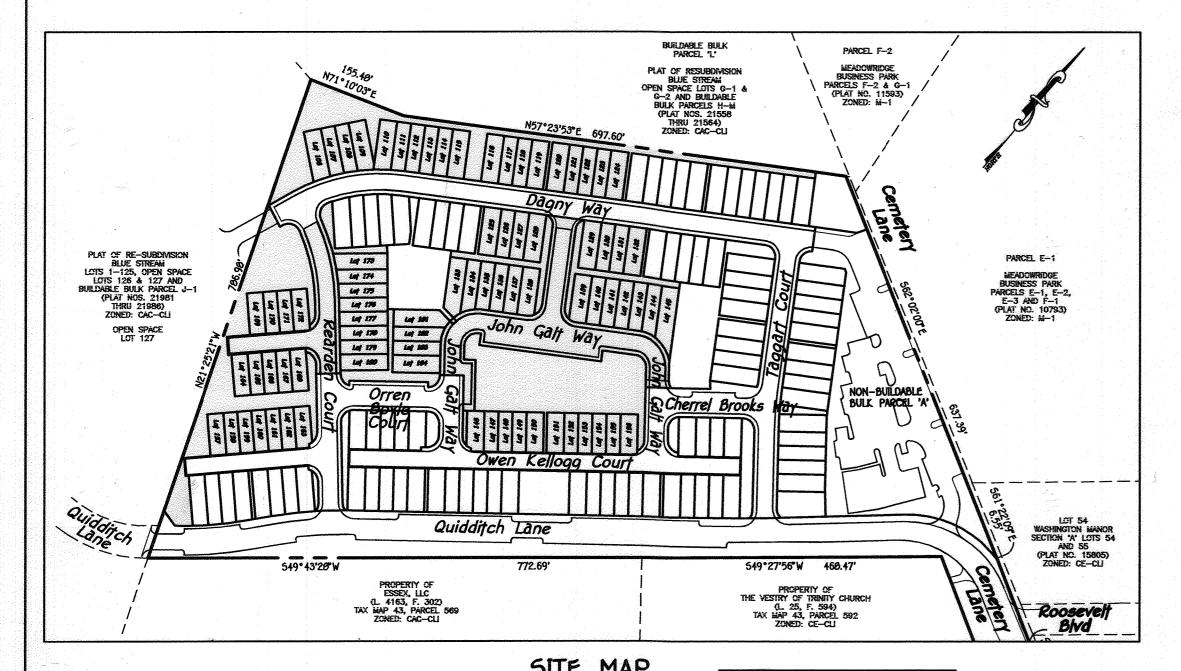
	SHEET INDEX
SHEET NO.	DESCRIPTION
1	title sheet
2	DETAILS SHEET
3	SITE DEVELOPMENT PLAN
4	SEDIMENT & EROSION CONTROL PLAN
5	SEDIMENT & ERÓSION CONTROL NOTES AND DETAILS
6	STORM DRAIN DRAINAGE AREA MAP AND SOILS MAP
7	STORM DRAIN DRAIN PROFILES
8	STORM WATER MANAGEMENT DETAILS
9	STREET TREES & LANDSCAPE PLAN
10	STREET TREES & LANDSCAPE DETAILS

11 GEOMETRY PLAN

WALKWAY/STR	FFT LIGHT	CHART (PRIV	ATF)PHASE VI
STREET NAME	STATION	OFFSET	FIXTURE/POLE TYPE
DAGNY WAY	0+12	25' R	
JOHN GALT WAY	1+51	37' R	
FLOYD FERRIS	0+98	18' L	
OWEN KELLOGG COURT	3+05	16' L	100-Watt HPS Vapor Equivalent Led "Maple Lawn
	NORTHING	EASTING .	ACORN" FIXTURE MOUNTED ON A 12-FOOT BLACK FIBERGLASS
WALKWAY LIGHT 1	551,575.07	1,376,592.23	POLE (WITH A SHROUD)
WALKWAY LIGHT 2	551,800.18	1,376,990.98	



LEGEND				
5YMBOL	DESCRIPTION			
	existing storm drain line			
x x x	EXISTING FENCE			
	BOUNDARY/RIGHT OF WAY LINE			
B.R.L	BUILDING RESTRICTION LINE			
	PROPOSED CURB TRANSITION			
	PROPOSED STORM DRAIN PIPE			
NATE OF THE PROPERTY OF THE PR	PROPOSED PERFORATED PIPE			
	PROPOSED CONCRETE			
	PROPOSED PAVING			
	PROPOSED LO.D.			
	EXISTING SOILS 5% AND SEE SHEET 5  GREATER W/ Kw > 0.35			
	EXISTING SLOPES 15% to 24.9%			
	existing slopes 25% and greater			
	RETENTION			
	REFORESTATION			
	SUPER SILT FENCE			
- 5F — 5F — 5F — 5	F SILT FENCE			
	EXISTING CONTOUR 2' INTERVAL			
	PROPOSED CONTOUR 2' INTERVAL			
×362.2	SPOT ELEVATION			
□WOB,>	WALKOUT BASEMENT			
. ECM .	EROSION CONTROL MATTING			
	WATER AND SEWER EASEMENT			
	STORM DRAIN EASEMENT			

	STREET AD	DRESS (	CHART
LOT NO.	STREET ADDRESS	LOT NO.	STREET ADDRESS
106	7780 DAGNY WAY	148	7707 OWEN KELLOGG COUR
107	7778 DAGNY WAY	149	7709 OWEN KELLOGG COUR
108	7776 DAGNY WAY	150	7711 OWEN KELLOGG COUR
109	7774 DAGNY WAY	151	7715 OWEN KELLOGG COUR
110	7770 DAGNY WAY	152	7717 OWEN KELLOGG COUR
111	7768 DAGNY WAY	153	7719 OWEN KELLOGG COUR
112	7766 DAGNY WAY	154	7721 OWEN KELLOGG COUR
113	7764 DAGNY WAY	155	7723 OWEN KELLOGG COUR
114	7762 DAGNY WAY	156	7725 OWEN KELLOGG COUR
115	7760 DAGNY WAY	157	7914 ELLIS WYATT COURT
116	7756 DAGNY WAY	158	7912 ELLIS WYATT COURT
117	7754 DAGNY WAY	159	7910 ELLIS WYATT COURT
118	7752 DAGNY WAY	160	7900 ELLIS WYATT COURT
119	7750 DAGNY WAY	161	7906 ELLIS WYATT COURT
120	7746 DAGNY WAY	162	7904 ELLIS WYATT COURT
121	7744 DAGNY WAY	163	7902 ELLIS WYATT COURT
122	7742 DAGNY WAY	164	7611 RICHARD HALLEY WAY
123	7740 DAGNY WAY	165	7809 RICHARD HALLEY WAY
124	7738 DAGNY WAY	166	7007 RICHARD HALLEY WAY
125	7755 DAGNY WAY	167	7805 RICHARD HALLEY WAY
126	7753 DAGNY WAY	168	7803 RICHARD HALLEY WAY
127	7751 DAGNY WAY	169	7808 RICHARD HALLEY WAY
128	7749 DAGNY WAY	170	7806 RICHARD HALLEY WAY
129	7739 DAGNY WAY	171	7804 REARDEN COURT
130	7737 DAGNY WAY	172	7802 REARDEN COURT
131	7735 DAGNY WAY	173	7734 REARDEN COURT
132	7733 DAGNY WAY	174	7732 REARDEN COURT
133	7950 JOHN GALT WAY	175	7730 REARDEN COURT
134	7940 JOHN GALT WAY	176	7728 REARDEN COURT
135	7946 JOHN GALT WAY	177	7726 REARDEN COURT
136	7944 JOHN GALT WAY	178	7724 REARDEN COURT
137	7942 JOHN GALT WAY	179	7722 REARDEN COURT
138	7940 JOHN GALT WAY	160	7720 REARDEN COURT
139	7932 JOHN GALT WAY	181	7954 JOHN GALT WAY
140	7930 JOHN GALT WAY	182	7956 JOHN GALT WAY
141	7928 JOHN GALT WAY	183	7950 JOHN GALT WAY
142	7926 JOHN GALT WAY	184	7960 JOHN GALT WAY
143	7924 JOHN GALT WAY	IRRIGATION WATER METER	7931 JOHN GALT WAY
144	7922 JOHN GALT WAY	1	
145	7920 JOHN GALT WAY	IRRIGATION WATER METER	7736 REARDEN COURT
146 147	7703 OWEN KELLOGG COURT 7705 OWEN KELLOGG COURT	PANIEK ILLICK	<del>,</del>

AMENITY AREA CHART

PHASE REQUIRED PROVIDED

# SITE DEVELOPMENT PLAN MORRIS PLACE

LOTS 106 THRU 184, OPEN SPACE LOTS 185 THRU 193 PHASE VI

TAX MAP No. 43 GRID No. 4 PARCEL NO. 599 HOWARD COUNTY, MARYLAND FIRST ELECTION DISTRICT



### SITE ANALYSIS DATA CHART

- A. TOTAL AREA OF THIS SUBMISSION = 5.984 AC. ±. B. LIMIT OF DISTURBED AREA = 5.44 AC. ±. (236,801 SqFt.) C. PRESENT ZONING DESIGNATION = CAC-CLI (PER 10/06/2013 COMPREHENSIVE ZONING PLAN) D. PROPOSED USE: RESIDENTIAL
- E. BUILDING COVERAGE OF SITE: 31% F. PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-82-148, 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-068, F-14-028, F-15-047, F-16-017, 5DP-15-017, 5DP-15-029, W & 5 CONTR. 14-4777-D AND CONTR. NO. 14-4897-D G. TOTAL AREA OF FLOODPLAIN LOCATED ON SITE 0.00 AC+
- H. TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 AC+ I. NET TRACT AREA = 5.984 AC. ±. (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA) J. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) =  $0 \text{ AC.} \pm$ K. TOTAL AREA OF FOREST = 0 AC+
- TOTAL IMPERVIOUS AREA = 2.47 AC+ M. TOTAL AREA OF SEVERELY ERODIBLE SOILS = 0 AC. ±

#### VICINITY MAP 5CALE: 1" = 2000'

#### BENCH MARKS T.P. 43BA ELEV. 209.431

N. 551,676.4075 E. 1,378,108.3982 LOC. NEAR INTERSECTION OF WASHINGTON BLVD. & KIT KAT RD.

T.P. 43BB ELEV. 209.296 N. 550.534.2018 E. 1,376,905.2050 LOC. NEAR INTERSECTION OF WASHINGTON BLVD. & CEMETERY RD.

#### RESIDENTIAL PARKING TABULATION TOTAL RESIDENTIAL PARKING REQUIRED: 302 PARKING SPACES

TOWNHOUSES: 2 SPACES PER UNIT 166 UNITS X 2 = 332 PARKING SPACES OVERFLOW PAKING 0.3 PER UNIT 166 UNITS X 0.3 = 50 PARKING SPACES EXISTING PHASES I-IV RESIDENTIAL PARKING PROVIDED: 172 PARKING SPACES 40 FRONT LOAD TOWNHOUSES: 96 SPACES 2 SPACES PER UNIT (1 GARAGE + 1 DRIVEWAY) 5 REAR LOAD TOWNHOUSES: 20 SPACES 4 SPACES PER UNIT (2 GARAGE + 2 DRIVEWAY) OVERFLOW SPACES: 56 SPACES PROVIDED BY ON-STREET PARKING EXISTING ON-STREET PARKING PER F-14-028: 53 SPACES

PROPOSED BY THIS 5DP: 3 5PACES EXISTING PHASE V RESIDENTIAL PARKING PROVIDED: 140 PARKING SPACES
34 REAR LOAD TOWNHOUSES: 136 SPACES 4 SPACES PER UNIT (2 GARAGE + 2 DRIVEWAY) OVERFLOW SPACES: 4 SPACES PROVIDED BY ON-STREET PARKING

PHASE VI RESIDENTIAL PARKING PROVIDED: 239 PARKING SPACES 52 FRONT LOAD TOWNHOUSES: 104 SPACES 2 SPACES PER UNIT (1 GARAGE + 1 DRIVEWAY) 27 REAR LOAD TOWNHOUSES: 108 SPACES 4 SPACES PER UNIT (2 GARAGE + 2 DRIVEWAY) OVERFLOW SPACES: 27 SPACES PROVIDED BY ON-STREET PARKING TOTAL RESIDENTIAL PARKING PROVIDED: 551 PARKING SPACES

TOTAL ON-STREET PARKING = 87 PARKING SPACES

- PLAT SUBJECT TO WP-14-068 WHICH THE PLANNING DIRECTOR ON JANUARY 17, 2014 APPROVED TO WAIVE SECTION 16.120(C)(4) —SINGLE FAMILY ATTACHED LOTS SHALL HAVE A MINIMUM 15 FEET OF FRONTAGE ON A PUBLIC ROAD. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:

  1). THE PETITIONER OR DESIGNEE SHALL BE RESPONSIBLE FOR aintenance of safe vehicular access to all residential units. This SHALL INCLUDE, BUT IS NOT LIMITED TO, MAINTENANCE OF THE PRIVATE ROAD PROVIDING ACCESS TO THE RESIDENTIAL UNITS, MAINTENANCE OF THE PRIVATE ROAD SYSTEM INCLUDING FOR SNOW REMOVAL AND PLOWING ON
- 2). UPON COMPLETION OF ANY PORTION OF THE PROPOSED RESIDENTIAL DEVELOPMENT, THE PETITIONER OR DESIGNEE SHALL PROVIDE ROAD MAINTENANCE, PRIVATE TRASH REMOVAL SERVICES, SNOW REMOVAL TO HE DEVELOPMENT UNTIL THE ROADS ARE TRANSFERRED TO THE H.O.A. 3). ON ALL FUTURE SUBDIVISION PLANS AND SITE DEVELOPMENT PLANS, PROVIDE A BRIEF DESCRIPTION OF WAIVER PETITION, WP-14-068 AS A GENERAL NOTE TO INCLUDE REQUESTS, SECTIONS OF THE
- REGULATIONS, ACTION AND DATE.
  4). ON ALL FUTURE SUBDIVISION PLANS, PROVIDE A BRIEF DESCRIPTION OF THE DESIGN MANUAL WAIVER, AS A GENERAL NOTE TO INCLUDE REQUESTS, ACTION AND DATE.

  5). COMPLIANCE WITH THE DEVELOPMENT ENGINEERING DIVISION
  COMMENTS DATED JANUARY 10, 2014.

  6). SUBJECT TO PROVIDING THE REQUIRED VISITOR AND OVERFLOW
  PARKING SPACES FOR THE RESIDENTIAL UNITS ON THE SITE DEVELOPMENT
- 30. THE OPEN SPACE SHOWN HEREON IS HEREBY DEDICATED TO A PROPERTY OWNERS ASSOCIATION FOR THE RESIDENTS OF THIS SUBDIVISION AND
- A MODERATE INCOME HOUSING UNIT (M.I.H.U.) AGREEMENT AND M.I.H.U. COVENANTS WILL BE RECORDED SIMULTANEOUSLY WITH THIS PLAT. SOILS BOUNDARIES ARE BASED ON NRCS WEBSOIL SURVEY.
- TOPOGRAPHIC CONTOURS ARE BASED ON AERIAL CONTOURS MAPPING B SUPPLEMENTED WITH A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, INC. DATED OCTOBER 24, 2007.
- 42. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS M5HA STANDARDS AND SPECIFICATIONS IS APPLICABLE 43. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC
- WORKS/BUREAU OF ENGINEERING INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 A LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE. ANY DAMAGE TO PUBLIC ROADS OR EXISTING UTILITIES WILL BE CORRECTED AT CONTRACTOR'S EXPENSE.
- A. THE R1-1 (STOP) SIGN AND THE STREET NAME SIGN (5N5) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE
- BASE PAVING IS COMPLETED. B. THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD
- COUNTY TRAFFIC DIVISION (410) 313-2430 PRIOR TO THE INSTALLATION OF ANY OF THE TRAFFIC CONTROL DEVICES. C. ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN
- ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. (MdMUTCD) D. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED I THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED (QUICK PUNCH), SQUARE TUBE (POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO QUICK PUNCH HOLES
- ABOVE GROUND LEVEL A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST. 46. 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 OF 20' SHALL BE MAINTAINED BETWEEN
- ANY STREET LIGHT AND ANY TREE. 47. A PRIVATE ROAD STREET NAME SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED (FOR EACH OF THE PRIVATE ROADS INTERSECTING QUIDDITCH LANE) BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT (410) 313-5752 FOR DETAILS AND COST ESTIMATES.
- 48. ALL SWALES AND SLOPES SHALL BE PERMANENTLY SEEDED OR OTHERWISE 49. ALL FILL AREAS (ROADWAYS, UNDER STRUCTURES, ECT.) TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION AS REQUIRED BY ASHTO 180. 50. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING
- REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS. PORCHES, OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT
- MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK. 51. DECKS MUST BE 10' FROM THE PUBLIC SEWER, WATER AND UTILITY EASEMENT, UNLESS SUBJECT TO AN APPROVED WAIVER. THIS PLAN IS SUBJECT TO A WAVIER TO DESIGN MANUAL VOLUME II,
- BY DEVELOPMENT ENGINEERING DIVISION REQUESTING A WAIVER TO SECTION 5.4, PARAGRAPH B.5. ALLOWING CONSTRUCTION OF AN & DEEP DECK ON TWELVE (12) TOWNHOUSE UNITS (LOTS 15-19, 62-67 & 156) OF CONTRACT NO. 14-4777-D WHICH ENCROACH A MAXIMUM OF FIVE (5) FEET INTO THE STRUCTURE SETBACK rom the public sewer, water and utility easement
- 53. THIS PLAN IS SUBJECT TO A WAVIER TO DESIGN MANUAL VOLUME II, APPROVED ON 12 13 16 BY DEVELOPMENT ENGINEERING DIVISION REQUESTING A WAVER TO SECTION 5.4, PARAGRAPH B.5. WHICH ALLOWS: CONSTRUCTION OF AN 8' DEEP DECK ON LOTS 68 THRU 95, LOTS 146 THRU 155 AND LOTS 164 THRU 172 WHICH ENCROACH A MAXIMUM OF

FIVE (5) FEET INTO THE STRUCTURE SETBACK.

CONSTRUCTION OF TOWNHOUSE UNITS ON LOTS 157 THRU 163 WHICH ENCROACH A MAXIMUM OF FIVE (5) FEET INTO THE STRUCTURE SETBACK. CONSTRUCTION OF AN 8' DEEP DECK ON LOTS 157 THRU 163 WHICH ENCROACH A MAXIMUM OF THREE (3) FEET INTO THE PUBLIC SEWER,

AS-BUILT CERTIFICATION FOR PSYMM

Note: There is no "AS BUILT" information

provided on this sheet.

#### GENERAL NOTES

- SUBJECT PROPERTY IS ZONED CAC-CLI AND GRANDFATHERED PER THE 02/02/04 COMPREHENSIVE ZONING PLAN AND THE COMP. LITE ZONING AMENDMENTS EFFECTIVE 07/28/06.
   COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY
- GEODETIC CONTROL STATIONS NO. 438A AND NO. 438B. STA. 43BA N 551,676.4075 E 1,370,108.3982 ELEVATION 209.431 STA. 43BB N 550,534.2018 E 1,376,905.2050 ELEVATION 209.296 THIS PLAN IS BASED ON FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER
- 2007, BY FISHER, COLLINS AND CARTER, INC. DISTANCES SHOWN ARE BASED ON SURFACE MEASUREMENT AND NOT REDUCED TO NAD '23 GRID MEASUREMEN DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW
  - SURFACE 6" OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1 1/2" MIN) GEOMETRY - MAX. 15% GRADE, MAX 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS STRUCTURE (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)
    DRAINAGE ELEMENTS - SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER
    DRIVEWAY SURFACE
- MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE PROPERTY SUBJECT TO PRIOR DEPARTMENT OF PLANNING AND ZONING FILE NO'S: ECP-13-035, 5DP-02-146 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-060, F-14-020, F-15-047, F-16-017, 5DP-15-017, 5DP-15-029, W & 5 CONTR. NO. 14-4777-D AND CONTR. NO. 14-4097-D
- TO THE BEST OF OUR KNOWLEDGE, NO CEMETERIES EXIST ON SITE BY BOTH VISUAL OBSERVATION AND REVIEW OF AVAILABLE HOWARD COUNTY INFORMATION.
- THERE IS NO FLOODPLAIN WITHIN THE LIMITS OF THIS SITE DEVELOPMENT PLAN SUBMITTAL. TRAFFIC STUDY DATED JANUARY, 2012 WAS PREPARED BY THE TRAFFIC GROUP, INC. AND WAS APPROVED ON MARCH 14, 2013 UNDER F-14-028.
- 10. THIS PROPERTY IS NOT LOCATED IN A HISTORIC DISTRICT.

  11. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE 2004 ZONING REGULATIONS PER COUNCIL BILL NO. 45–2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL NO. 75-2003 AND THE "COMP-LITE" ZONING REGULATION AMENDMENTS EFFECTIVE 7/28/06. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS OR PARCELS MUST comply with setbacks and buffer regulations in effect at the time of submission of a building or GRADING PERMIT APPLICATION.
- 12. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. 13. ARTICLES OF INCORPORATION FOR THE MORRIS PLACE COMMUNITY ASSOCIATION, INC. WAS FILED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION ON SEPTEMBER 23, 2014, RECEIPT
- THE FINAL PLAT FOR F-14-028. MCCARTHY AND ASSOCIATES ON JUNE, 2009 AND WAS APPROVED WITH THE COMPREHENSIVE SKETCH PLAN.
- 5-10-002 BY THE PLANNING DIRECTOR ON JUNE 7, 2010. THE TRAFFIC STUDY AND THE APFO (ADEQUATE PUBLIC FACILITIES ORDINANCE) ROAD FACILITIES TEST FOR THIS
- PUBLIC WATER AND SEWER IS PROVIDED VIA CONTRACT NOS. 14-4777-D AND 14-4897-D
- 18. Water and sewer service to these lots will be granted under the provisions of section 18.122.8 OF THE HOWARD COUNTY CODE. 19. A PRE-5UBMISSION COMMUNITY MEETING WAS HELD ON AUGUST 12, 2009 FOR THIS PROJECT.
- 20. THE 65 dBA NOISE CONTOUR LINE WAS OBTAINED FROM A NOISE STUDY PREPARED BY MARS GROUP DATED JUNE, 2009 AND IS ADVISORY AS REQUIRED BY THE HOWARD COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992 AND CAN NOT BE CONSIDERED TO EXACTLY LOCATE THE 65 dba noise exposure. The 65DBA NOISE CONTOUR LINE REQUIREMENT WAS ESTABLISHED BY HOWARD COUNTY TO ALERT DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT. THERE ARE NO WETLANDS. STREAMS, 100 YEAR FLOODPLAIN OR STEEP SLOPES WITH A CONTIGUOUS AREA GREATER THAN 20,000 SQUARE FEET LOCATED ON THIS SITE DEVELOPMENT PLAN. THERE ARE NO WETLANDS
- ON-SITE THAT WILL BE DISTURBED OR THAT WILL REQUIRE 401 AND 404 WETLANDS PERMITS FROM THE STATI OF MARYLAND.

  22. FOREST CONSERVATION HAS BEEN PROVIDED UNDER F-14-028 IN ACCORDANCE WITH SECTION 16.1200 OF
- PREPARED BY MCCARTHY AND ASSOCIATES. 24. Plat subject to WP-12-173 which the planning director on June 25, 2012 approved to waiv
- SECTION 16.144(G) REQUIRING THE SUBMISSION OF A PRELIMINARY PLAN WITHIN FOUR (4) MONTHS OF SKETCH PLAN APPROVAL AND SECTION 16.1106(D) REQUIRING RESIDENTIAL PROJECTS WITH 101 PLUS HOUSING UNITS NINE (9) MONTHS AFTER STARTING DATE SUBJECT TO: 1) THE PRELIMINARY PLAN FOR PHASES 1 THROUGH 3 FOR 19 UNITS MUST BE SUBMITTED T
- OR BEFORE NOVEMBER 1, 2012. 25. A 10' PUBLIC TREE MAINTENANCE EASEMENT AND A 10' PRIVATE PARKING SETBACK RUNNING ALONG THE EDGE OF THE PUBLIC ROAD RIGHT-OF-WAY, AS SHOWN ON THIS PLAN OF SUBDIVISION IS RESERVED UPON ALL LOTS FRONTING ON THE SAID PUBLIC ROAD RIGHT-OF-WAY. THIS EASEMENT ALLOWS HOWARD COUNTY THE RIGHT TO ACCESS THE PROPERTY, WHEN NECESSARY, FOR THE SPECIFIC PURPOSE OF THE INSTALLATION, REPAIR AND MAINTENANCE OF COUNTY OWNED TREES LOCATED WITHIN THE BOUNDARIES OF THE PRIVATE LOTS. NO BUILDING
- OR STRUCTURE OF ANY KIND SHALL BE LOCATED ON OR OVER THE SAID EASEMENT AREA.

  26. THE LOTS CREATED BY THIS SUBDIMISION PLAT AREA SUBJECT TO A FEE OR ASSESSMENT TO COVER OR DEFRAY ALL OR PART OF THE DEVELOPER'S COST OF THE INSTALLATION OF THE WATER AND SEWER FACILITIES, PURSUANT TO THE HOWARD COUNTY CODE SECTION 10.112. THIS FEE OR ASSESSMENT, WHICH RUNS WITH THE LAND, IS A CONTRACTUAL OBLIGATION BETWEEN THE DEVELOPER AND EACH OWNER OF THIS PROPERTY AND IS NOT IN ANY WAY A FEE OR ASSESSMENT OF HOWARD COUNTY.
- 27. H.O.A. COVENANTS AND RESTRICTIONS ARE RECORDED IN LIBER 16221, FOLIO 410 AMONG THE LAND RECORDS OF HOWARD COUNTY, MARYLAND. MORRIS PLACE COMMUNITY ASSOCIATION, INC. FOR THE TOWNHOUSE LOTS FRONTING PRIVATE STREETS.
- STREETS ARE PRIVATELY OWNED AND MAINTAINED BY THE MORRIS PLACE COMMUNITY ASSOCIATION, INC. 30. THIS PLAN IS SUBJECT TO A LETTER DATED MARCH 16, 2010 WHICH THE PLANNING DIRECTOR GRANTED APPROVAL TO ALLOW A REDUCTION IN THE REQUIRED COMMERCIAL SPACE TO 200 SQUARE FEET PER RESIDENTIAL UNIT. HOWEVER, IF THE ADJOINING LUSKINS PROPERTY (PARCEL 569), WHICH HAS FRONTAGE OF
- ROUTE 1 IS LATER INTEGRATED WITH THIS SUBDIVISION, 300 SQUARE FEET OF COMMERCIAL SPACE FOR EACH residential unit may be required, or what regulations dictate at that tim COUNTY CODE AND LANDSCAPE MANUAL. LANDSCAPING OBLIGATIONS FOR THIS SITE DEVELOPMENT (APFO PHASE VI) HAS BEEN PROVIDED BY A FINANCIAL SURETY IN THE AMOUNT OF \$44,250.00 BASED ON 90 SHADE TREES, 63 EVERGREEN, 260 SHRUBS WHICH WILL BE ARE POSTED AS PART OF THE DEVELOPERS AGREEMENT FOR
- THIS SITE DEVELOPMENT PLAN. 32. THIS PROJECT COMPLIES WITH THE ROUTE 1 MANUAL IN REGARDS TO THE "CAC-CLI" ZONING DISTRICT. 33. ON FEBRUARY 6, 2012 AND JULY 10, 2013 THE DEPARTMENT OF PLANNING AND ZONING HAS TENTATIVELY ALLOCATED FOR THIS SUBDIVISION IN THE ROUTE 1 PLANNING AREA IN ACCORDANCE WITH THE FOLLOWING ALLOCATION SCHEDULE AND MILESTONES:

PHASE No.	FILE NO.	ALLOCATION YEAR	KUULI	NO. OF M.I.H.U. ALLOCATIONS	TOTAL NO. OF ALLOCATIONS	FINAL PLANS OR SITE DEVELOPMENT PLAN
I-IV	F-14-028	2016	43	10	53	FINAL PLANS BY NOVEMBER 9, 2013
٧	F-15-047	2017	16	18	34	SITE DEVELOPMENT PLAN BETWEEN 07/01/14 & 11/01/14
VI	F-16-017	2016	79	0	79	SITE DEVELOPMENT PLAN BETWEEN 07/01/15 & 11/01/16
	TOTAL5		139	28	166	-4-4

34. AMENITY AREA REQUIREMENTS PROVIDED WITH SDP FOR APFO PHASES I THRU VI. SEE

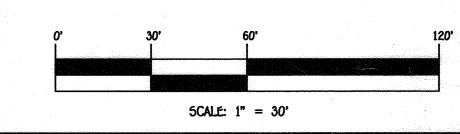
AMENITY AREA CHART THIS SHEET. 35. STORMWATER MANAGEMENT FOR THIS REDEVELOPMENT PROJECT HAS BEEN PROVIDED IN ACCORDANCE WITH CHAPTER 5 OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I AND II, REVISED 2009, UNDER F-14-028, SDP-15-017 AND BY

THE CONSTRUCTION OF THREE (3) M-6 BIO RETENTION FACILITIES UNDER THIS SITE DEVELOPMENT PLAN. 36. MODERATE INCOME HOUSING UNITS (M.I.H.U.) FOR PHASE V TABULATION:

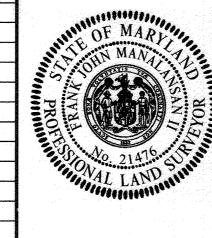
- A. TOTAL PROJECT M.I.H.U. REQUIREMENT = 25 M.I.H.U. (166 UNITS X 15%) = 24.9 M.I.H.U.
- B. M.I.H.U. FOR PHASE I THRU V REQUIRED = 14 M.I.H.U. (87 UNITS X 15%) = 13.05 M.I.H.U. OR 14 M.I.H.U.C. M.I.H.U. FOR PHASE I THRU V PROVIDED = 14 M.I.H.U.
- D. M.I.H.U. FOR PHASE VI REQUIRED = 11 M.I.H.U. (25 M.I.H.U. - 14 M.I.H.U.)

E. M.I.H.U. FOR PHASE IV PROVIDED = 11 M.I.H.U.

MORRIS PLACE, PHASES I THRU IV (5DP-15-017) CONTAINS 53 UNITS: PHASE V (5DP-15-029) CONTAINS 34 UNITS: AND PHASE VI (5DP-16-001) CONTAINS 79 UNITS, TOTALING 166 UNITS. NO MORE THAN 83 RESIDENTIAL UNITS (50% OF THE TOTAL UNITS) MAY OBTAIN BUILDING PERMITS UNTIL EITHER CONSTRUCTION OF A PROPORTIONAL AMOUNT OF COMMERCIAL SPACE HAS COMMENCED HAVING RECEIVED A BUILDING PERMIT IN ACCORDANCE WITH SECTION 127.5.E.3.e OF THE ZONING REGULATIONS OR A FEE IN LIEU PAYMEN FOR NOT PROVIDING COMMERCIAL SPACE IS APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING AND PAID TO HOWARD COUNTY, MARYLAND.







DATE

#### PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

CDCG38ZHLP

0505 E. HARTFORD DRIVE

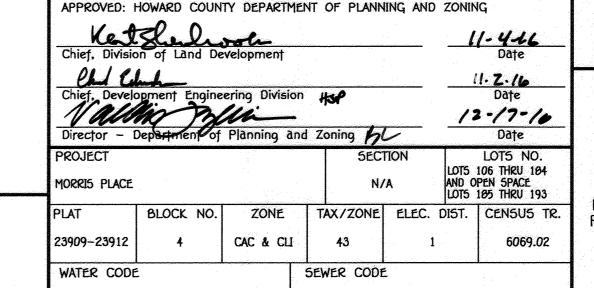
SCOTTSDALE, AZ. 85255

ATTN: STEVEN S. BENSON

C/O CDCG ASSET MANAGEMENT LLC

C-02

DEVELOPER BEAZER HOMES CORP 8965 GUILFORD ROAD COLUMBIA, MD. 21046 ATTN: EDWARD GOLD (410) 720-5071



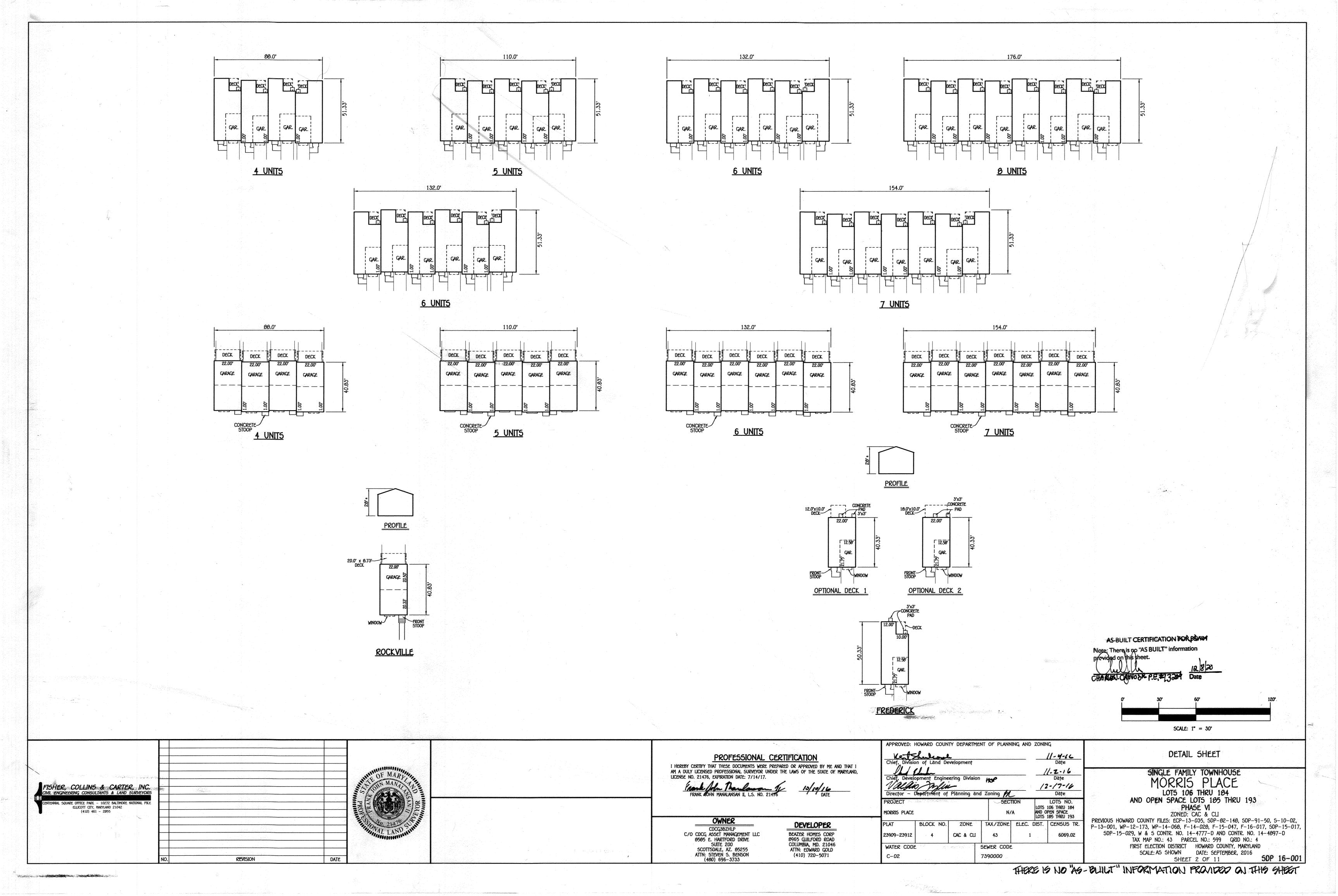
## TITLE SHEET

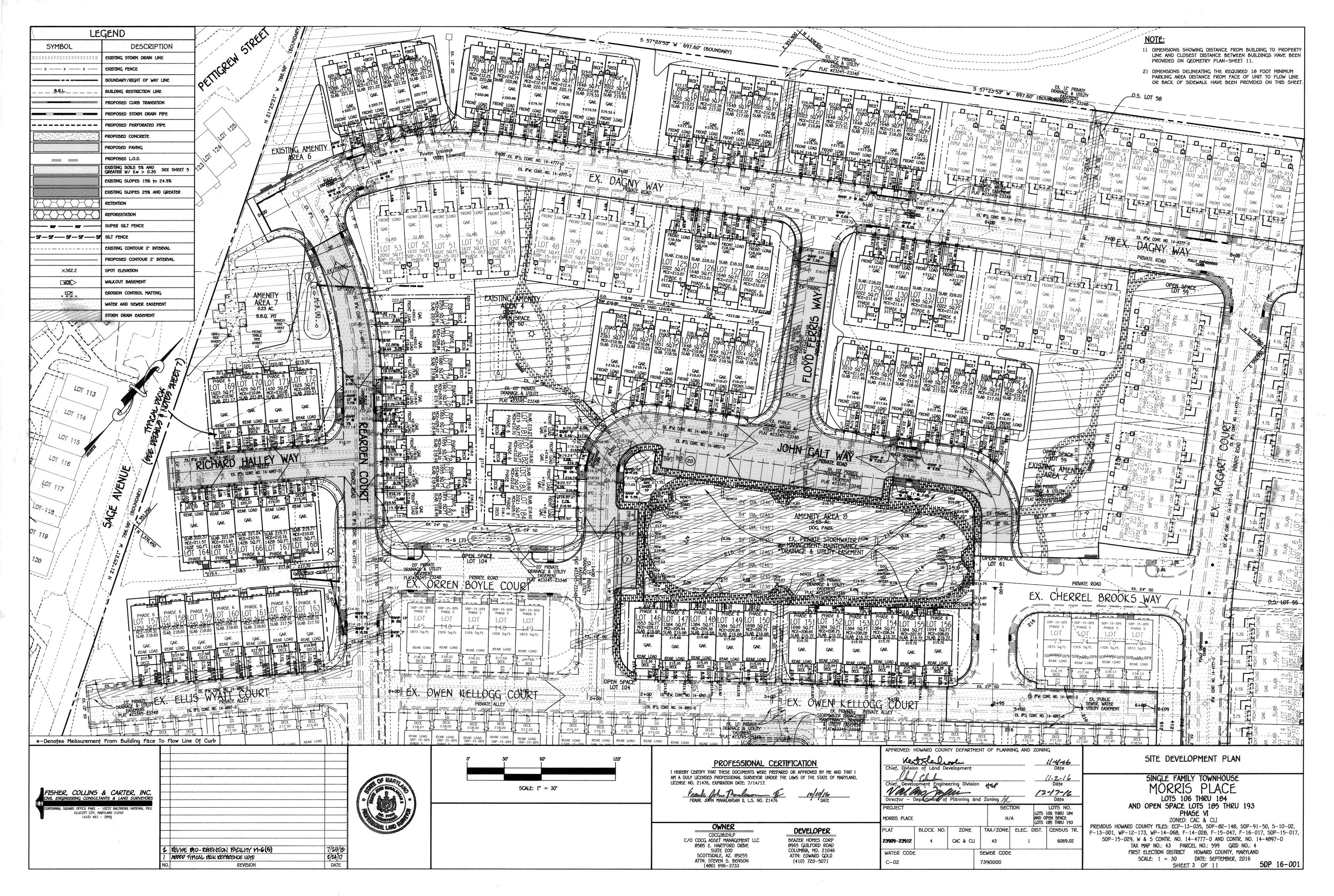
SINGLE FAMILY TOWNHOUSE MORRIS PLACE LOTS 106 THRU 184 AND OPEN SPACE LOTS 185 THRU 193 PHASE VI

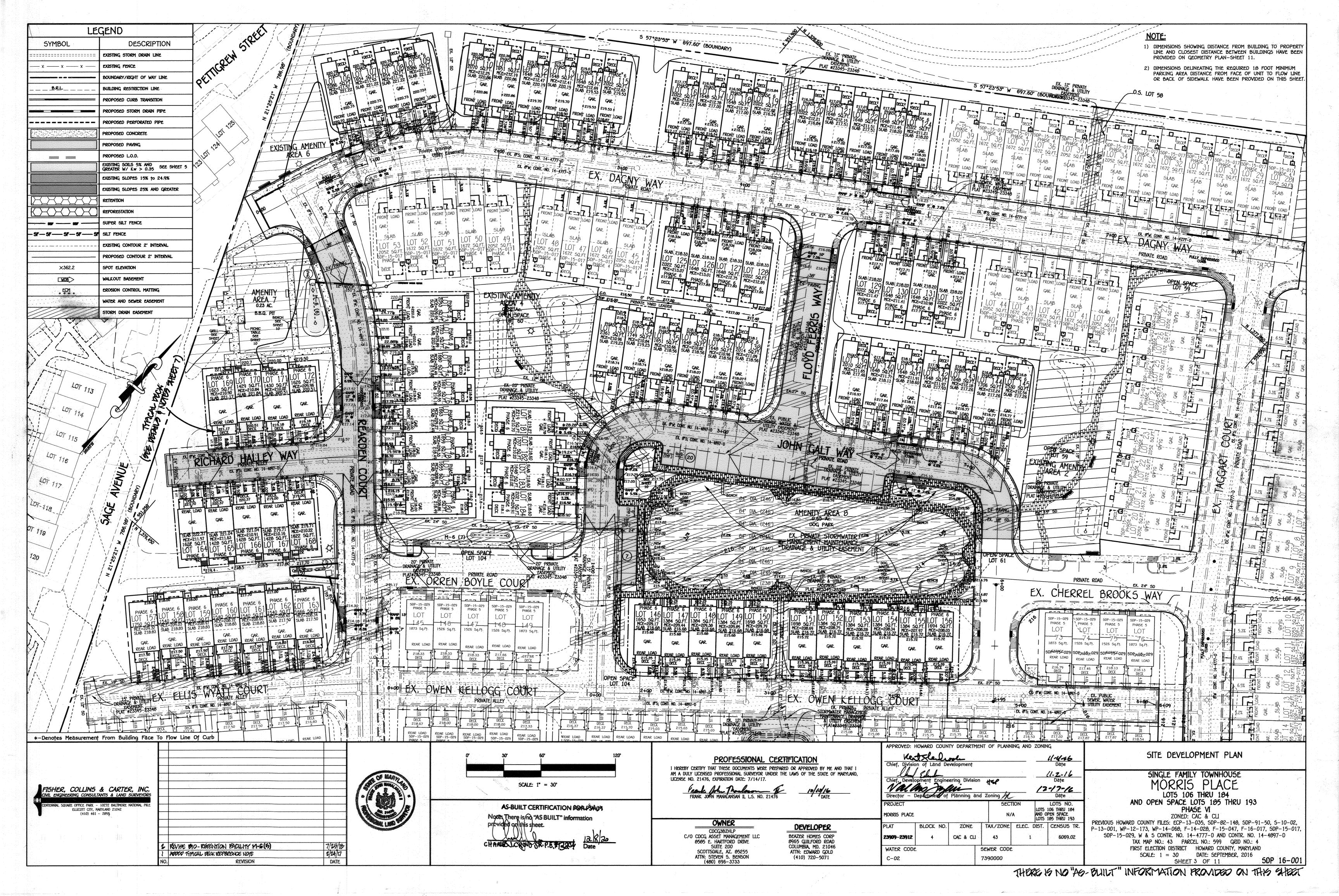
ZONED: CAC & CLI PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-62-148, 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-060, F-14-020, F-15-047, F-16-017, 50P-15-017, 5DP-15-029, W & 5 CONTR. NO. 14-4777-D AND CONTR. NO. 14-4897-D TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: SEPTEMBER, 2016

THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET







## 50IL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

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.

B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS. . 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 15 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 IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.

V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION. e. Abbligatianelast musemblichiga porteopia prunceanisceanis quadsica sobrecorelogamentare. Dalgabrec poonditioek SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES. D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING, WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER

WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE, LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE, SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.

B. TOPSOILING I. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROMIDE A SUITABLE SOIL MEDIUM FOR VECETATIVE CROWN! SOILS OF CONCERN HAVE LOW MOISTLIFE CONTENT. LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION. 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. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR

FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS. c. The original 501l to be vegetated contains material toxic to plant growth. D. 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 1 1/2 INCHES IN DIAMETER. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON

GRASS, NUT SEDGE, POISON MY, THISTLE, OR OTHERS AS SPECIFIED. C. TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

A EROSION AND SEDIMENT CONTROL PRACTICES MUST BE MAINTAINED WHEN APPLYING TOPSOIL B. UNIFORMLY DISTRIBUTE TOPSOIL IN A 5 TO 8 INCH LAYER AND LIGHTLY COMPACT TO A MINIMUM THICKNESS OF 4 INCHES. spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of doitional soil preparation and tillage, any irregularities in the surface resulting from topsoiling or OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. c. Topsoil must not be placed if the topsoil or subsoil is in a prozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed

SOIL AMENDMENTS (FERTILIZER & LIME SPECIFICATIONS) 1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OF 5 ACRES OR MORE. SOIL ANALYSIS MAY BE PERFORMED BY A RECOGNIZED PRIVATE OR COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO

BE USED FOR CHEMICAL ANALYSES. 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

PRADEMARK 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 90 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 81

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 TOPSOIL.

#### DUST CONTROL DEFINITION

CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE

CONDITIONS WHERE PRACTICE APPLIES

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. TEMPORARY METHODS

MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVE 3. TILLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH

SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF THE SITE. CHISEL-TYPE WHICH MAY PRODUCE THE DESIRED EFFECT. IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL

THE SURFACE IS MOIST. REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW BARRIERS - SOLID BOARD FENCES SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALE DIKES AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CONTROLLING SOIL BLOWING, CURRENTS AND SOIL BLOWING.

CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN 6, CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT PERMANENT METHODS

PERMENENT VEGETATION - SEE STANDARDS FOR PERMANENT VEGETATIVE COVER AND PERMANENT STABILIZATION WITH 50D. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE. TOPSOILING - COVERING WITH LESS EROSIVE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING. 3. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

#### SEQUENCE OF CONSTRUCTION

FISHER, COLLINS & CARTER. INC.

IVIL ENGINEERING CONSULTANTS & LAND SURVEYOR

(410) 461 - 2855

NIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIK

NOTIFY "MISS UTILITY" AT LEAST 46 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777 NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.

REQUEST A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE ENFORCEMENT AUTHORITY THE INFRASTRUCTURE NECESSARY, AS DETERMINED BY THE CONSTRUCTION INSPECTION DIVISION, FROM F-14-028, 5DP-15-017 AND 5DP-15-029 MUST BE COMPLETED PRIOR TO BEGINNING CONSTRUCTION

INSTALL THE STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, AND INLET PROTECTION. (1 WEEK) INSTALL STORM DRAIN AND PIPING, AND BEGIN TO GRADE SITE TO SUB-GRADE. WITHIN THE SAME SPECIFIED AREA (1 MONTH) BEGIN CONSTRUCTION OF CURB & GUTTER AND INSTALLATION OF ROAD BASE COURSE. (2 WEEKS)

GRADE AND STABILIZE WITH TEMPORARY SEEDING THE BUILDING PADS. (1 MONTHS) COMMENCE CONSTRUCTION OF TOWNHOUSES (6 MONTHS) INSTALL FINISHED SURFACE COURSE, SIDEWALKS AND STREET TREES. (2 WEEKS) CONTRACTOR SHALL REMOVE ALL OLD AND NEW JUNK, TRASH.
OBTAIN APPROVAL OF APPROPRIATE ENFORCEMENT AUTHORITY PRIOR TO REMOVAL OF SEDIMENT CONTROLS.

REMOVAL OF CONTROLS AND STABILIZATION OF AREAS THAT ARE DISTURBED BY REMOVAL OF SEDIMENT

NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE AFTER EACH RAINFALL AND ON A DAILY BASIS. REMOVE SEDIMENT FROM ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.

#### TEMPORARY SEEDING NOTES (B-4-4) DEFINITION

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.

CRITERIA 1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES, SEEDING DATES AND SEEDING DEPTHS. THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE 8.1 PLUS FERTILIZER LIME RATES MUST BE PUT ON THE PLAN.

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS PERFORMED OUTSIDE FOR TEMPORARY SEEDING.

3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING AND MULCH OR STRAW-MULCH ALONE AS PRESCRIBED IN SECTION 8-4-3.A.1.8 AND MAINTAIN UNTIL THE NEXT SEEDING SEASON

	TEMP	orary seedi	NG SUMM	IARY	
HARDINESS SEED MIXTU	ZONE (FROM FIGURE RE (FROM TABLE B.1	8.3): <u>68</u> ):		FERTILIZER RATE (10-20-20)	LIME RATE
5PECIES	APPLICATION RATE (LB/AC)	SEEDING DATES	SEEDING DEPTHS		
BARLEY	96		1"	425 10 45	a 100k (40
OAT5	72	3/1 - 5/15, 8/15 - 10/15	I*	436 LB/AC (10 LB/ 1000 5F)	2 TONS/AC (90 LB/ 1000 SF)
RYE	112		17	1000 Ji j	1000 31 )

#### PERMANENT SEEDING NOTES (B-4-5)

A. SEED MIXTURES

1. GENERAL USE A SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT lardiness zone (from Figure B.3) and based on the site condition or purpose found on table B.2. nter selected mixture(s), application rates, and seeding dates in the permanent seeding summary.

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 GUIDE, SECTION 342 - CRITICAL AREA PLANTING. C. FOR SITES HAVING DISTURBED AREA OVER 5 ACRES, USE AND SHOW THE RATES RECOMMENDED BY THE SOIL testing agency. D. for areas receiving low maintenance, apply urea form fertilizer (46–0–0) at 3 1/2 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 summar

2. TURFGRASS MIXTURES A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. B. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED BELOW BASED ON THE SITE CONDITIONS OR PURPOSE. ENTER SELECTED MIXTURE(S), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN. 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

A. SEEDING 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 ercent of the total mixture by weight. KENTUCKY BLUEGRASS/PERENNAL 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 CULTIMARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIMARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET ONE OR MORE CULTIVARS MAY BE BLENDED.

N. KENTUCKY BLUEGRASS/FINE FESCUE: SHADE MIXTURE: FOR USE IN AREAS WITH SHADE IN BLUEGRASS

LAWNS. FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. MIXTURE INCLUDES; CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 30 TO 40 PERCENT AND CERTIFIED FINE FESCUE AND 60 TO 70 PERCENT. SEEDING RATE: 1 1/2 TO 3 POUNDS PER 1000 SQUARE FEET.

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. Thi certification program of the maryland department of agriculture, turf and seed section, Provides a reliable means of consumer protection and assures a pure genetic line C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 1 OCTOBER 1 (HARDINESS ZONES: 58, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 68) SOUTHERN MD, EASTERN SHORE: MARCH 1 TO MAY 15 AUGUST 15 TO OCTOBER 15

0. 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 17. INCHES IN DIAMETER THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF

E. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER FOR PLANT GROWTH (1/2 TO 1 INCH EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE) UNTIL THEY ARE FIRMLY ESTABLISHED. THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY

PERMANENT SEEDING SUMMARY HARDINESS ZONE (FROM FIGURE 8.3): 68
SEED MIXTURE (FROM TABLE 8.3): 6 FERTILIZER RATE (10-20-20) LIME RATE NO. SPECIES APPLICATION RATE SEEDING SEEDING N P205 K20 MAR. 1-MAY 15 I/4-1/2 PER ACRE (2 LB/ 1000 SF) 1000 SF) 1000 SF) 1000 SF)

#### B. 500: TO PROVIDE QUICK COVER ON DISTURBED AREAS (2:1 GRADE OR FLATTER).

GENERAL SPECIFICATIONS

A CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE B. 500 MUST BE MACHINE CUT AT A UNIFORM SOIL THICKNESS TO 3/4 INCH, PLUS OR MINUS 1/4 INCH, AT THE TIME OF cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or UNEVEN ENDS WILL NOT BE ACCEPTABLE 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. 500 MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OF WET) MAY

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 115 installation. . 50D INSTALLATION

L DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, LIGHTLY BRRIGATE THE-SUBSOIL IMMEDIATELY PRIOR TO LAYING THE SOD. 8. 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 500 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 joints. Roll and tamp, peg or otherwise secure the sod to prevent suppage on slopes. Ensure solid contact exists between 500 roots and the underlying soil surface. D. WATER THE 500 IMMEDIATELY FOLLOWING ROLLING AND TAMPING UNTIL THE UNDERSIDE OF THE NEW 500 PAD AND SOIL SURFACE BELOW THE 500 ARE THOROUGHLY WET. COMPLETE THE OPERATIONS OF LAYING, TAMPING, AND irrigating for any piece of 500 within eight hours.

3. SOD MAINTENANCE A. IN THE ABSENCE OF ADEQUATE RAINFALL, WATER DAILY DURING THE FIRST WEEK OR AS OFTEN AND SUFFICIENTLY AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER SOD DURING THE HEAT OF THE DAY TO B. AFTER THE FIRST WEEK, SOO WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
C. DO NOT MOW UNTIL THE SOO IS FIRMLY ROOTED. NO MORE THAN 1/3 OF THE GRASS LEAF MUST BE REMOVED BY

THE INITIAL CUITING OR SUBSEQUENT CUITINGS. MAINTAIN A GRASS HEIGHT OF AT LEAST 3 INCHES UNLESS

#### STANDARD STABILIZATION NOTE

ollowing initial soil disturbance or re-disturbance, permanent or temporary stabilization must be COMPLETED WITHIN: A.) THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES

AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1).

B.) SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

1) A MINIMUM OF 40 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855). 2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. 1) 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 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 DONE WHEN recommended seeding dates do not allow for proper germination and establishment of grasses. 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 Howard county sediment control inspector. 6) SITE ANALYSIS:

TOTAL AREA OF SITE 2.51 ACRES 1.33 ACRES area disturbed area to be roofed or paved AREA TO BE VEGETATIVELY STABILIZED TOTAL FILL

2,374 CU.Y05 OFFSITE WASTE/BORROW AREA LOCATIO 7) ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

1.18 ACRES

B) Additional Sediment Control Must be provided, if Deemed Necessary by the Howard County Sediment Control inspector 9) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading, other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made 10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.

AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION. 12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE 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 PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

11) any changes or revisions to the sequence of construction must be reviewed and approved by the plan approval

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

DEFINITION THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

PURPOSE TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

CONDITIONS WHERE PRACTICE APPLIES TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING

I. SPECIFICATIONS A. ALL SEED MUST MEET THE REQUIREMENT OF THE MARYLAND STATE SEED LAW, ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE

DATE OF SOWING SUCH MATERIAL ON ANY PROJECT, REFER TO TABLE 8.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE B. MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN.

THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS. C. INOCULANTS: THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER, ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE, USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEFDING, NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED, TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE

D. SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEEDCONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS. 2. APPLICATION

A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS. L INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1,

PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER, APPLY HALF THE SEEDING RATE IN EACH direction. Roll the seeded area with weighted roller to provide good seed to soil contact. 8. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL I. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT

LEAST 1/4 INCH OF SOIL COVERING, SEEDBED MUST BE FIRM AFTER PLANTING. II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

. Hydroseeding apply seed uniformly with hydroseeder (slurry includes seed and fertilizer). 1. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHORUS), 200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE.

II. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING

III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

1. MULCH MATERIALS (IN ORDER OF PREFERENCE)

A STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, BYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR, STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY. MOLDY, CAKED, DECAYED OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED. 8. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED

INTO UNIFORM FIBROUS PHYSICAL STATE I. WOFM 15 TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOT TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS. III. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER mulch will remain in uniform suspension in water under agitation and will blend with seed. Fertilizer and OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL MUST FORM A BLOTTER-LIKE GROUND COVER ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND MUST COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BY PHYTO-TOXIC. V. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY 10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 6.5, ASH CONTENT OF 1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. when straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.

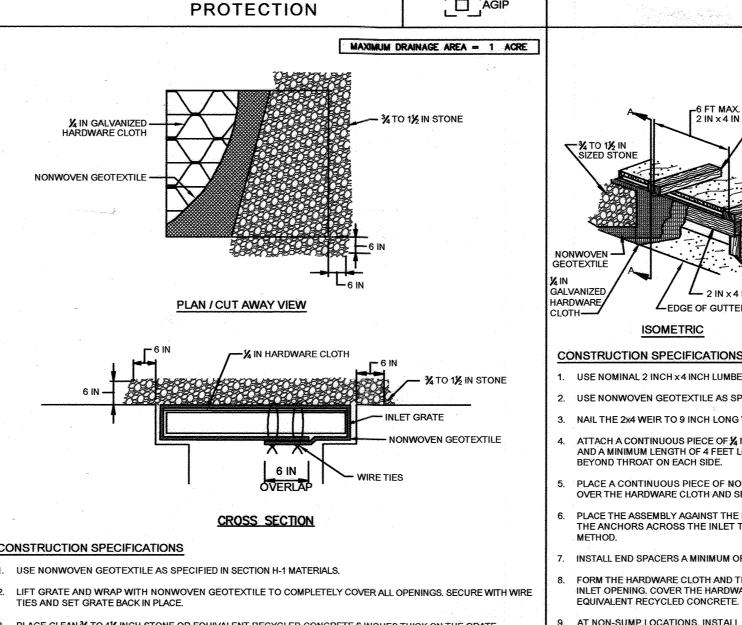
WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED TO A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER. A. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE

done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR. II. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS

PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER III. SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR, OR OTHER APPROVED EQUAL MAY BE USED. FOLLOW APPLICATION RATES AS SPECIFIED BY THE MANUFACTURER. APPLICATION OF LIQUID BINDERS NEEDS TO BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. USE OF ASPHALT BINDERS IS STRICTLY PROHIBITED.

PROFESSIONAL CERTIFICATE

IV. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER RECOMMENDATIONS NETTING IS USUALLY AVAILABLE IN ROLLS 4-15 FEET WIDE AND 300 TO 3,000 FEET LONG.



DETAIL E-9-2 AT-GRADE INLET

PLACE CLEAN 1/2 TO 1/2 INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.

STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE

ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION U.S. DEPARTMENT OF AGRICULTURE
TURAL RESOURCES CONSERVATION SERVICE B-4-8 STANDARDS AND SPECIFICATIONS

STANDARD SYMBOL

DETAIL E-9-3 CURB INLET

T MAX. SPACING OF

2 IN x 4 IN WEII

USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS

OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR

ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE

NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).

INSTALL FND SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.

ATTACH A CONTINUOUS PIECE OF 1/2 INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES

PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH

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 APPROVED ANCHORING

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 1/2 INCH STONE OR

AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.

STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT

EDGE OF GUTTER PAN

ISOMETRIC

USE NOMINAL 2 INCH x 4 INCH LUMBER

FOUNALENT RECYCLED CONCRETE.

PROTECTION

2 IN x 4 IN ANCHORS

% TO 1% STONE

NONWOVEN -

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

FOR STOCKPILE AREA

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 8-3 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 6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE EROSION/SEDIMENT

CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE. 7. STOCK PILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS WELL AS STANDARD 8-4-1 INCREMENTAL STABILIZATION AND STANDARD 8-4-4 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. 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.

#### TABLE B.1 TEMPORARY SEEDING FOR SITE STABILIZATION

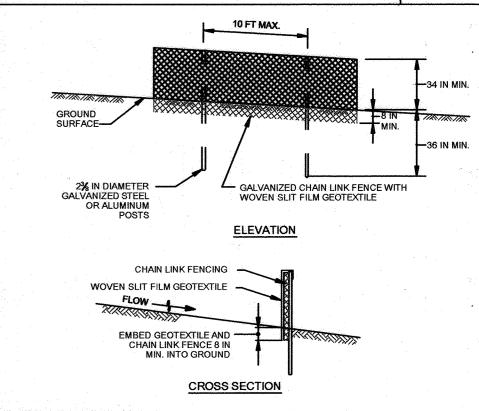
PLANT SPECS	SEED	ING RATE 1/	SEEDING DEPTH 2/				
PLANT SPECS	LB./AC.	LB./1000 FT. <sup>2</sup>	(michiec)	5b AND 6a	6Ь	7a AND 7b	
COOL-SEASON GRASSES							
annual Ryegrass (Lolium Perenne SSP. Mutiflorum)	40	1.0	0.5	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 30	
BARLEY (HORDEUM VULGARE)	96	2.2	1.0	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 30	
OATS (AVENA SATIVA)	72	1.7	1.0	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 30	
WHEAT (TRITICUM AESTIVUM)	120	2.8	1.0	MAR. 15 TO MAY 31; AUG. 1 TO SEPT. 30	MAR. 1 TO MAY 15; AUG. 1 TO OCT. 15	FEB. 15 TO APR. 30; AUG. 15 TO NOV. 30	
CEREAL RYE (SECALE CEREALE)	112	2.8	1.0	MAR. 15 TO MAY 31; AUG. 31 TO OCT. 31	MAR. 1 TO MAY 15; AUG. 1 TO NOV. 15	FEB. 15 TO APR. 30; AUG. 15 TO DEC. 15	
WARM-SEASON GRASSES							
FOXTAIL MILLET (SETARIA ITALICA)	30	0.7	0.5	JUNE 1 TO JULY 31	MAY 16 TO JULY 31	MAY 1 TO AUGUST 14	
PEARL MILLET (PENNISETUM GLAUCUM)	20	0.5	0.5	JUNE 1 TO JULY 31	MAY 16 TO JULY 31	MAY 1 TO AUGUST 14	

1. SEEDING RATES FOR THE WARM-SEASON GRASSES ARE IN POUNDS OF PURE LIVE SEED (PLS). ACTUAL PLANTING RATES SHALL BE ADJUSTED TO REFLECT PERCENT SEED GERMINATION AND PURITY, AS TESTED.

SEEDING RATES LISTED ABOVE ARE FOR TEMPORARY SEEDINGS, WHEN PLANTED ALONE. WHEN PLANTED AS A NURSE CROP WITH PERMANENT, SEED MIXES, USE 1/3 OF THE SEEDING RATE LISTED ABOVE FOR BARLEY, OATS AND WHEAT. FOR SMALLER-SEEDED GRASSES (ANNUAL RYEGRASS, PEARL MILLET, FOXTAIL MILLET). DO NOT EXCEED MORE THAN 5% (BY WEIGHT) OF THE OVERALL PERMANENT SEEDING MIX, CEREAL RYE GENERALLY SHOULD NOT BE USED AS A NURSE CROP, UNLESS PLANTING WILL OCCUR IN VERY LATE FALL BEYOND THE SEEDING DATES FOR OTHER TEMPORARY SEEDINGS. CEREAL RYE HAS ALLELOPATHIC PROPERTIES that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above. OATS ARE THE RECOMMENDED NURSE CROP FOR WARM-SEASON GRASSES.

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

PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 11-4-16 Chief, Division of Land Developmen 12-17-16 Director - Department of Planning and Zoning LOTS NO. SECTION AND OPEN SPACE LOTS 105 THRU 193 IORRIS PLACE N/A OWNER BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. | CENSUS TO DEVELOPER CDCG3BZHLP C/O CDCG ASSET MANAGEMENT LLC BEAZER HOMES CORP 23909-23912 CAC & CLI 6069.02 0505 E. HARTFORD DRIVE 8965 GUILFORD ROAD COLUMBIA, MD. 21046 WATER CODE SEWER CODE SCOTTSDALE, AZ. 85255 ATTN: EDWARD GOLD ATTN: STEVEN S. BENSON (410) 720-5071 C-02 (480) 696-3733



H-SSF----

**EXISTINGPAVEMENT** 

DETAIL E-3 SUPER SILT

**FENCE** 

[크]CIP

-2 FT MIN. LENGTH

SANDBAG OR OTHER APPROVED

ANCHORING METH

-2 IN x 4 IN SPACER

- GALVANIZED

HARDWARE

OF 2 IN x4 IN

MAXIMUM DRAINAGE AREA = 1/2 ACRE

SECTION A-A

CONSTRUCTION SPECIFICATIONS

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 THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION, EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.

WHERE ENDS OF THE GEOTEXTILE COME TOGETHER. THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED.

AND STAPLED TO PREVENT SEDIMENT BY PASS. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT

45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT

GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING

> MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-1STABILIZED SCE SCE CONSTRUCTION ENTRANCE MOUNTABLE BERM - EXISTING PAVEMENT EXISTING NONWOVEN - MIN. 6 IN OF 2 TO 3 IN AGGREGATE OVER LENGTH AND WIDTH OF ENTRANCE PROFILE 50 FT MIN.

CONSTRUCTION SPECIFICATIONS

PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (\*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO

PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY, A MOUNTABLE BERM IS REQUIRED WHEN SCEIS NOT LOCATED AT A HIGH SPOT

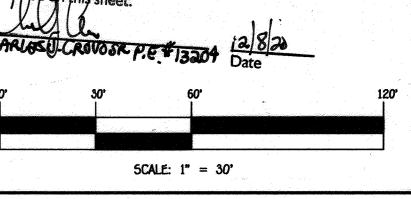
PLAN VIEW

3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS. 4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR)

AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. 5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER

REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

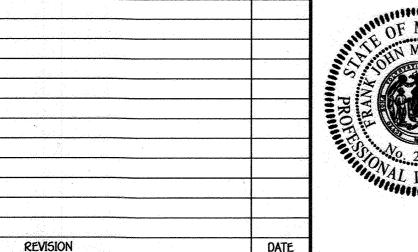
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE AS-BUILT CERTIFICATION FOR PSACE Note: There is no "AS BUILT" information provided on this sheet.



SEDIMENT & EROSION CONTROL NOTES AND DETAILS

SINGLE FAMILY TOWNHOUSE LOTS 106 THRU 184 AND OPEN SPACE LOTS 185 THRU 193

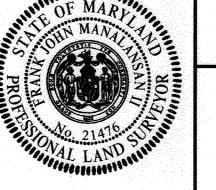
PHASE VI ZONED: CAC & CLI PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-02-140, 5DP-91-50, 5-10-02 P-13-001, WP-12-173, WP-14-060, F-14-020, F-15-047, F-16-017, 5DP-15-017, 5DP-15-029, W & 5 CONTR. NO. 14-4777-D AND CONTR. NO. 14-4897-D TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPTEMBER, 2016

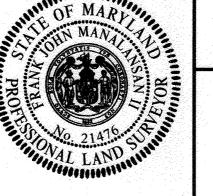


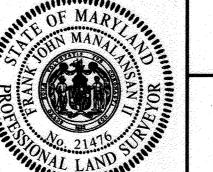


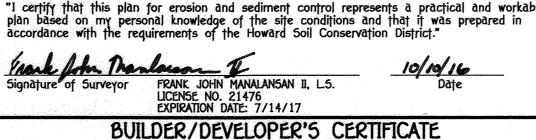




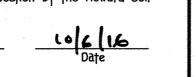




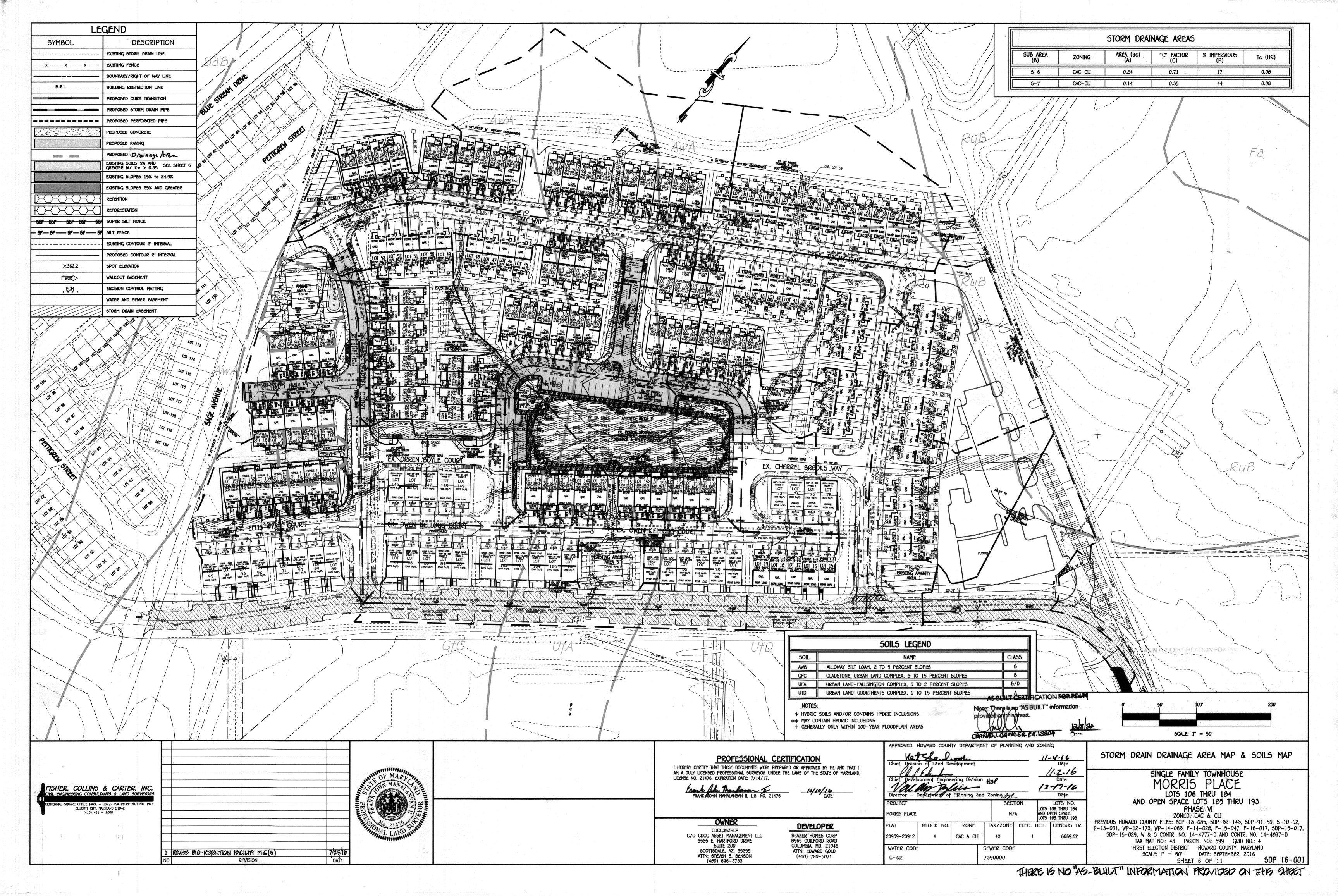


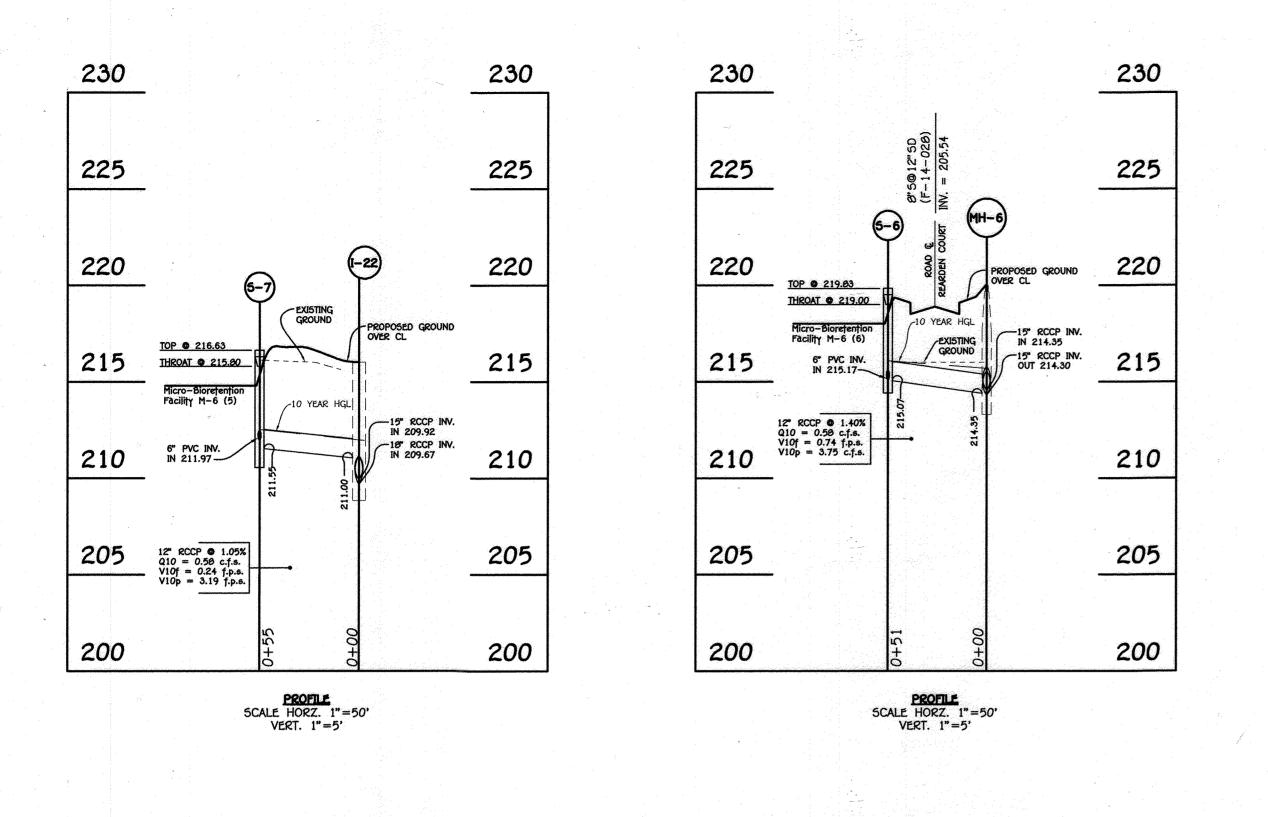


"I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on—site inspection by the Howard Soil Conservation District."



SHEET 5 OF 11 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET





SIZE	CLA55	LENGTH
12"	RCCP	106'
6"	Schedule 40 PVC	117'
6"	Perforațed Schedule 40 PVC	94'

STRUCTURE SCHEDULE							
STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV IN	INV OUT	COORDINATES	TYPE	REMARK5
Ex. I-22	PUBLIC	216.01	209.92 (MH-8) 15" 211.00 (5-7) 12"	209.67 18"	N 551290.83 E 1376636.54	A-5 INLET	D-4.01
Ex. MH-6	PRIVATE	220.00	214.35 (I-18) 15" 214.35 (5-6) 12"	214.30 15"	N 551513.51 E 1376470.50	STANDARD MANHOLE	G-5.12
5-6	PRIVATE	219.03	215.17 6"	215.07 12"	N 551490.58 E 1376432.60	D INLET	D-4.10
5-7	PRIVATE	216.63	211.97 6"	211.55 12"	N 551321.01 E 1376594.51	D INLET	D-4.10

DECK WAIVER REFERENCE NOTE

BY LETTER DATED DECEMBER 13, 2016, MR. THOMAS BUTLER, DEPUTY DIRECTOR, DEPARTMENT OF PUBLIC WORKS, APPROVED A WAIVER ALLOWING THE CONSTRUCTION OF A DECK, 8' DEEP MAXIMUM, ON LOTS 60 THRU 95, LOTS 146 THRU 155 & LOTS 164 THRU 172, WHICH PROTRUDES A MAXIMUM OF 5' INTO THE 10' STRUCTURE SETBACK FROM THE PUBLIC SEWER, WATER & UTILITY EASEMENT AND WHICH PROTRUDES A MAXIMUM OF 7' INTO THE STRUCTURE SETBACK FOR LOTS 157 THRU 163.

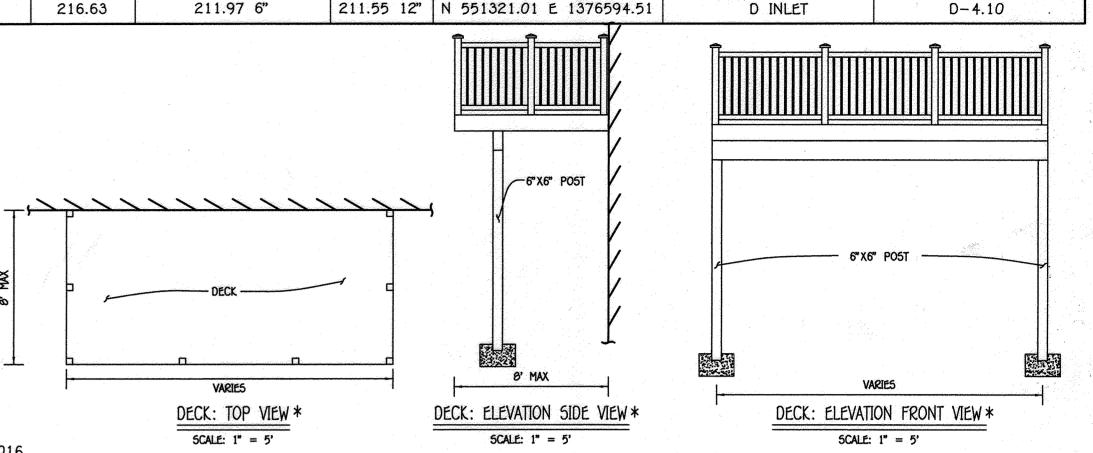
DECK CONDITIONS / LIMITATIONS:

- PROPOSED DECK SHALL BE A MAXIMUM SIZE OF 8 FEET DEEP.
- 2. THE FOUNDATION FOR EACH DECK POST SHALL BE A MINIMUM OF 5 FEET FROM ANY WATER METER OR SEWER
- CLEANOUT, OR PUBLIC WATER/SEWER APPURTENANCE.

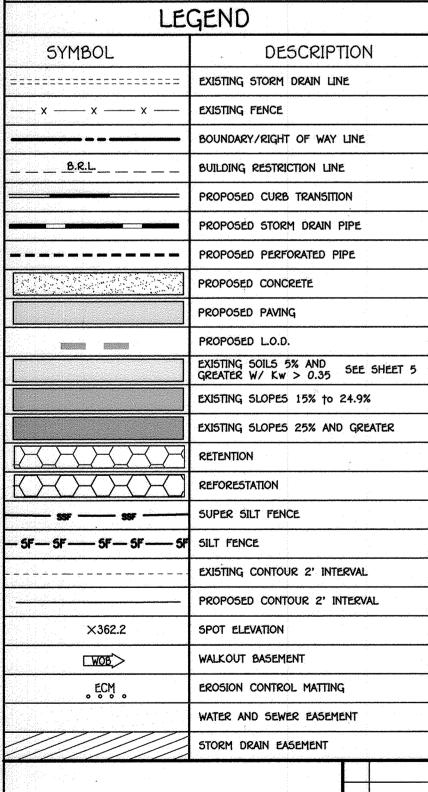
  3. THE CONSTRUCTION OF ACCESS STEPS, FROM/TO EXTERIOR
- GRADE, FOR THE DECKS SHALL NOT BE PERMITTED.

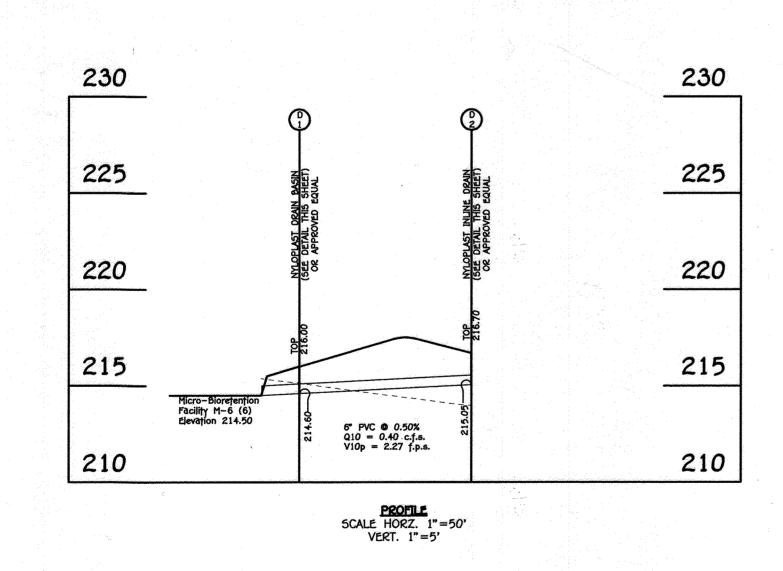
  4. REFERENCE WAIVER APPROVAL LETTER DATED DECEMBER 13, 2016.

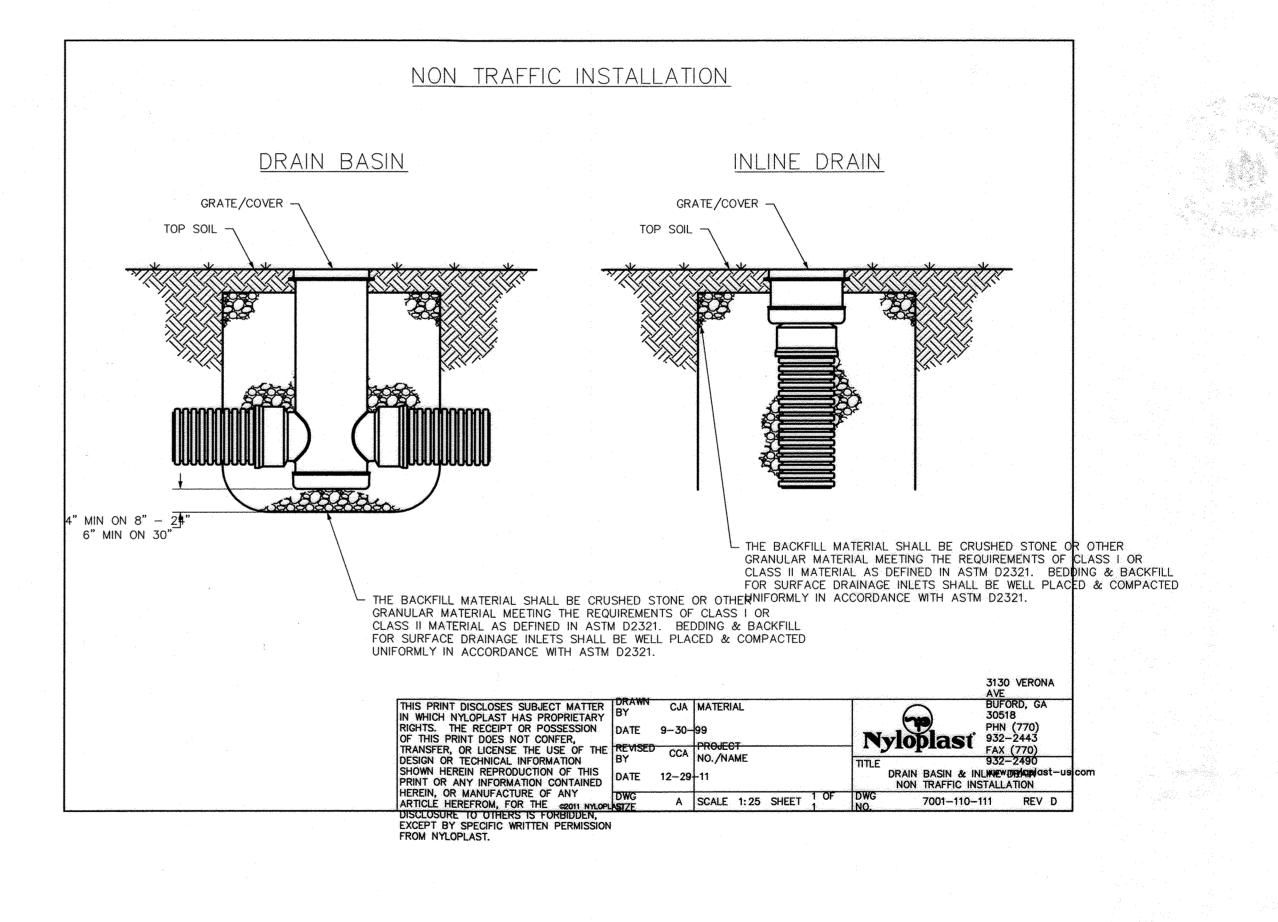
  5. THE WAIVER APPROVAL FOR CONT. NO. 14-4897-D
- (LETTER OF DECEMBER 13, 2016) IS LIMITED ONLY TO LOTS 60 THRU 95, LOTS 146 THRU 155, LOTS 157 THRU 163, LOTS 164 THRU 172 AND A SEPARATE WAIVER SHALL BE REQUIRED FOR PROPOSED DECKS ON TOWNHOME GROUPINGS ELSEWHERE WITHIN THE DEVELOPMENT, SHOULD THE PROPOSED DECKS NOT MEET HOWARD COUNTY WATER AND SEWER DESIGN MANUAL, VOLUME II REQUIREMENTS.

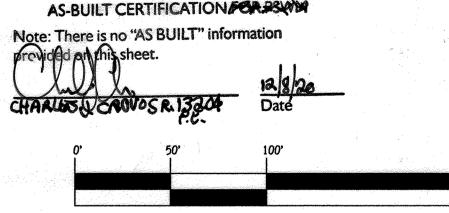


TYPICAL DECK: DETAILS & NOTES \*









SCALE: 1" = 50'

FISHER, COLLINS & CARTER, INC.

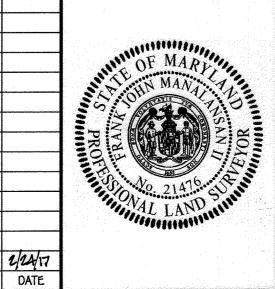
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE

ELLICOTT CITY, MARYLAND 21042

(410) 461 - 2055

1 ADDED DECK DECAUS & NOTES



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

FRANK JOHN MANALANSAN II, L.S. NO. 21476

CDCG3BZHLP
C/O CDCG ASSET MANAGEMENT LLC
Ø5Ø5 E. HARTFORD DRIVE
SUITE 200
SCOTTSDALE, AZ. Ø5255

ATTN: STEVEN 5. BENSON

DEVELOPER

BEAZER HOMES CORP
8965 GUILFORD ROAD
COLUMBIA, MD. 21046
ATTN: EDWARD GOLD
(410) 720-5071

C-02

STORM DRAIN PROFILES

SINGLE FAMILY TOWNHOUSE

MORRIS PLACE

LOTS 106 THRU 104

AND OPEN SPACE LOTS 105 THRU 193

PHASE VI

PHASE VI

ZONED: CAC & CLI

PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-02-140, 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-060, F-14-020, F-15-047, F-16-017, 5DP-15-017, 5DP-15-029, W & 5 CONTR. NO. 14-4777-D AND CONTR. NO. 14-4097-D

TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4

FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: 1" = 50' DATE: SEPTEMBER, 2016

SHEET 7 OF 11

#### INFILTRATION AND FILTER SYSTEM CONSTRUCTION SPECIFICATIONS

INFILTRATION AND FILTER SYSTEMS EITHER TAKE ADVANTAGE OF EXISTING PERMEABLE SOILS OR CREATE A PERMEABLE MEDIUM SUCH AS SAND FOR WC), AND RE V. IN SOME INSTANCES WHERE PERMEABILITY IS GREAT. THESE FACILITIES MAY BE USED FOR QP AS WELL. THE MOST COMMON SYSTEMS INCLUDE INFILTRATION TRENCHES, INFILTRATION BASINS, SAND FILTERS, AND ORGANIC FILTERS.

WHEN PROPERLY PLANTED, VEGETATION WILL THRIVE AND ENHANCE THE FUNCTIONING OF THESE SYSTEMS. FOR EXAMPLE, PRE-TREATMENT BUFFERS WILL TRAP SEDIMENTS THAT OFTEN ARE BOUND WITH PHOSPHOROUS AND METALS. VEGETATION PLANTED IN THE FACILITY WILL AID IN NUTRIENT UPTAKE AND WATER STORAGE. ADDITIONALLY, PLANT ROOTS WILL PROVIDE ARTERIES FOR STORMWATER TO PERMEATE SOIL FOR GROUNDWATER RECHARGE. FINALLY, SUCCESSFUL PLANTINGS PROVIDE AESTHETIC VALUE AND WILDLIFE HABITAT MAKING THESE FACILITIES MORE DESIRABLE TO THE PUBLIC.

#### DESIGN CONSTRAINTS:

> PLANTING BUFFER STRIPS OF AT LEAST 20 FEET WILL CAUSE SEDIMENTS TO SETTLE OUT BEFORE REACHING THE FACILITY, THEREBY REDUCING THE POSSIBILITY OF CLOGGING.

> DETERMINE AREAS THAT WILL BE SATURATED WITH WATER AND WATER TABLE DEPTH SO THAT APPROPRIATE PLANTS MAY BE SELECTED (HYDROLOGY WILL BE SIMILAR TO BIORETENTION FACILITIES. SEE FIGURE A.5 AND TABLE A.4 FOR PLANTING MATERIAL GUIDANCE).

> PLANTS KNOWN TO SEND DOWN DEEP TAPROOTS SHOULD BE AVOIDED IN SYSTEMS WHERE FILTER FABRIC IS USED AS PART OF FACILITY DESIGN.

> TEST SOIL CONDITIONS TO DETERMINE IF SOIL AMENDMENTS ARE NECESSARY. > PLANTS SHALL BE LOCATED SO THAT ACCESS IS POSSIBLE FOR STRUCTURE MAINTENANCE.

> STABILIZE HEAVY FLOW AREAS WITH EROSION CONTROL MATS OR SOD. > TEMPORARILY DIVERT FLOWS FROM SEEDED AREAS UNTIL VEGETATION IS ESTABLISHED. > SEE TABLE A.5 FOR ADDITIONAL DESIGN CONSIDERATIONS.

#### BIO-RETENTION

#### SOIL BED CHARACTERISTICS

THE CHARACTERISTICS OF THE SOIL FOR THE BIORETENTION FACILITY ARE PERHAPS AS IMPORTANT AS THE FACILITY LOCATION, SIZE, AND TREATMENT VOLUME. THE SOIL MUST BE PERMEABLE ENOUGH TO ALLOW RUNOFF TO FILTER THROUGH THE MEDIA, WHILE HAVING CHARACTERISTICS SUITABLE TO PROMOTE AND SUSTAIN A ROBUST VEGETATIVE COVER CROP. IN ADDITION, MUCH OF THE NUTRIENT POLLUTANT UPTAKE (NITROGEN AND PHOSPHORUS) IS ACCOMPLISHED THROUGH ABSORPTION AND MICROBIAL ACTIVITY WITHIN THE SOIL PROFILE, THEREFORE, SOILS MUST BALANCE THEIR CHEMICAL AND PHYSICAL PROPERTIES TO SUPPORT BIOTIC COMMUNITIES ABOVE AND BELOW GROUND.

THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 5% BY VOLUME [ENVIRONMENTAL QUALITY RESOURCES (EQR), 1996; ENGINEERING TECHNOLOGY INC. AND BIOHABITATS, INC. (ETAB), 1993]. SOILS SHOULD FALL WITHIN THE SM, ML, SC CLASSIFICATIONS OR THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER. BRUSH OR SEEDS FROM NOXIOUS WEEDS (E.G., JOHNSON GRASS, MUGWORT, NUTSEDGE, AND CANADA THISTLE OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.) SHOULD NOT BE PRESENT IN THE SOILS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN 12 TO 10 LIFTS THAT ARE LOOSELY COMPACTED (TAMPED LIGHTLY WITH A BACKHOE BUCKET OR TRAVERSED BY DOZER TRACKS). THE SPECIFIC CHARACTERISTICS ARE PRESENTED IN TABLE A.3.

TABLE A 3 PLANTING SOIL CHAPACTERISTICS

PARAMETER	VALUE	
PH RANGE	5.2 TO 7.00	
organic matter	1.5 TO 4.0% (BY WEIGHT)	
MAGNESIUM	35 LBS. PER ACRE, MINIMU	M
PHOSPHORUS (PHOSPHATE - P205)	75 LB5. PER ACRE, MINIMU	M
POTASSIUM (POTASH -1(K2O)	05 LBS. PER ACRE, MINIMU	M
SOLUBLE SALTS	500 PPM	
CLAY .	0 TO 5 %	
SILT	30 TO 55 %	
SAND	35 TO 60%	. 4

THE MULCH LAYER PLAYS AN IMPORTANT ROLE IN THE PERFORMANCE OF THE BIORETENTION SYSTEM. THE MULCH LAYER HELPS MAINTAIN SOIL MOISTURE AND AVOIDS SURFACE SEALING, WHICH REDUCES PERMEABILITY. MULCH HELPS PREVENT EROSION, AND PROVIDES A MICROENVIRONMENT SUITABLE FOR SOIL BIOTA AT THE MULCH/SOIL INTERFACE. IT ALSO SERVES AS A PRETREATMENT LAYER. TRAPPING THE FINER SEDIMENTS. WHICH REMAIN SUSPENDED AFTER THE PRIMARY PRETREATMENT

THE MULCH LAYER SHOULD BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE SHREDDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHOULD BE WELL AGED (STOCKPILED OR STORED FOR AT LEAST 12 MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, SOIL, ROOTS, ETC. THE MULCH SHOULD BE APPLIED TO A MAXIMUM DEPTH OF THREE INCHES. GRASS CLIPPINGS SHOULD NOT BE USED AS A MULCH MATERIAL.

#### PLANTING GUIDANCE

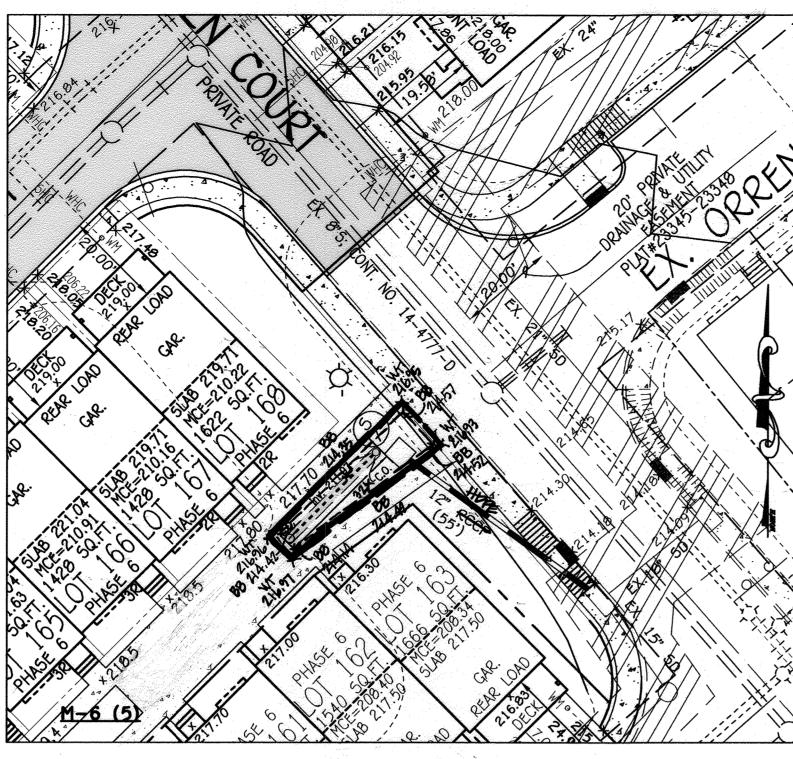
PLANT MATERIAL SELECTION SHOULD BE BASED ON THE GOAL OF SIMULATING A TERRESTRIAL FORESTED COMMUNITY OF NATIVE SPECIES. BIORETENTION SIMULATES AN UPLAND-SPECIES ECOSYSTEM. THE COMMUNITY SHOULD BE DOMINATED BY TREES, BUT HAVE A DISTINCT COMMUNITY OF UNDERSTORY TREES, SHRUBS AND HERBACEOUS MATERIALS. BY CREATING A DIVERSE, DENSE PLANT COVER, A BIORETENTION FACILITY WILL BE ABLE TO TREAT STORMWATER RUNOFF AND WITHSTAND URBAN STRESSES FROM INSECTS,

DISEASE, DROUGHT, TEMPERATURE, WIND, AND EXPOSURE. THE PROPER SELECTION AND INSTALLATION OF PLANT MATERIALS IS KEY TO A SUCCESSFUL SYSTEM. THERE ARE ESSENTIALLY THREE ZONES WITHIN A BIORETENTION FACILITY (FIGURE A.5). THE LOWEST ELEVATION SUPPORTS PLANT SPECIES ADAPTED TO STANDING AND FLUCTUATING WATER LEVELS. THE MIDDLE ELEVATION SUPPORTS PLANTS THAT LIKE DRIER SOIL CONDITIONS, BUT CAN STILL TOLERATE OCCASIONAL INUNDATION BY

WATER. THE OUTER EDGE 15 THE HIGHEST ELEVATION AND GENERALLY SUPPORTS PLANTS ADAPTED TO DRYER CONDITIONS. A SAMPLE OF APPROPRIATE PLANT MATERIALS FOR BIORETENTION FACILITIES ARE INCLUDED IN TABLE A.4. THE LAYOUT OF PLANT MATERIAL SHOULD BE FLEXIBLE, BUT SHOULD FOLLOW THE GENERAL PRINCIPALS DESCRIBED IN TABLE A.5. THE OBJECTIVE IS TO HAVE A SYSTEM, WHICH RESEMBLES A RANDOM, AND NATURAL PLANT LAYOUT, WHILE MAINTAINING OPTIMAL CONDITIONS FOR PLANT ESTABLISHMENT AND GROWTH. FOR A MORE EXTENSIVE BIORETENTION PLAN, CONSULT ETAB, 1993 OR CLAYTOR AND SCHUELER, 1997.

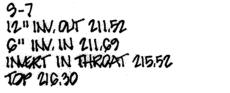
REVISE BIO-REJENTION FACILITY M-6(5)

**REVISION** 

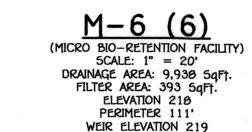


M-6 (5) MICRO BIO-RETENTION FACILITY) SCALE: 1" = 20' DRAINAGE AREA: 5,960 5qFt. FILTER AREA: **58C** 5qFt. ELEVATION 214.80 PERIMETER 121' WEIR ELEVATION 215.80

12" INV. OUT 211.52 6" INV. IN 211,69



PROVIDE 6" PVC 5CHEDULE 40



FACILITY NO. | A | B M-6 (5) 216.95 211.00 211.07 214.36 M-6 (6) 219.21 210.00 215.17 217.90 M-6 (7) 217.79 216.00 213.17 216.44

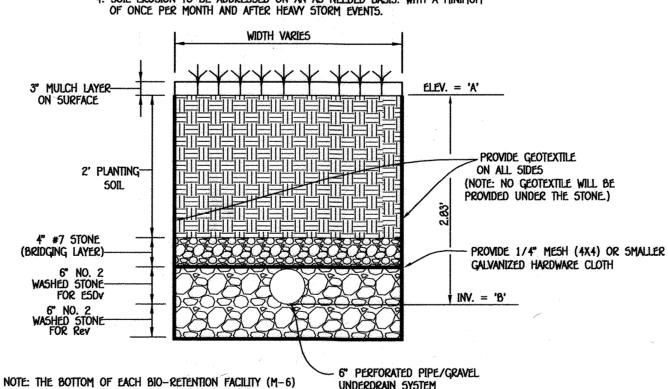
# OPERATION AND MAINTENANCE SCHEDULE

FOR BIO-RETENTION AREAS (M-6) 1. ANNUAL MAINIENANCE OF PLANT MATERIAL, MULCH LATER AND SOIL LATER IS REQUIRED. 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.

2. SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDER BEYOND TREATMENT. TREATMENT OF ALL DISEASED TREES AND SHRUBS AND REPLACEMENT OF ALL DEFICIENT STAKES AND WIRES.

3. MULCH SHALL BE INSPECTED EACH SPRING. REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.

SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED BASIS. WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.



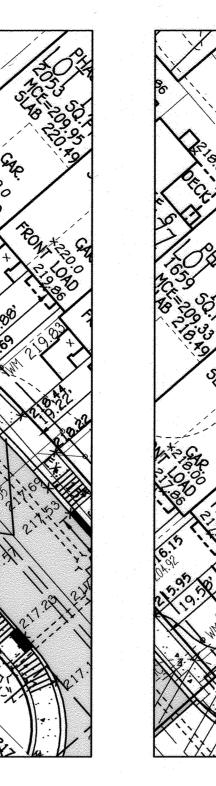
BIO-RETENTION FACILITY (M-6) TYPICAL SECTION

SHALL BE ROTOTILLED PRIOR TO STONE INSTALLATION.

SCOTTSDALE, AZ. 85255

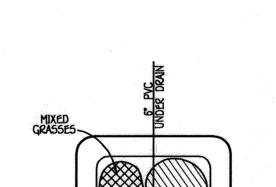
ATTN: STEVEN 5. BENSON (480) 696-3733

NO SCALE

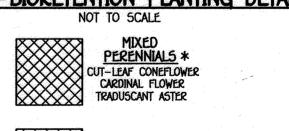


12" INV. OUT 214.47 6" INV. IN 215.18 INJORT IN THROAT 218:39

W	11714	



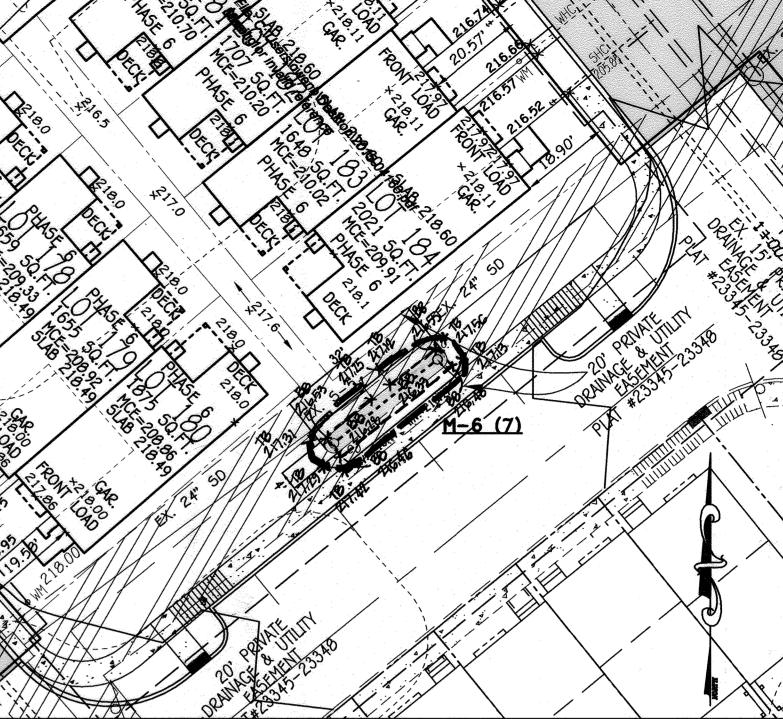
## MICRO-BIORETENTION PLANTING DETAIL



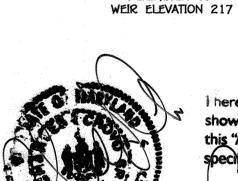
PLANT MATERIAL MUST COVER

AT LEAST 50% OF THE SURFACE

AREA OF THE MICRO-BIORETENTION



M-6 (7) (MICRO BIO-RETENTION FACILITY) 5CALE: 1" = 20' DRAINAGE AREA: 6,649 5qft FILTER AREA: 123 59F1 **ELEVATION 216** PERIMETER 68'



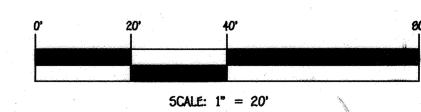
hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on

is "AS BUILT" plan meet the approved plans and

HARBUCKSINSA PERFECTIVE

DRAINAGE AREA M-6 (5) MICRO-BIORETENTION PLANT MATERIAL						
QUANTITY	NAME	MAXIMUM SPACING (FT.)				
6	PERENNIALS	1 FT.				
3	5HRUBS MIXED GRASSES	2 FT.				
DR	PAINAGE ARI	EA M-6 (6)				
		I PLANT MATERIAL				
QUANTITY	NAME	MAXIMUM SPACING (FT.)				
44	PERENNIALS	1 FT.				
22	5HRUBS MIXED 2 FT.					
	DRAINAGE AREA M-6 (7)					

D MICRO-B	DRAINAGE AREA M-6 (7) MICRO-BIORETENTION PLANT MATERIAL				
QUANTITY	NAME	MAXIMUM SPACING (FT.)			
22	PERENNIALS	1 FT.			
11	5HRUB5 MIXED GRASSES	2 FT.			



#### PIPE SIZE: 6" HOLE SIZE: 3/8" CENTER TO CENTER: 3" ROWS OF HOLES: 2 @ 90° 2 @ 160° (+/-3°) SCH40 PVC PERFORATED UNDERDRAIN PIPE DETAIL FOR HORIZONTAL DRAIN PIPE

7/25/18 DATE

UNDERDRAIN PIPE SHALL BE 4" TO 6" DIAMETER, SLOTTED

PERFORATIONS SHALL BE 3/8" DIAMETER LOCATED 6" ON

CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE

GRAVEL LAYER SHALL BE (No. 57 STONE PREFERRED) AT

THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5%

SHALL BE WRAPPED WITH A 1/4" (No. 4 OR 4 x 4)

LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.

CLEANOUT PORT AND MONITOR PERFORMANCE OF THE

A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE)

SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND

UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF

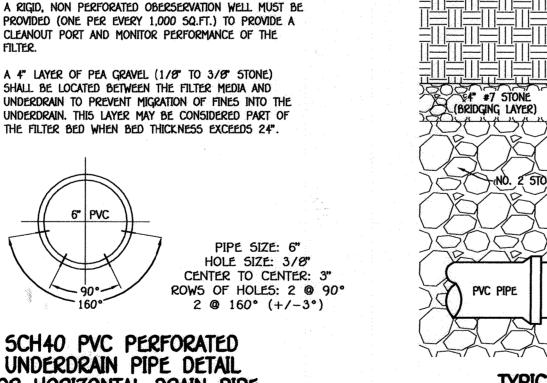
THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".

OR PERFORATED RIGID PLASTIC PIPE (ASTMF 750, TYPE

PS 28 OR AASHTO-M- 278) IN A GRAVEL LAYER. THE PREFERRED MATERIAL IS SLOTTED 4" RIGID PIPE (e.g.,

PVC OR HDPE).

GALVANIZED HARDWARE CLOTH.



24 PLANTING

TYPICAL CLEAN-OUT DETAIL

NO SCALE

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17. MORRIS PLACE OWNER DEVELOPER CDCG3BZHLP BEAZER HOMES CORP C/O CDCG ASSET MANAGEMENT LLC 23909-23912 8965 GUILFORD ROAD 8585 E. HARTFORD DRIVE COLUMBIA, MD. 21046 **SUITE 200** 

ATTN: EDWARD GOLD

(410) 720-5071

WRAP THE PERFORATED PIPE WITH 1/4" MESH

(4x4) OR SMALLER GALVANIZED HARDWARE CLOTH.

C-02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING letsleh 11-4-66 12-17-10 LOTS NO. **SECTION** LOTS 106 THRU 104 AND OPEN SPACE LOTS 105 THRU 193 N/A BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR. 6069.02 CAC & CLI WATER CODE SEWER CODE

7390000

\*SEE PLANT MATERIAL CHARTS FOR QUANTITIES AND SPACING

STORM WATER MANAGEMENT DETAILS

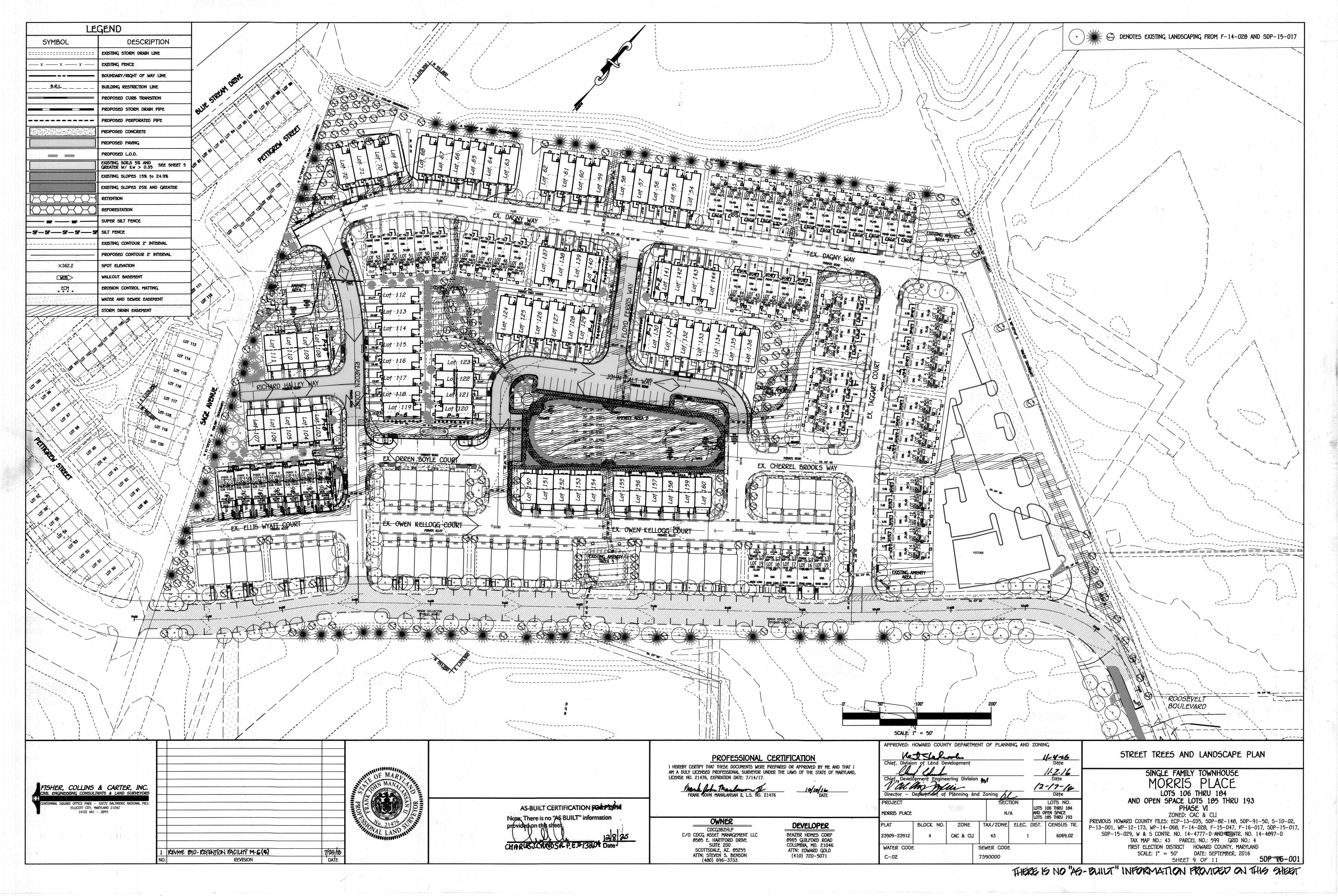
SINGLE FAMILY TOWNHOUSE MORRIS PLACE LOTS 106 THRU 104

AND OPEN SPACE LOTS 185 THRU 193 PHASE VI ZONED: CAC & CLI PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-82-148, 5DP-91-50, 5-10-02,

P-13-001, WP-12-173, WP-14-068, F-14-028, F-15-047, F-16-017, 50P-15-017, 5DP-15-029, W & 5 CONTR. NO. 14-4777-D AND CONTR. NO. 14-4897-D TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPTEMBER, 2016 50P 16-001 SHEET 8 OF 11

AS-BLILT

FISHER, COLLINS & CARTER, INC. ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042

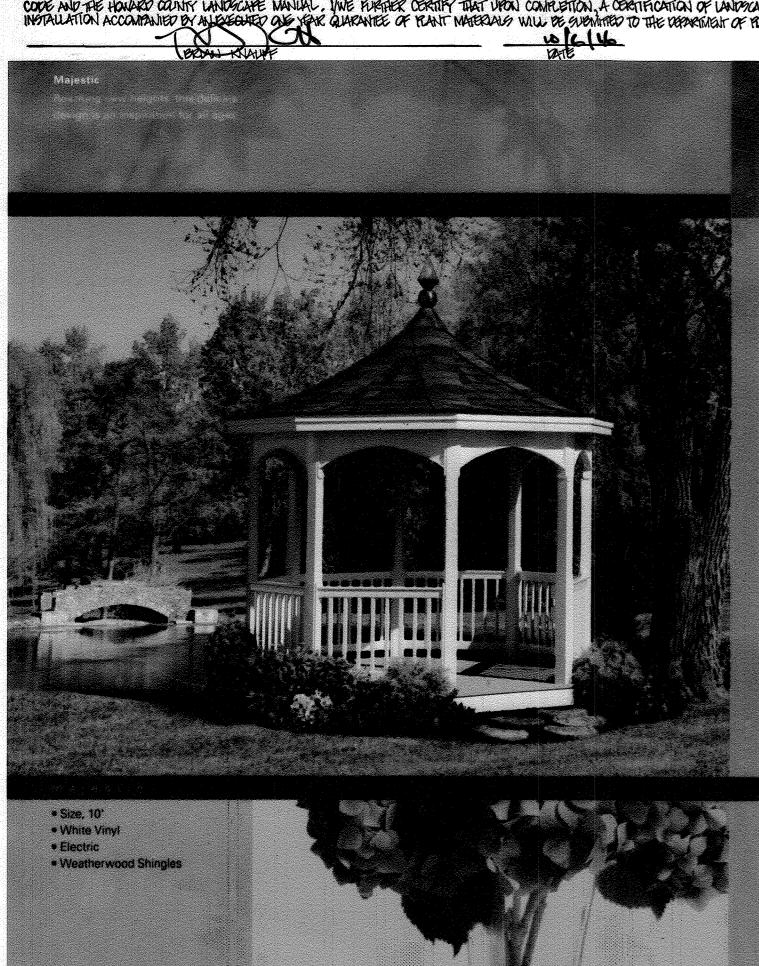


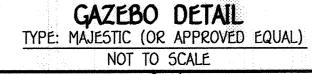
LANDSCAPING PLANT LIST				
SYMBOL	QUANTITY	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
0	29	ACER RUBRUM 'ARMSTRONG' RED MAPLE	2 1/2"-3" CAL.	
$\odot$	31	NYSSA SYLVATICA BLACK TUPELO	2 1/2"-3" CAL.	
0	30	QUERCUS PHELLOS WILLOW OAK	2 1/2"-3" HGT.	
	25	LLEX OPACA AMERICAN HOLLY	5'−6' HGT.	
	39	PINUS STROBUS EASTERN WHITE PINE	6'-Ø' HGT.	
•	90	AZALEA 'BLAAW'S PINK'/ BLAAW'S PINK AZALEA	1 <i>8</i> " –24" 5PREAD	
***	92	EUONYMUS KIAUTSCHOVICUS 'MANHATTAN' MANHATTAN EUONYMUS	2 1/2"-3" HGT.	
	56	JUNIPERUS CHINENSIS 'SARGENTI' SARGENT JUNIPER	1 <i>8</i> " –24" 5PREAD	
0	22	CLETHRA ALNIFOLIA SUMMERSWEET CLETHRA	2 1/2"-3" HGT.	

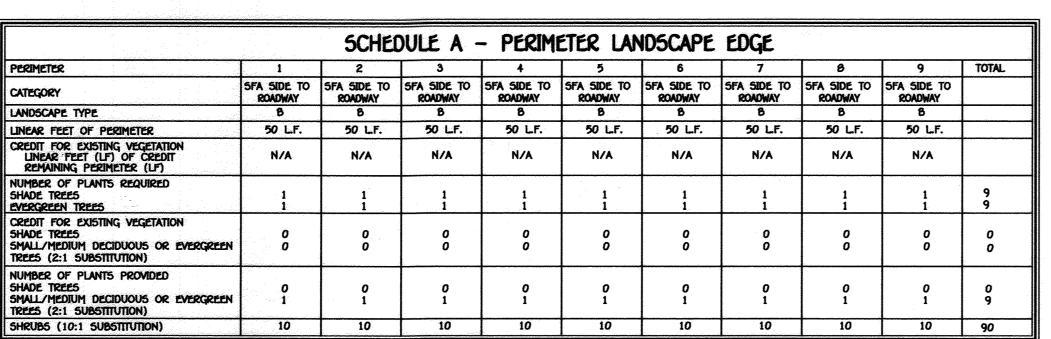
THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$44,250.00 FOR 90 SHADE TREES, 63 EVERGREEN. 260 SHRUBS SHALL BE POSTED WITH THE DEVELOPERS AGREEMENT FOR THIS PLAN (SDP-16-001).

#### LANDSCAPE DEVELOPER'S CERTIFICATE

THE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN VILL BE DONE ACCORDING TO THE PLAN, SECTION IG. 124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I WE FURTHER CERTIFY THAT UPON COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY ALLOWEDLED QUE YAR QUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PRAINING AND ZOLING.







	SINGLE FAMILY ATTACHED
number of dwelling units	79
Number of trees required (1:DU 5FA)	79
(1:3 DU APTS)	
(1:3 DU APTS) SCHEI PARK INTERNAL	OULE B ING LOT LANDSCAPING

ESSEX is designed to add dimension and weight to larger landscape and commercial settings.

6' Bench with arms

seat height 18"

80 lbs. assembled

Constructed using dimensionally larger lumber, these benches will provide a base for any outdoor

Pages 20-21

NUMBER OF PARKING SPACES

height 35"

seat height 18"

64 lbs. assembled

Curved bench with arms

width 83" inside radius 93" depth 27" outside radius 115"

110 lbs. assembled

8' Bench with arms

width 96" depth 26"

ESSEX

adds strength and visual size

Corner braces add strength as well as enhancing the overall design. Mortise and tenon joint construction adds strength

to all Essex benches.

and longeviry.

NUMBER OF TREES REQUIRED (1:10)

project, but are specially scaled for the grand stage.

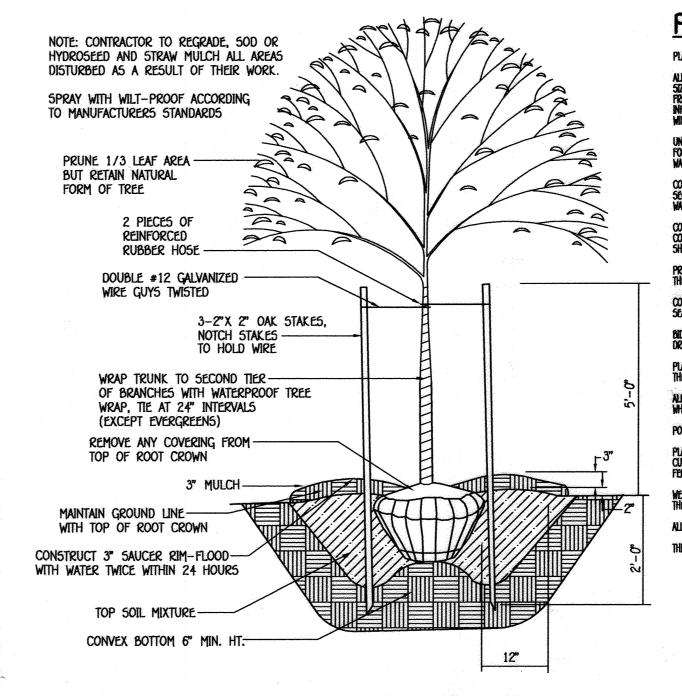
SCHEDULE C RESIDENTIAL DEVELOPMENT

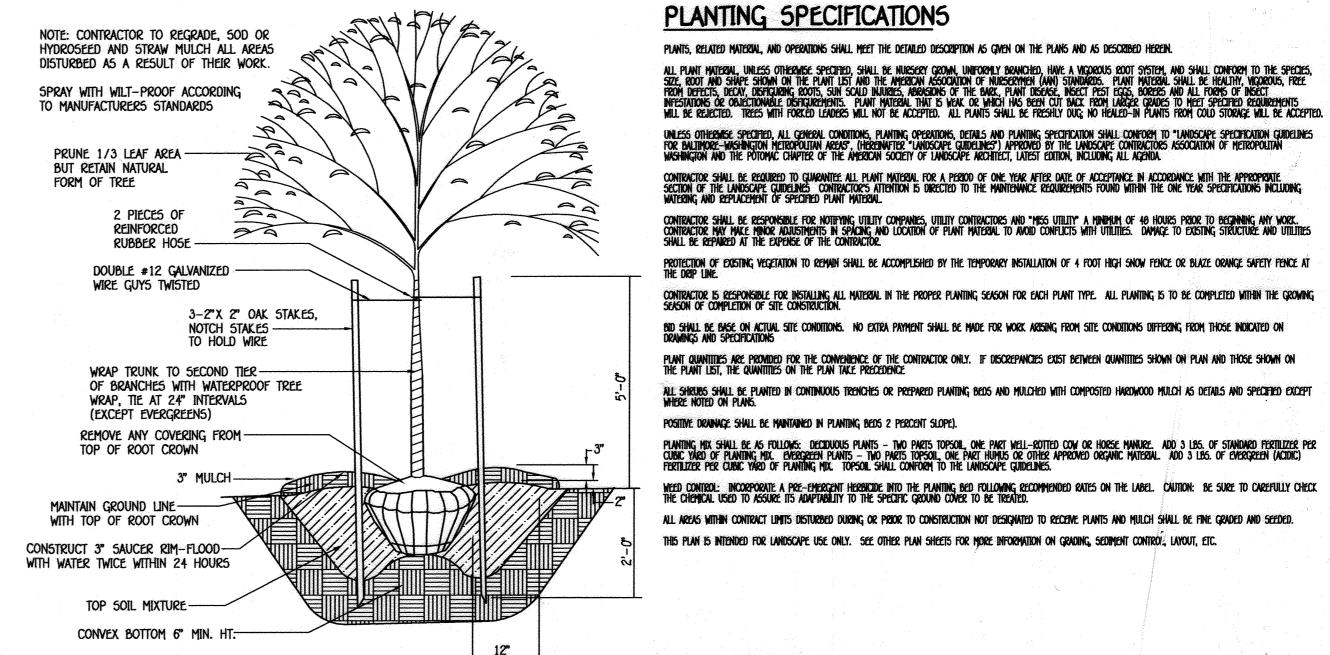
STREET TREE SCHEDULE PHASE VI				
QTY.	SIZE	COMMENTS		
155'/40 = 3.90 3.90 x 2 = 7.8 8 TREES	21/2-3" CAL.	40' APART (Richard Halley Way)		
$276^{\circ}/40 = 6.90$ $6.90 \times 2 = 13.8$ 14  TREES	2 1 /2 - 3" CAL.	40' APART (Part of Reardon Court) sta 0+00.00 to 2+75.60		
433'/40 = 10.03 10.03 x 2 = 21.65 22 TREE5	2 1/2-3" CAL.	40' APART (Part of John Galt Way) sta 1+30.99 to 5+63.66		
161'/40 = 4.03 4.03 x 2 = 0.06 8 TREES	2 1/2-3" CAL.	40' APART (Floyd Ferris Way)		

RUSTICO COMBO

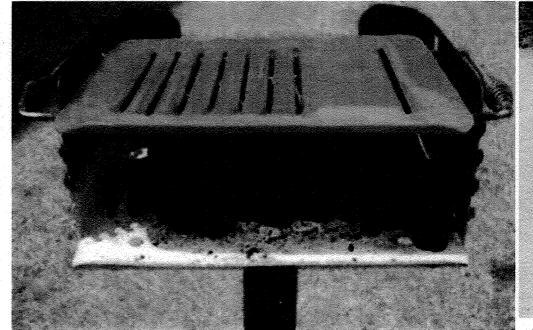
Multi-size rectangular shapes • Slightly dimpled surface

TOTAL QUANTITY = 52 STREET TREES





TREE PLANTING DETAIL



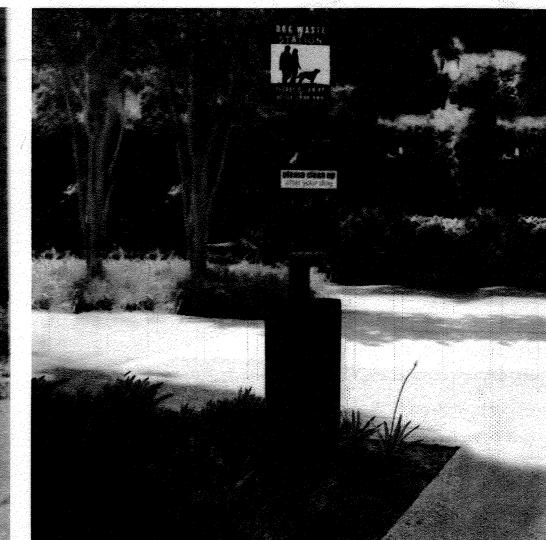
STAINLESS STEEL GRILL TYPE: STAINLESS STEEL (OR APPROVED EQUAL) NOT TO SCALE



A-FRAME PICNIC TABLE TYPE: BARCO BOARD (OR APPROVED EQUAL) NOT TO SCALE

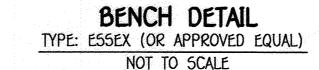


STEEL DESIGNER RECEPTACLES TYPE: 55 GALLON SLATTED STEEL (OR APPROVED EQUAL) NOT TO SCALE

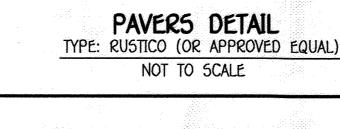


DOG WASTE STATION NOT TO SCALE

	FINISHING TOUCHES Page 70		Cha	mfere	ed edg	jes • Sc	juare	cornei	griu rs
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			i de la companya de	width	length	thickness	***************************************	s.t./pallet	-
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·		.		6"	6"	2-3/8"	4.0		10
		1		6"	9"	2-3/8"	2,7		16
			0	9"	9"	2-3/8"	1.8		4
			6x6 an	d 6x9 also	sold separa	ately. See opp	isite page.		
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SCALE: 1" = 30'



PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

	OWNER	
	COCG3BZHLP	
C/0	CDCG ASSET MANAGEMENT	LLC
	8585 E. HARTFORD DRIVE	
	SUITE 200	
	SCOTTSDALE, AZ. 85255	
	ATTN: STEVEN 5. BENSON (400) 696-3733	

DEVELOPER BEAZER HOMES CORP 8965 GUILFORD ROAD COLUMBIA, MD. 21046 ATTN: EDWARD GOLD (410) 720-5071

APPROVED: I	HOWARD COUN	TY DEPARTME	NT OF PLANN	ING AND ZONII	NG
	ASLE De	A AND DESCRIPTION OF THE PARTY			1-416 Date
lh.	opment Engine				/-Z-/6 Date
Val	Dep ot men do	un			-/7-16 Date
PROJECT MORRIS PLACE			SECT N/	LOTS A AND (	LOTS NO. 106 THRU 184 PPEN SPACE 185 THRU 193
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
23909-23912	4	CAC & CLI	43	. 1	6069.02
WATER CODE	<b>5</b>		5EWER CODE		

LANDSCAPE DETAILS

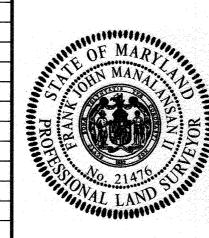
SINGLE FAMILY TOWNHOUSE MORRIS PLACE LOTS 106 THRU 104
AND OPEN SPACE LOTS 105 THRU 193
PHASE VI
ZONED: CAC & CLI

PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-82-148, 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-060, F-14-020, F-15-047, F-16-017, 50P-15-017, SDP-15-029, W & 5 CONTR. NO. 14-4777-D AND CONTR. NO. 14-4097-D
TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: SEPTEMBER, 2016 5DP 16-001 SHEET 10 OF 11

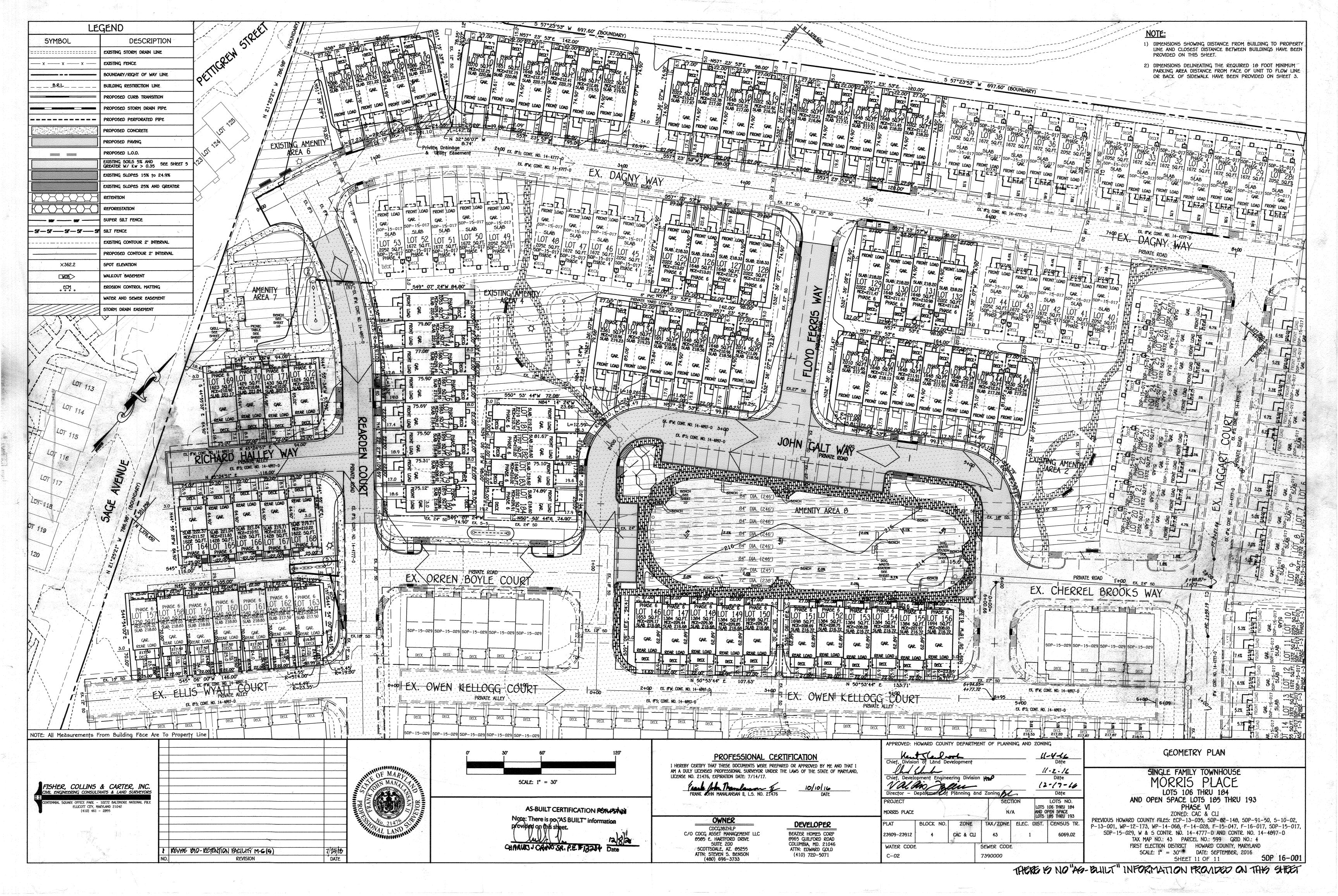
FISHER, COLLINS & CARTER, INC.

REVISION



DATE

AS-BUILT CERTIFICATION PORPSWM Note: There is no "AS BUILT" information



	LANDSCAPING PLANT LIST				
SYMBOL	QUANTITY	BOTANICAL AND COMMON NAME	SIZE	COMMENTS	
	50	ACER RUBRUM 'ARMSTRONG' RED MAPLE	2 1/2-3" CAL.		
+	<b>9</b> 6	PRUNUS SARGENTII SARGENT CHERRY	2 1/2-3" CAL.		
0	10	CLETHRA ALNIFOLIA SUMMERSWEET CLETHRA	2 1/2-3" CAL.		

THE LANDSCAPE MANUAL. SURETY IN THE AMOUNT OF \$41,100.00 FOR 136 SHADE TREES, 10 SHRUBS SHALL BE POSTED WITH THE DEVELOPERS AGREEMENT FOR THIS PLAN (5DP-15-017).

#### LANDSCAPE DEVELOPER'S CERTIFICATE

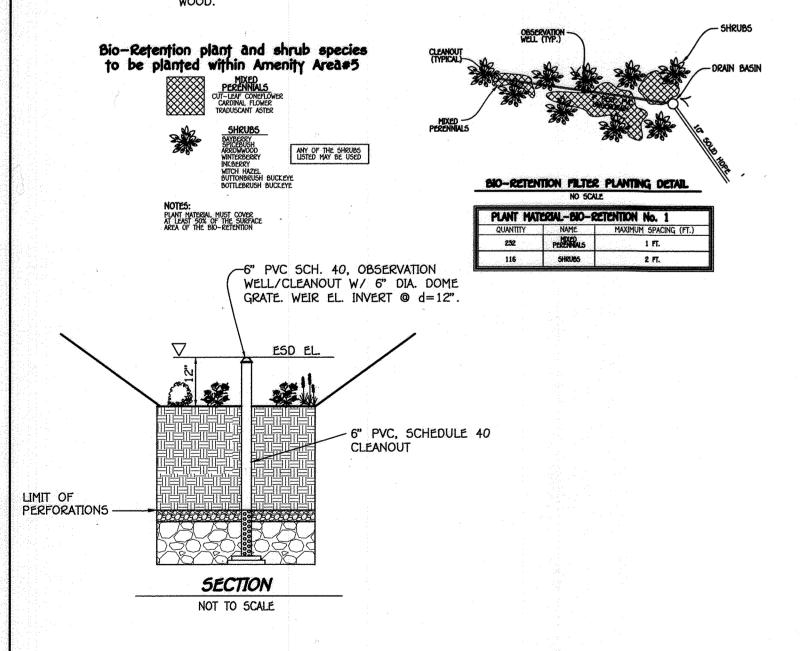
I/We certify that the landscaping shown on this plan will be done according to the plan, Section 16.124 of the Howard County Code and the Howard County Landscape Manual. I/We further certify that upon completion a certification of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.



This plan has been prepared in accordance with the provision of Section 16.124 of the Howard County Code and Landscape Manual. Financial surety for the required landscaping will be posted as part of the developor's agreement.

### AMENITY AREA #5

- 1. THE BIO-RETENTION FACILITY LOCATED WITHIN AMENITY AREA #5 HAS BEEN PROVIDED UNDER F-14-028. THE QUANTITY AND SPECIES FOR THE REQUIRED PLANTINGS TO SUPPORT THIS FACILITY ARE SHOWN BELOW.
- 2. THE TREE PLANTING SURROUNDING THIS FACILITY ARE TO SUPPORT THE LANDSCAPE OBLIGATION REQUIRED FOR 5DP-15-029. THERE WILL BE 10 ACER RUBRUM
- 'ARMSTRONG', RED MAPLES PLANTED ALONG THE PERIMETER OF THIS FACILITY 3. BENCHES WILL BE BLACK FRAMED WITH COMPOSITE SLATES THAT RESEMBLE NATURAL

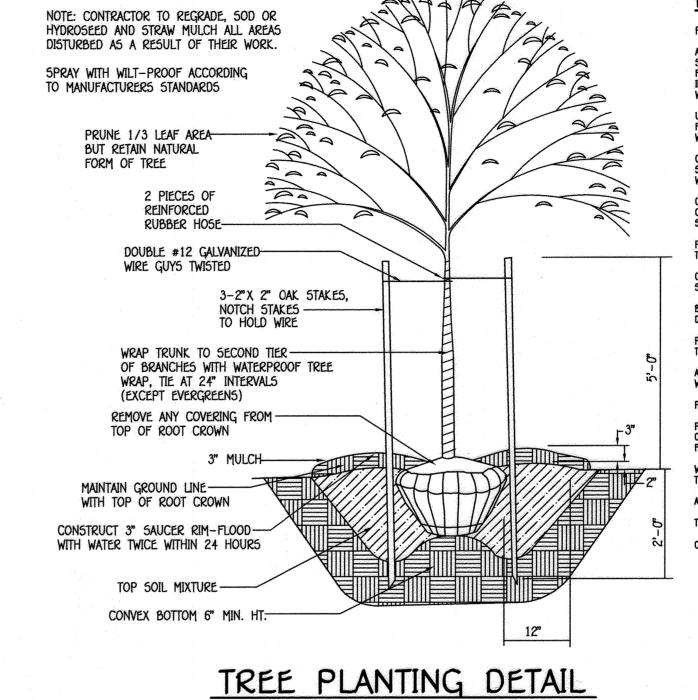


STRE	ET TREE :	5CHEDULE
QTY.	SIZE	COMMENTS
467'/40 = 11.67 11.67 x 2 = 23.35 23 TREES	21/2-3" CAL.	40' APART (Taggart Court)
173/40 = 4.33 4.33 x 2 = 8.44 9 TREE5	21/2-3" CAL.	40' APART (Cherrel Brooks Way)
882'/40 = 22.05 22.05 x 2 = 44.10 44 TREE5	2 1/2-3" CAL.	40' APART (Dagny Way)
131'/40 = 3.20 3.20 x 2 = 6.56 7 TREES	2 1/2-3" CAL.	40' APART (Part of John Galt Way) sta 5+63.74 to 6+94.65

TOTAL QUANTITY = 83 STREET TREES

SCHEDU PARKINO INTERNAL LAI	G LOT
	SINGLE FAMILY ATTACHED
NUMBER OF PARKING SPACES	4
NUMBER OF TREES REQUIRED (1:10)	1

SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING		
	SINGLE FAMILY ATTACHED	
NUMBER OF DWELLING UNITS	53	
NUMBER OF TREES REQUIRED (1:DU 5FA) (1:3 DU APTS)	53	
NUMBER OF TREES PROVIDED	Melitrippine and gentlement and an account of the second o	
SHADE TREES	<b>52</b>	
5HRUB5	10	



#### PLANTING SPECIFICATIONS

plants, related material, and operations shall meet the detailed description as given on the plans and as described herein.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT 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. ALL PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE—WASHINGTON METROPOLITAN AREAS", (HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECT, LATEST EDITION, INCLUDING ALL AGENDA.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK.
CONTRACTOR MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIAL TO AVOID CONFLICTS WITH UTILITIES. DAMAGE TO EXISTING STRUCTURE AND UTILITIES SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.

PROTECTION OF EXISTING VEGETATION TO REMAIN SHALL BE ACCOMPLISHED BY THE TEMPORARY INSTALLATION OF 4 FOOT HIGH SNOW FENCE OR BLAZE ORANGE SAFETY FENCE AT

CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE. ALL PLANTING IS TO BE COMPLETED WITHIN THE GROWING

BID SHALL BE BASE ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON

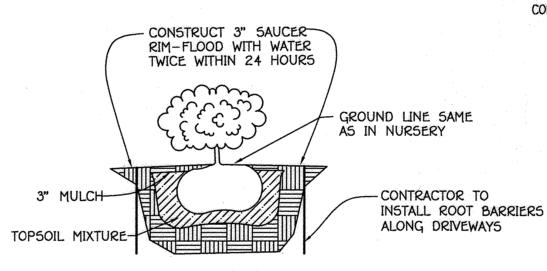
PLANT QUANTITIES ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN TAKE PRECEDENCE ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE).

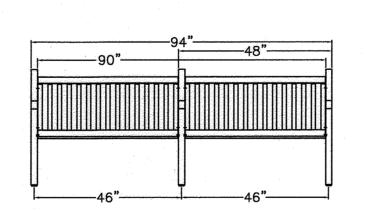
PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE. ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES. WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

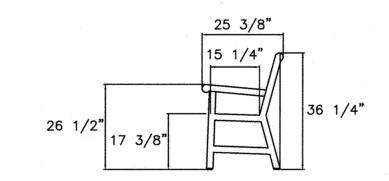
ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED. THIS PLAN IS INTENDED FOR LANDSCAPE USE ONLY. SEE OTHER PLAN SHEETS FOR MORE INFORMATION ON GRADING, SEDIMENT CONTROL, LAYOUT, ETC.

CONTRACTOR TO INSTALL ROOT BARRIER ALONG DRIVEWAYS



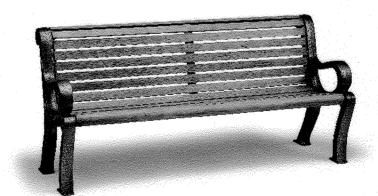
SHRUB PLANTING DETAIL



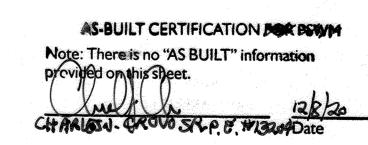


SCOTTSDALE, ARIZONA 05255 ATTN: STEVEN 5. BENSON (400) 696-3733

BENCH DETAILS NOT TO SCALE

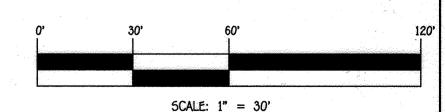


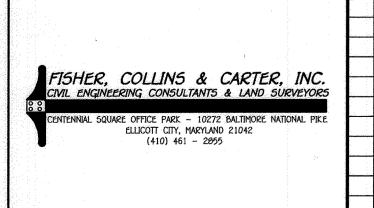


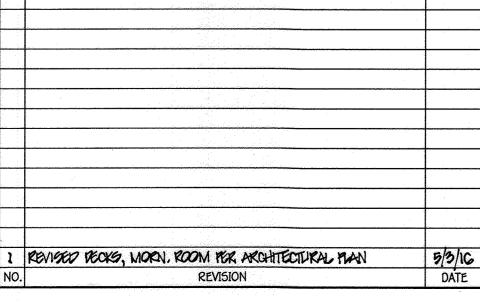




32 Gallon Receptacle
AS MANUFACTURED BY KRT OR APPROVED EQUAL with Liner and Flat Top Lid — Faux Wood Portable









AS-BUILT CERTIFICATION FOR PORCE evote: There is no "AS BUILT" information provided on this sheet.

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

DEVELOPER/BUILDER OWNER CDCG 3 BZH LP, C/O CDCG ASSET MANAGEMENT, LLC BEAZER HOMES CORP 8965 GUILFORD ROAD SUITE 290 6565 E. HARTFORD DRIVE SUITE 200 COLUMBIA, MARYLAND 21046

ATTN: EDWARD GOLD (410) 720-5071

MORRIS PLACE PHASES I-IV BLOCK NO. ZONE 23345-23348 CAC-CLI WATER CODE

C-02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING Chief, Division of Land Development 10.7-15 10.2.16 Chief, Development Engineering Division Company Director - Department of Planning and Zoning 10-7-15 Date LOTS NO. N/A 1 THRU 53 TAX/ZONE | ELEC. DIST. | CENSUS TR 6069.02 SEWER CODE

7390000

LANDSCAPE PLAN

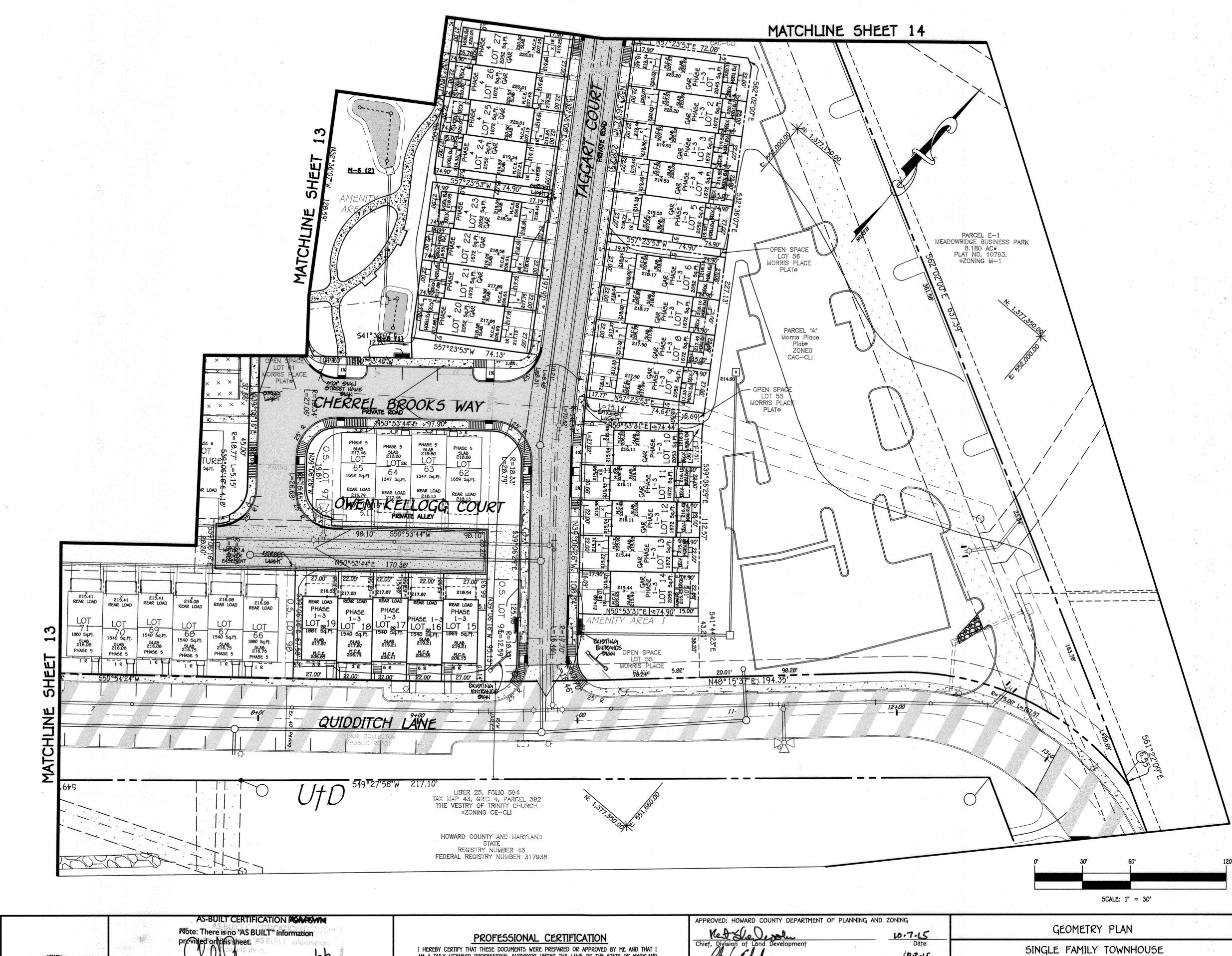
MORRIS PLACE

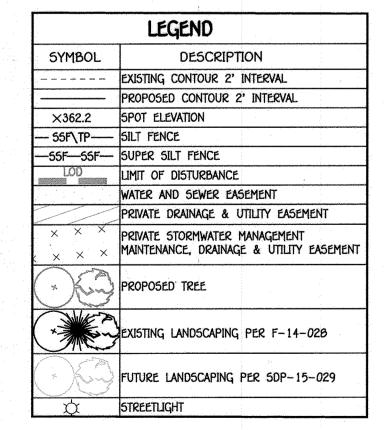
LOTS 1 THRU 53, OPEN SPACE LOTS 54 THRU 61 & NON-BUILDABLE BULK PARCELS 'A' THRU 'C' PHASES I-IV ZONED: CAC-CLI

PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-82-148, 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-060, F-14-020, F-15-047, SDP-15-029 AND W & 5 CONTRACT NO. 14-4777-D. TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: AUGUST, 2015

5HEET 12 OF 14 50P 15-017 THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET





FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS L SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 5/3/16 DATE REVIGED DECKS, MORN, ROOM PER ARCHITECTURAL PLAN



CHANUS JUCKOVO SR. P.E. #1309 Date

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/17.

CDCG 3 BZH LP, C/O CDCG ASSET MANAGEMENT, LLC

8585 E. HARTFORD DRIVE SUITE 200

SCOTTSDALE, ARIZONA *8*5255 ATTN: STEVEN 5. BENSON (480) 696-3733

DEVELOPER/BUILDER BEAZER HOMES CORP 8965 GUILFORD ROAD SUITE 290 COLUMBIA, MARYLAND 21046 ATTN: EDWARD GOLD (410) 720-5071

10.2.15 Chief, Development Engineering Division

Director - Department of Planning and Zoning 10-7-15 PROJECT LOTS NO. SECTION MORRIS PLACE PHASES I-IV N/A 1 THRU 53 TAX/ZONE | ELEC. DIST. | CENSUS TR. BLOCK NO. ZONE 23345-23348 6069.02 CAC-CLI WATER CODE SEWER CODE C-02 7390000

LOTS 1 THRU 53, OPEN SPACE LOTS 54 THRU 61 & NON-BUILDABLE BULK PARCELS 'A' THRU 'C' PHASES I-IV

ZONED: CAC-CLI PREVIOUS HOWARD COUNTY FILES: ECP-13-035, 5DP-82-148, 5DP-91-50, 5-10-02, P-13-001, WP-12-173, WP-14-068, F-14-028, F-15-047, 50P-15-029 AND W & 5 CONTRACT NO. 14-4777-D. TAX MAP NO.: 43 PARCEL NO.: 599 GRID NO.: 4

FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: AUGUST, 2015 5HEET 13 OF 14 5DP 15-017

THERE IS NO "AS-BUILT" INFORMATION PROMDED ON THIS SHEET

