF TURF VALLEY, LP ATTN: LOUIS MANGIONE 1205 YORK ROAD, PENTHOUSE **LUTHERVILLE, MARYLAND 21093** 410.825.8400

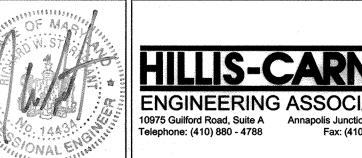
WALL ELEVATIONS

VANTAGE CONDOMINIUMS AT TURF VALLEY (PODS B, C & H : SEC IV: RESIDENTIAL PHASE IVE)

ZONE: PGCC-1

TAX MAP 16 GRID 12 & 18 TAX MAP 17 GRID 7 2ND ELECTION DISTRICT

PARCEL 8 HOWARD COUNTY, MARYLAND



DESIGN BY: AM CHECKED BY: RWS SCALE: AS SHOWN **ENGINEERING ASSOCIATES** DATE: FEBRUARY, 2013 Annapolis Junction, Maryland Fax: (410) 880 - 4098

PROJECT#: 05171-B SHEET#: 21 of 21 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. 14434, EXPIRATION DATE: 05-13-13

PLANNING BOARD APPROVAL BLOCK

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