#### GENERAL NOTES THIS SUBDIVISION PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE SUBJECT PROPERTY ZONED CAC-CLI & CE-CLI PER 2-02-04 COMPREHENSIVE ZONING PLAN, AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE 7/28/06 3. SITE ANALYSIS a. ZONING = CAC-CLI & CE-CLI CAC-CLI = 16.34 AC± CE-CLI = 0.91 AC± b. GROSS AREA OF TRACT = 17.25 AC. \* AREA OF FLOODPLAIN = 0.00 AC. ± AREA OF STEEP SLOPES (GREATER THAN 25%) = 0.00 AC.± NET AREA OF TRACT = 17.25 AC.± . AREA OF PROPOSED BUILDING LOTS AND OPEN SPACE LOTS THIS SUBMITTAL (APFO PHASE I THRU IV) = 4.466 AC. FEE SIMPLE LOTS 1-53 = 2.182 AC. ± (PHASES 1-4) OPEN SPACE LOT 167 = 2.284 AC. ± AREA OF BULK PARCELS TO BE SUBDIVIDED AT LATER STAGE = 9.970 AC± (PHASES 4-6) AREA OF PROPOSED PUBLIC ROAD = 2.806 AC+ (THIS SUBMISSION) TOTAL NUMBER OF LOTS PROPOSED = 53 (PHASES 1-4) TOTAL NUMBER OF LOTS PROPOSED FOR ENTIRE MORRIS PLACE PROJECT SUMMARY NUMBER OF BUILDABLE LOTS = 167 (166 RESIDENTIAL UNITS AND 1 COMMERCIAL PARCEL) TOTAL NUMBER OF UNITS ALLOWED: (17.25 Ac. X 25 UNITS/AC) = 431 UNITS TOTAL NUMBER OF UNITS PROVIDED: TOWNHOUSES = 166 UNITS TOTAL AREA OF COMMERCIAL FLOOR AREA ALLOWED = (166 UNITS X 300 54Ft PER UNIT = 49,800 54Ft) TOTAL AREA OF COMMERCIAL FLOOR AREA PROVIDED = 33,200 54FT (SEE GENERAL NOTE NO. 23) TOTAL NUMBER OF MIHU REQUIRED: (166 X 15%) = 25 UNITS TOTAL NUMBER OF MIHU PROVIDED: 25 UNITS PREVIOUS DEPARTMENT OF PLANNING AND ZONING FILE NUMBERS = SDP-91-50, 5-10-02, WP-12-173, ECP-13-035, P-13-001. PUBLIC WATER AND SEWER WILL BE USED FOR THIS PROJECT AND WILL BE EXTENDED FROM THE LIMITS OF CONTRACTS OF 14-4003-D AND 14-1074-D RESPECTIVELY. AMENITY AREA REQUIRED: (PHASE I THROUGH IV) =0.72 ACRES (SEE AMENITY AREA CHART THIS SHEET) AMENITY AREA PROVIDED: AT SITE DEVELOPMENT PLAN STAGE. TOPOGRAPHIC CONTOURS ARE BASED ON AERIAL CONTOUR MAPPING BY HARFORD AERIAL PHOTOGRAPHED ON SEPTEMBER 18, 2007 AND SUPPLEMENTED WITH A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS AND CARTER, INC. DATED OCTOBER 24, 2007. PROPERTY DEED REFERENCE: LIBER 13599 AT FOLIO 277 AND LIBER 13579 AT FOLIO 404. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT AND PUBLIC WATER AND SEWER SHALL BE UTILIZED WITHIN THIS DEVELOPMENT. a. PUBLIC SEWER FRONTAGE PROVIDED BY CONTRACT No. 14-4777-D. b. PUBLIC WATER SERVICE PROVIDED BY CONTRACT Nos. 14-4777-D. SOILS BOUNDARIES ARE BASED ON NRCS WEBSOIL SURVEY. 0. The existing industrial buildings and accessory structures located on site are to be razed. BOUNDARY OUTLINE BASED ON FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. DATED OCTOBER, 2007. 10. STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH CHAPTER 5 OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT COTTON OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF ENVIRONMENT STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009, A FIRST OF THE MARYLAND DEPARTMENT OF THE MARYLAND DEPARTM DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE THE 65DBA NOISE EXPOSURE. 13. THE 65DBA NOISE LINE 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.

FINAL ROAD CONSTRUCTION, GRADING AND STORMWATER MANAGEMENT PLANS

# MORRIS PLACE

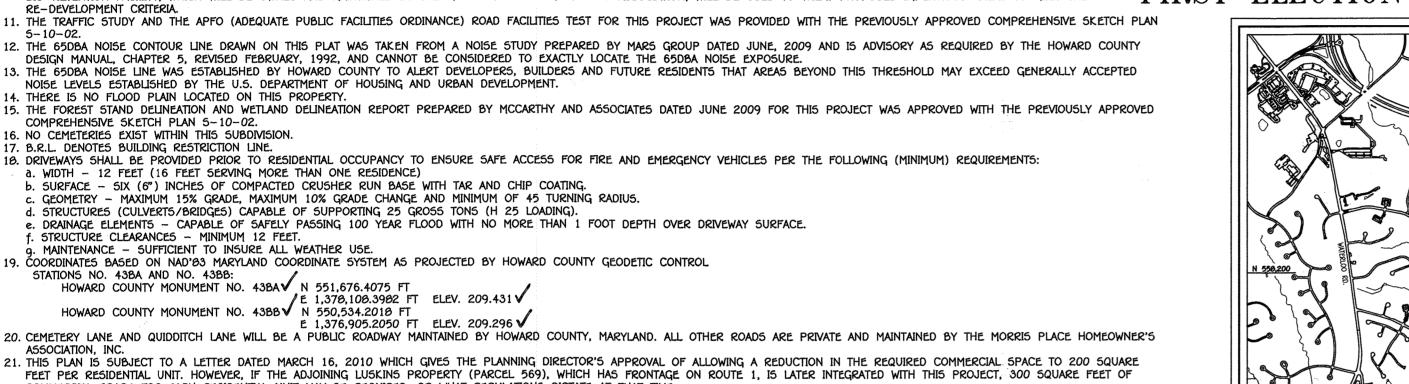
LOTS 1-53, OPEN SPACE LOTS 54 THRU 61 AND NON-BUILDABLE

BULK PARCELS 'A' THRU 'C'

PHASES I-IV

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

HOWARD COUNTY, MARYLAND ELECTION DISTRICT



E 1,376,905.2050 FT ELEV. 209.296 20. CEMETERY LANE AND QUIDDITCH LANE WILL BE A PUBLIC ROADWAY MAINTAINED BY HOWARD COUNTY, MARYLAND. ALL OTHER ROADS ARE PRIVATE AND MAINTAINED BY THE MORRIS PLACE HOMEOWNER'S 21. THIS PLAN IS SUBJECT TO A LETTER DATED MARCH 16, 2010 WHICH GIVES THE PLANNING DIRECTOR'S APPROVAL OF ALLOWING 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 ON ROUTE 1, IS LATER INTEGRATED WITH THIS PROJECT, 300 SQUARE FEET OF COMMERCIAL SPACE FOR EACH RESIDENTIAL UNIT MAY BE REQUIRED, OR WHAT REGULATIONS DICTATE AT THAT TIME.

22. NO FOREST EXIST ON THIS PROJECT PER THE FOREST STAND DELINEATION REPORT, PREPARED BY MCCARTHY AND ASSOCIATES ON JUNE 2009 AND PROVIDED WITH 5-10-02 APPROVED ON JUNE 6. 23. FOREST CONSERVATION WILL BE PROVIDED IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL WITH OFF-SITE REFORESTATION OF 2.59 ACRES ON BRIGHTON MILL FOREST TREE BANK, 5DP-11-056, PARCEL 'A', TAX MAP 34, PARCEL 2 AND MAPLEWOOD FARM, 5DP-13-040, PARCEL 'A', TAX MAP 21, PARCEL 106. 24. SOIL BORINGS WILL BE PROVIDED AT THE SITE DEVELOPMENT PLAN STAGE OF THIS PROJECT.

25. THE FOLLOWING STANDARDS (CONSTRUCTION AND TEMPORARY CONTROL) ARE REQUIRED FOR THIS PROJECT a. MD-104.03-05 RIGHT LANE CLOSURE/MULTILANEUN DIV. GREATER THAN 40 MPH

b. SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING

d. STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (H 25 LOADING).

c. GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 TURNING RADIUS.

19. COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL

e. DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.

/E 1,370,108.3982 FT ELEV. 209.431

b. MD-620.02 STANDARD TYPES A & B CONCRETE CURB AND GUTTER AND COMBINATION CURB AND GUTTER 26. ARTICLES OF INCORPORATION FOR THE MORRIS PLACE HOMEOWNER'S ASSOCIATION, INC. WAS FILED WITH THE MARYLAND STATE DEPARTMENT OF ASSESSMENTS AND TAXATION.

16. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:

27. A PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON AUGUST 12, 2009 FOR THIS PROJECT.

14. THERE IS NO FLOOD PLAIN LOCATED ON THIS PROPERTY.

a. WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE)

MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

HOWARD COUNTY MONUMENT NO. 43BA V N 551,676.4075 FT

HOWARD COUNTY MONUMENT NO. 43BB 

✓ N 550.534.2018 FT

COMPREHENSIVE SKETCH PLAN 5-10-02.

STATIONS NO. 43BA AND NO. 43BB:

16. NO CEMETERIES EXIST WITHIN THIS SUBDIVISION 17. B.R.L. DENOTES BUILDING RESTRICTION LINE.

f. STRUCTURE CLEARANCES - MINIMUM 12 FEET.

26. PLAT SUBJECT TO WP-12-173 WHICH THE PLANNING DIRECTOR ON JUNE 25, 2012 APPROVED TO WAIVE 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 TO DPZ ON OR BEFORE NOVEMBER 1, 2012.

29. A TREE MAINTENANCE EASEMENT RUNNING ALONG THE EDGE OF THE PUBLIC ROAD RIGHT-OF-WAY, AS SHOWN ON THIS PLAT 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

30. REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE FOR PRIVATE ROADS ARE PROVIDED BY THE MORRIS PLACE HOMEOWNERS ASSOCIATION, INC. FOR THE TOWNHOUSE LOTS FRONTING 31. FINANCIAL OBLIGATIONS FOR 95 STREET TREES PROVIDED BY A SURETY IN THE AMOUNT OF \$20,500.00 POSTED WITH THE DEVELOPERS AGREEMEN

32. LANDSCAPING OBLIGATIONS FOR THIS SUBMISSION (APFO PHASES I THRU IV) HAS BEEN PROVIDED BY A FINANCIAL SURETY IN THE AMOUNT OF \$25,350.00 BASED ON 64 SHADE TREES @ \$300/SHADE TREE AND 41 EVERGREEN TREES @ \$150/EVERGREEN TREE. INTERNAL PARKING AND PRIVATE ROAD STREET TREES ARE POSTED AS PART OF THE DEVELOPERS AGREEMENT FOR THE SITE DEVELOPMENT

33. THIS PROJECT COMPLIES WITH THE ROUTE 1 MANUAL IN REGARDS TO THE "CAC-CLI" ZONING DISTRICT. 34. 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:

ALLOCATION ALLOCATIONS ELKRIDGE G & R 4 | 2016 | ELKRIDGE G & R | ELKRIDGE G & R ELKRIDGE G & R

34 F-14-028 INCLUDES PH. 1-4 34 PRELIMINARY OR 5DP BETWEEN 7/1/14 & 11/1/14 79 PRELIMINARY OR SDP BETWEEN 7/1/15 & 1/1/16

35. AMENITY AREA REQUIREMENTS PROVIDED WITH SDP FOR APFO PHASES I THRU IV. SEE AMENITY AREA CHART THIS SHEET.

39. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.

36. MODERATE INCOME HOUSING UNITS (M.I.H.U.) FOR PHASE I THRU IV TABULATION: A. TOTAL PROJECT M.I.H.U. REQUIREMENT = 25 M.I.H.U.

(166 UNIT5 X 15%) = 24.9 M.I.H.U.B. M.I.H.U. FOR PHASE I THRU IV REQUIRED = 8 M.I.H.U

(53 UNITS X 15%) = 7.95 M.I.H.U.C. M.I.H.U. FOR PHASE I THRU IV PROVIDED = 0 M.I.H.

40. TRAFFIC CONTROL DEVICES:

37. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE. 30. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO

A. THE RI-1 (STOP) SIGN AND THE STREET NAME SIGN (SNS) 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

D. ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN 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, PERORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND THAN TWO QUICK PUNCH HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST. 41. 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. 42. ENVIRONMENTAL CONCEPT PLAN, ECP-13-035, APPROVED ON APRIL 1, 2012 43. SKETCH PLAN, 5-10-02, APPROVED BY THE PLANNING DIRECTOR ON JUNE 7, 2010.

44. PRELIMINARY PLAN, P-13-001, APPROVED BY THE PLANNING DIRECTOR ON JULY 3, 2013. 45. NON-BUILDABLE BULK PARCELS 'A', 'B', AND 'C' RESERVES THE RIGHT TO BE RE-SUBDIVIDED IN ACCORDANCE WITH APPO REGULATIONS AND IN COMPLIANCE WITH MORRIS PLACE SKETCH PLAN,

5-10-002. APPROVED BY THE PLANNING DIRECTOR ON JUNE 7, 2010. 46. THE LOTS CREATED BY THIS SUBDIVISION 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 18.112. 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.

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. A NEW PUBLIC STREET NAME SIGN MAY BE NEEDED AT

THE CEMETERY LANE - ROOSEVELT BLVD INTERSECTION. 48. A MODERATE INCOME HOUSING UNIT (M.I.H.U.) AGREEMENT AND M.I.H.U. COVENANTS WILL BE RECORDED SIMULTANEOUSLY WITH THIS PLAT. 49. THIS PLAN SUBJECT TO A WAIVER TO SECTION 2.5 OF THE HOWARD COUNTY DESIGN MANUAL VOLUME III, APPROVED ON MAY 13, 2014, ALLOWING THE USE OF A 15.5' RADIUS ON THE SOUTH SIDE

OF THE INTERSECTION OF QUIDDITCH LANE AND SAGE AVENUE.

ADC STREET MAP: MAP 34 GRID F6

# VICINITY MAP

BENCHMARK INFORMATION B.M.#1 - HOWARD COUNTY CONTROL STATION #43BA - HORIZONTAL - NAD '83) (LOCATED IN FRONT F #7561 OLD WASHINGTON ROAD, APPROX. 4.2' BEHIND FIRE HYDRANT & APPROX. 2.9' BEHIND EDGE OF PAVING) N 550.534.2018 E 1.376,905,2050 ELEVATION = 209.296 - VERTICAL - (NAVD '88) B.M.#2 - HOWARD COUNTY CONTROL STATION #43BB - HORIZONTAL - (NAD '63) (LOCATED ALONG OLD WASHINGTON ROAD, APPROX. 350' SOUTH OF KIT KAT ROAD. ALONG EAST BOUND PAVING EDGE) E 1,378,108.3982 ELEVATION = 209.431 - VERTICAL - (NAVD '88)

ROADWAY INFORMATION CHART							
ROAD NAME	CLASSIFICATION	DESIGN SPEED	POSTED SPEED LIMIT	R/W WIDTH			
QUIDDITCH LANE	MINOR COLLECTOR	35 MPH	25 MPH	VARIES			
EX. CEMETERY LANE	MINOR COLLECTOR		25 MPH	80'			
EX. U.S. ROUTE 1	INTERMEDIATE ARTERIAL		50 MPH	ULTIMATE 134'			

	STREET SIGN CHART										
.	STREET NAME	STATION	OFFSET	Posted Sign	5IGN CODE						
	QUIDDITCH LANE QUIDDITCH LANE QUIDDITCH LANE QUIDDITCH LANE QUIDDITCH LANE	0+65 2+89 9+66 11+12 13+00	13' R 28' L 28' L * 20' L 24' R	SPEED LIMIT 25 MPH STOP STOP SPEED LIMIT 25 MPH TO NORTH & SOUT	R2-1 R1-1 R1-1 R2-1 TH {1}						
	ROOSEVELT BOULEVARD	**	**	U.S. 1 TRAIL BLAZER SIGN ASSEMBLY	M4-5 M1-4 M5-1R						
	CEMETERY LANE	17+00	14' L	SPEED LIMIT 25 MPH	R2-1						
	CEMETERY LANE CEMETERY LANE	14+70 14+95	52' L 24' R	TO NORTH (1) TO SOUTH (1)							
		}	7								

NOTE: SEE SHEETS 21-22 FOR PAVEMENT MARKING AND SIGNAGE PLAN.

\*\* HOWARD COUNTY TRAFFIC WILL FIELD LOCATE

\* - MOUNT TO STREET LIGHT POLE

SHEET INDEX
DESCRIPTION
TITLE SHEET
DEMOLITION PLAN
QUIDDITCH LANE - PLAN AND PROFILE
CEMETARY LANE - PLAN AND PROFILE
EROSION & SEDIMENT CONTROL PLAN
EROSION & SEDIMENT CONTROL NOTES AND DETAILS
STORM DRAIN DRAINAGE AREA MAP
STORM DRAIN PROFILES
STORMWATER MANAGEMENT BIO RETENTION PLANTING PLAN AND DETAILS
ROADWAY DETAILS
ROADWAY X-SECTIONS & TEMPORARY TRAFFIC PLANS
STREET TREE & LANDSCAPE PLANS
PAVEMENT MARKING AND SIGNAGE PLAN
STORMWATER MANAGEMENT NOTES & DETAILS

	STREET	LIGH	T CHART
STREET NAME	5TATION	OFF5ET	FIXTURE/POLE TYPE
	0+20 12+36 13+25	13' R 19' L 19' L	250-wath HPS vapor equivalen Led "Tear drop" fixture Mounted at 23' on a black Fiberglass pole (with a Shroud) using a 4' arm
QUIDDITCH LANE	1+85 4+00 5+00 5+93 6+71 7+88 0+92	20' L 20' L 22' R 20' L 20' L 22' R 20' L	100-wath HPS VAPOR EQUIVALENT LED "MAPLE LAWN ACORN" FIXTURE MOUNTED ON A 12-FOO BLACK FIBERGLASS POLE (WITH A SHROUD)
	3+00 9+82 11+12	13' R 13' R 20' L	150-watt HP5 VAPOR EQUIVALENT LED "MAPLE LAWN ACORN" FIXTUR MOUNTED ON A 12-FOOT BLACK FIBERGLASS POLE (WITH A SHROU
CEMETERY LANE	14+28 15+50 16+67 17+85	27' R 24' K 13' R 16' R	250-watt HPS VAPOR EQUIVALMEN LED "TEAR DROP" FIXTURE MOUNTED AT 23' ON A BLACK FIBERGLASS POLE (WITH A SHROUD) USING A 4' ARM

ACRES

17.25

2.59

### SITE ANALYSIS DATA CHART

B. LIMIT OF DISTURBED AREA = 17.25 AC. ±. C. PRESENT ZONING DESIGNATION = CAC-CLI & CE-CLI (PER 10/06/2013 COMPREHENSIVE ZONING PLAN

D. PROPOSED USE: RESIDENTIAL AND COMMERCIAL E. BUILDING COVERAGE OF SITE: 40% F. PREVIOUS HOWARD COUNTY FILES: 5DP-82-148, 5DP-91-50,

5-10-02, WP-12-173, & P-13-001 G. TOTAL AREA OF FLOODPLAIN LOCATED ON SITE 0.00 AC±

H. TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 AC+ . NET TRACT AREA = 17.25 AC.±. (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA)

TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0 AC. \* . TOTAL AREA OF FOREST = 0 AC± L. TOTAL GREEN OPEN AREA = 10.29 AC±

L. TOTAL AREA OF SEVERELY ERODIBLE SOILS = 0 AC. ±

TOTAL IMPERVIOUS AREA = 6.96 AC±

	AME	ENTIY AREA CHART
PHASE	REQUIRED	PROVIDED

0.50 AC. | 0.51 AC. AMENITY AREAS 1-3 0.22 AC. 0.22 AC. AMENITY AREA 4 0.27 AC. | 0.34 AC. AMENITY AREAS 5-6 0.74 AC. | 0.88 AC. AMENITY AREAS 7-8 1.73 AC. 1.95 AC.

wen Kellogg Court ... De

SITE PHASING MAP

SCALE: 1" = 200'

QUIDDITCH LANE

AREA TO REMAIN IN AGRICULTURAL PRODUCTION D. NET TRACT AREA 17.25 LAND USE CATEGORY: MIXED USE E. AFFORESTATION THRESHOLD (NET TRACT AREA [C] x 15%) 2.59 2.59 F. CONSERVATION THRESHOLD (NET TRACT AREA [C] x 15%) EXISTING FOREST COVER G. EXISTING FOREST COVER WITHIN THE NET TRACT AREA H. AREA OF FOREST ABOVE AFFORESTATION TRESHOLD AREA OF FOREST ABOVE CONSERVATION TRESHOLD BREAKEVEN POINT J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION BREAKEVEN POINT K. CLEARING PERMITTED WITHOUT MITIGATION PROPOSED FOREST CLEARING . TOTAL AREA OF FOREST TO BE CLEARED OR RETAINED OUTSIDE FCE M. TOTAL AREA OF FOREST TO BE RETAINED

NET TRACT AREA

B. DEDUCTIONS (AREA WITHIN 100 YEAR FLOODPLAIN)

PLANTING REQUIREMENTS

R. TOTAL REFORESTATION REQUIRED

5. TOTAL AFFORESTATION REQUIRED

TOTAL PLANTING REQUIREMENT

N. REFORESTATION FOR CLEARING ABOVE THE CONSERVATION TRESHOLD

REFORESTATION FOR CLEARING BELOW THE CONSERVATION TRESHOLD

A. TOTAL TRACT AREA

FOREST CONSERVATION WORKSHEET VERSION 1.0

	APFO PHASING CHART									
HATCH	HATCH PHASE APFO ROUTE ONE MIHU TOTAL YEAR UNITS									
	I-III	2013	16	3	19					
	IV	28	6	34						
	٧	2015	28	6	34					
	VI	2016	69	10	79					
	TOTAL	141	25	166						

### AS-SUILT CERTIFICATION

thereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT plan meet the approved plans and

CHARLES J. (CROVO, SR. NO. 13204

U.S. ROUTE 1-BALTIMORE-WASHINGTON BOULEVARD

5 49°17'36" W 85.54'

TITLE SHEET LOTS 1-53. OPEN SPACE LOTS 54-61 AND NON-BUILDABLE BULK PARCELS 'A' THRU 'C' PHASES I-IV

ZONED: CAC-CLI & CE-CLI TAX MAP No. 43 GRID No. 4 PARCEL No. 599 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPTEMBER 30, 2014 SHEET 1 OF 24 F-14-028

APPROVED: DEPARTMENT OF PLANNING AND ZONING

FISHER, COLLINS & CARTER, INC.

(REVISED STREET SIGN OHART & REVIOUED CEMETER! W. 1944) 3/24/16 ELLICOTT CITY, MARYLAND 21042 DESCRIPTION REVISIONS

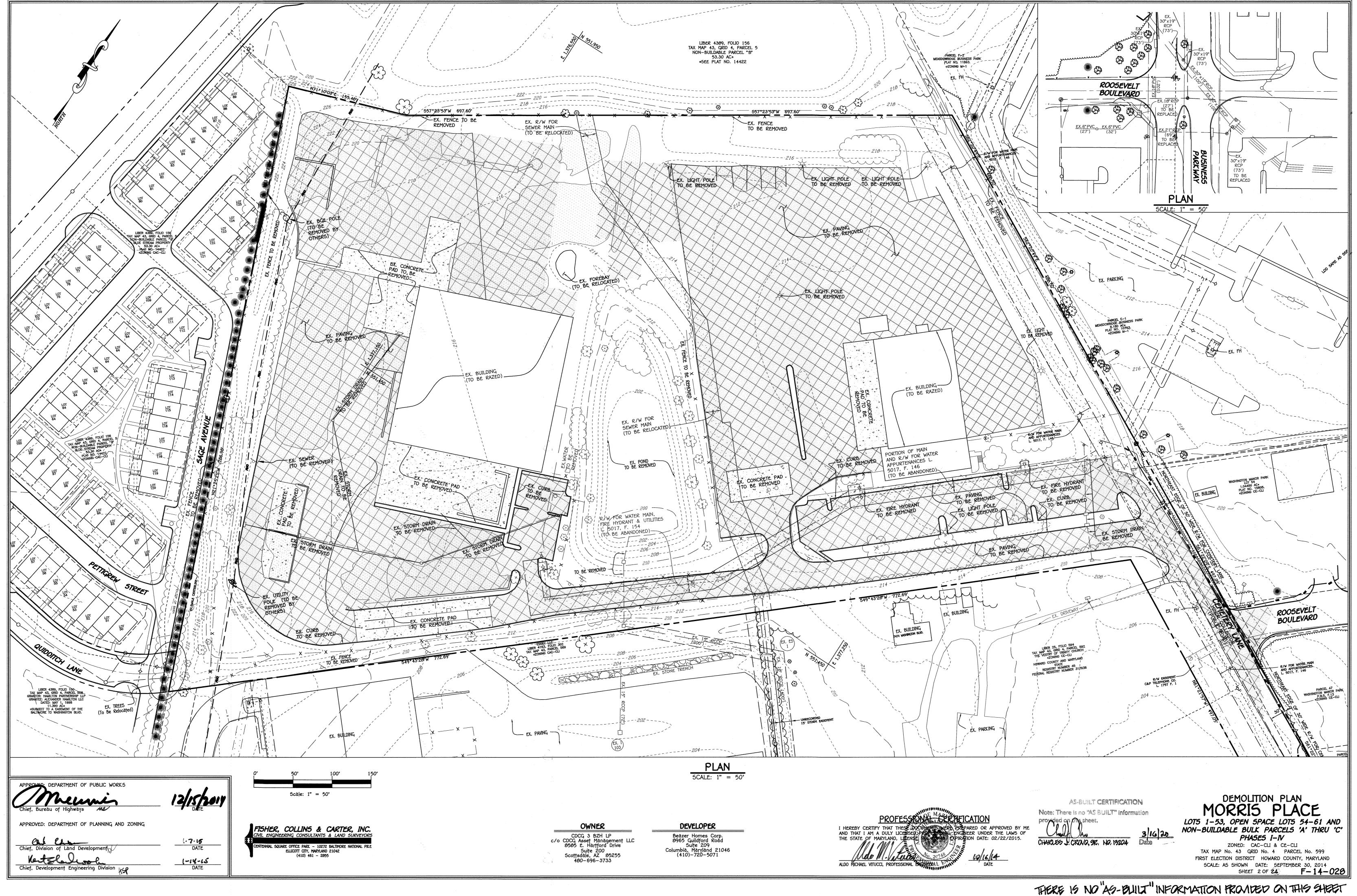
OWNER CDCG 3 BZH LP c/o CDCG Asset Management 1 8585 E. Hartford Drive Scottsdale, AZ 05255

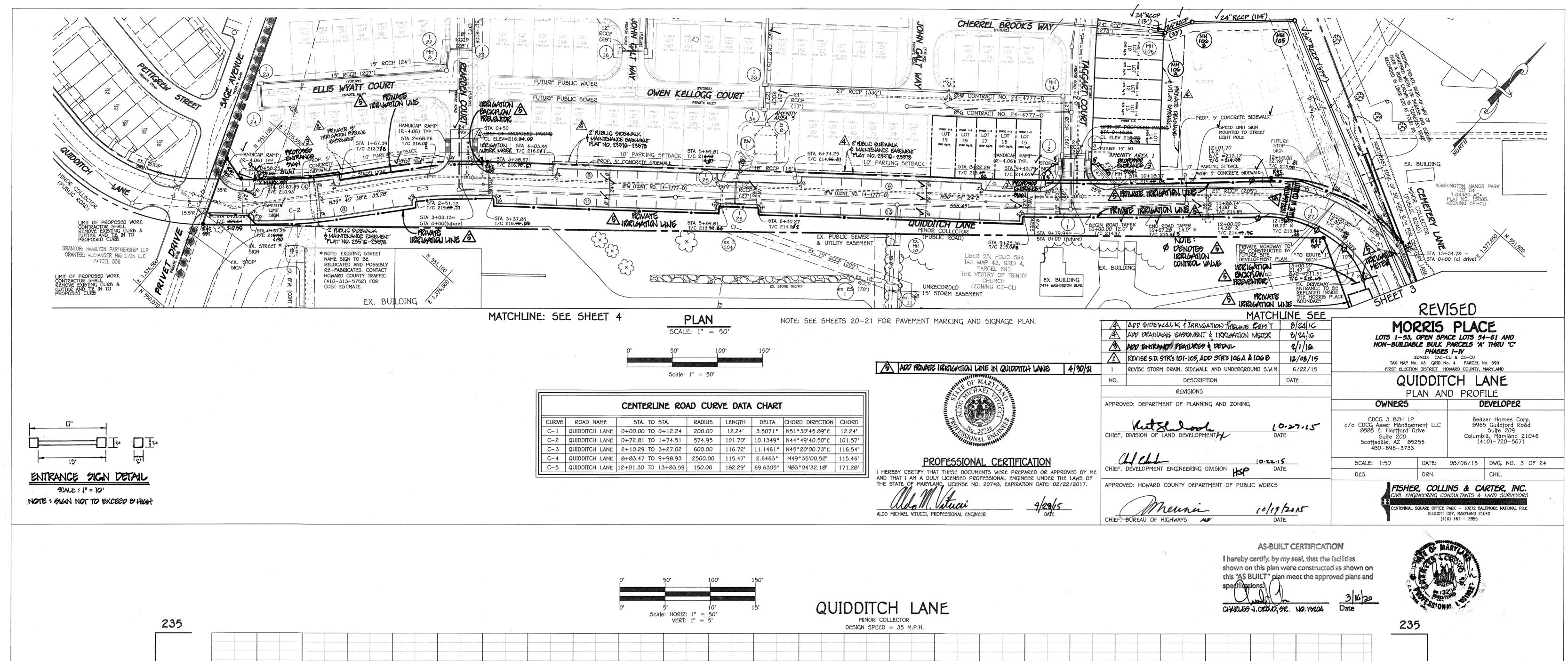
Bedzer Homes Corp 8965 Guildford Road
5uite 209
Columbia, Maryland 21046
(410)-720-5071 ADDRESS CHART

LOT NUMBER STREET ADDRESS

IRRIGATION METER 7519 CEMETERY LANE

5 49°43'28' W 772.69'

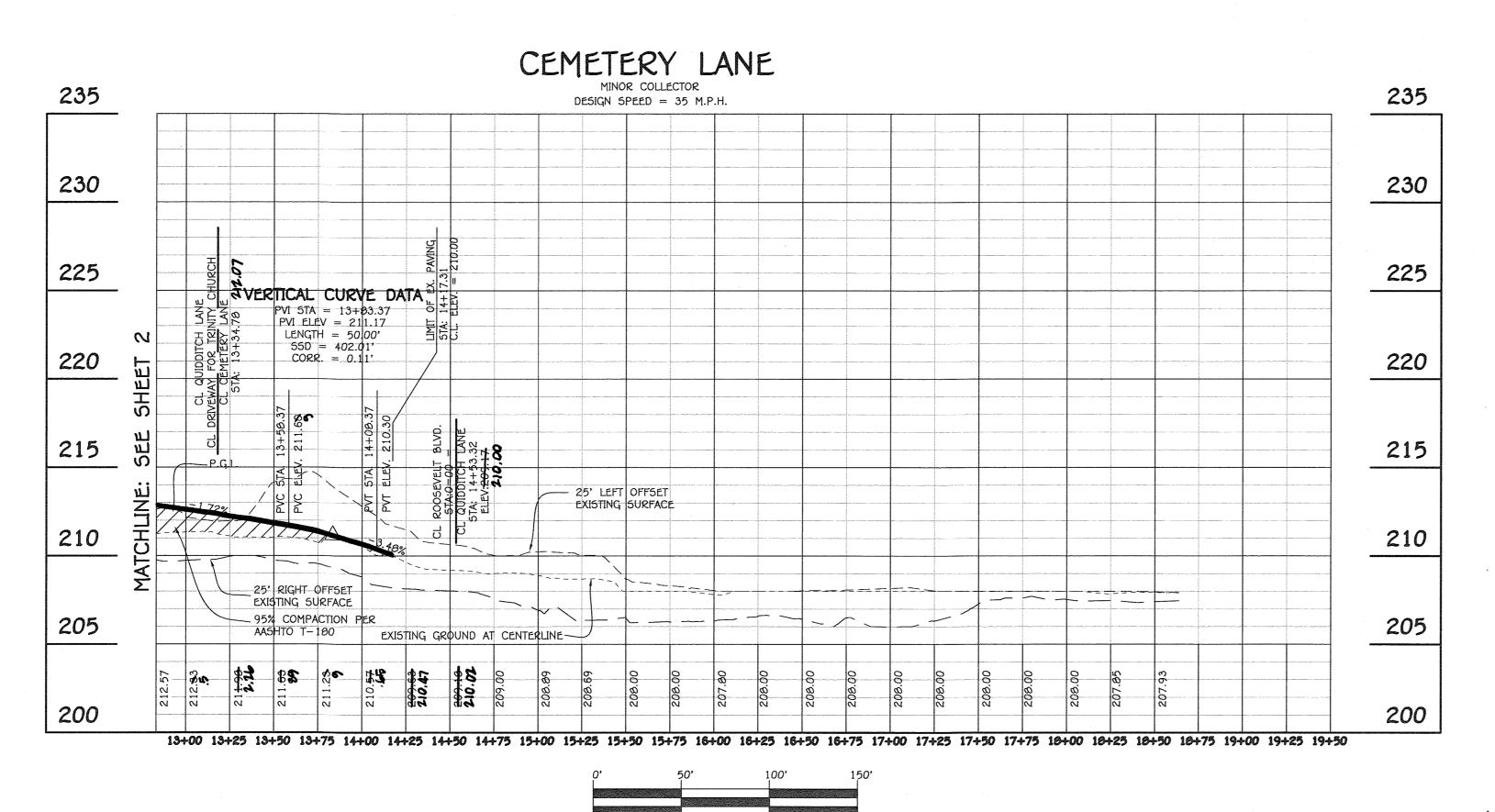




VERTICAL CURVE DATA VERTICAL CURVE DATA VERTICAL CURVE DATA PVI STA = 8+05.04 VERTICAL CURVE DATA PVI STA = 3+13.47 PVI E EV = 217.50 PVI ELEV = 215.74 VERTICAL CURVE DATA PVI 5TA = 9+79.78 PVI 5TA = 11+07.74225 LENGTH = 150.00' LENGTH = 200.00' PVI ELEV = 213.98 PVI ELEV = 215.91 PVI 5TA = 5 + 84.9425' LEFT OFFSET EXISTING SURFACE 550 = 250.64' CORR. = 1.10' LENGTH = 100.00' 55D = 255.92' LENGTH = 135.61PVI ELEV = 2 2.99 CORR. = 0.42LENGTH =  $150.00^{\circ}$ 550 = 358.57550 + 483.68 $HIGH\ PT\ 5TA = 8+13.20$ HIGH PT STA = 3+30.11 V CORR. = 0.43CORR. = 0.40'VERTICAL CURVE DATA HIGH PT ELEV = 215.32 SUMP STA = 9+66.24 V SUMP ELEV = 214.<del>39</del>, C7 HIGH PT ELEV = 216.482 HIGH PT 5TA = 11+04.42CORR. = 0.55'PVI 5TA = 0 + 47.89SUMP STA = 5+95.56 V HIGH PT ELEV = 215.51 PVI ELEV + 210.20,-SUMP ELEV = 213.52.76 £ 84 220 LENGTH = 50.00° 550 = 68294.83CORR. = 0.11'7 STA. ELEV. 25' RIGHT OFFSET EXISTING SURFACE 255 EFT OFFSET EXISTING SURFACE 210 95% COMPACTION PER 95% COMPACTION PER-95% COMPACTION PER AASHTO T-180 25' RIGHT OFFSET EXISTING BURFACE RTY LIN +23.62 = 209. # 150 Pm 213.56 213.56 17. 213.56 17. 213.56 17. 213.56 \$215. \$2. \$15. \$2. 4.4.1.2 4.4.2 4.4.2 4.4.2 \$5.215. \$5.215. 412 12 412 412 215.4 0+00 0+25 0+50 0+75 1+00 1+25 1+50 1+75 2+00 2+25 2+50 2+75 3+00 3+25 3+50 3+75 4+00 4+25 12450 124783.10

PROFILE

SCALE HORZ. 1" = 50



Scale: HORIZ: 1" = 50"

VERT: 1" = 5'



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20740, EXPIRATION DATE: 02/22/2017.

ALDO MICHAEL VITUCCI, PROFESSIONAL ENGINEER



AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and specifications.

CHARLES J. CROLO, SK. NO. 13204 Date

		1.1.
A	ADD PRIVATE IRRIGATION UNE IN QUIDOTCH LANE	4/30/2
1	revise cemetery lane	8/24/16
1	REVISE STORM DRAIN, SIDEWALK AND UNDERGROUND S.W.M.	6/22/1
NO.	DESCRIPTION	DATE
	REVISIONS	
	VED: DEPARTMENT OF PLANNING AND ZONING	
V	DIVISION OF LAND DEVELOPMENT AL DI	<b>&gt;7.15</b> ATE
CHIEF,	DIVISION OF LAND DEVELOPMENT/M	ATE

## REVISED

MORRIS PLACE
LOTS 1-53, OPEN SPACE LOTS 54-61 AND
NON-BUILDABLE BULK PARCELS 'A' THRU 'C'
PHASE I-N
ZONED: CAC-CU & CE-CU
TAX MAP No. 43 GRID No. 4 PARCEL No. 599
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

CEMETERY LANE
PLAN AND PROFILE

 OWNERS
 DEVELOPER

 CDCG 3 BZH LP
 Beazer Homes Corp.

 c/o CDCG Asset Management LLC
 8965 Guildford Road Suite 209

 Suite 200
 Scottsdale, AZ 85255

 480-696-3733
 Columbia, Maryland 21046

 5CALE: 1:50
 DATE: 08/06/15
 DWG. NO. 4 OF 24

DRN.

DES.

FISHER, COLLINS & CARTER, INC.

CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

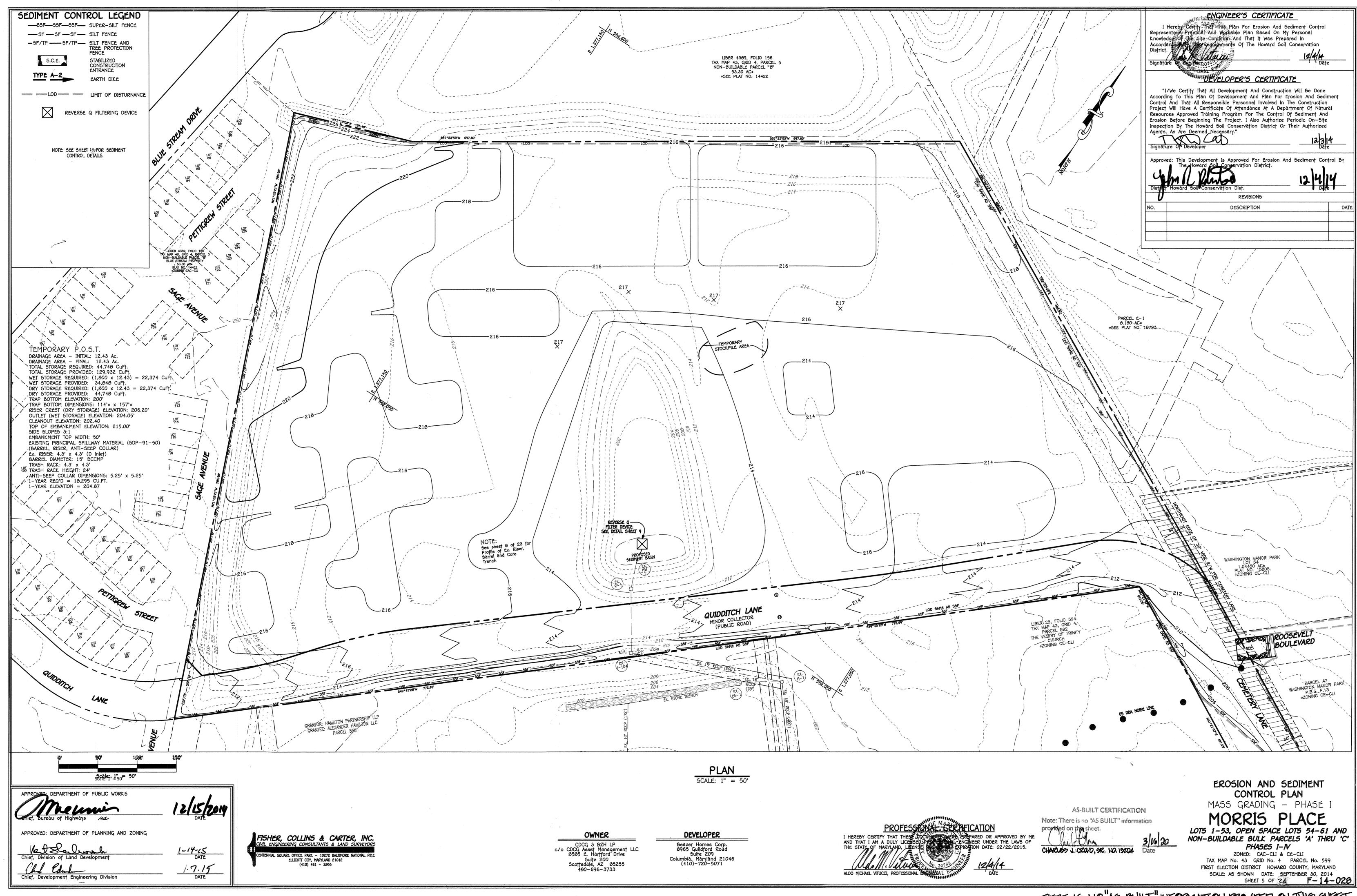
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE

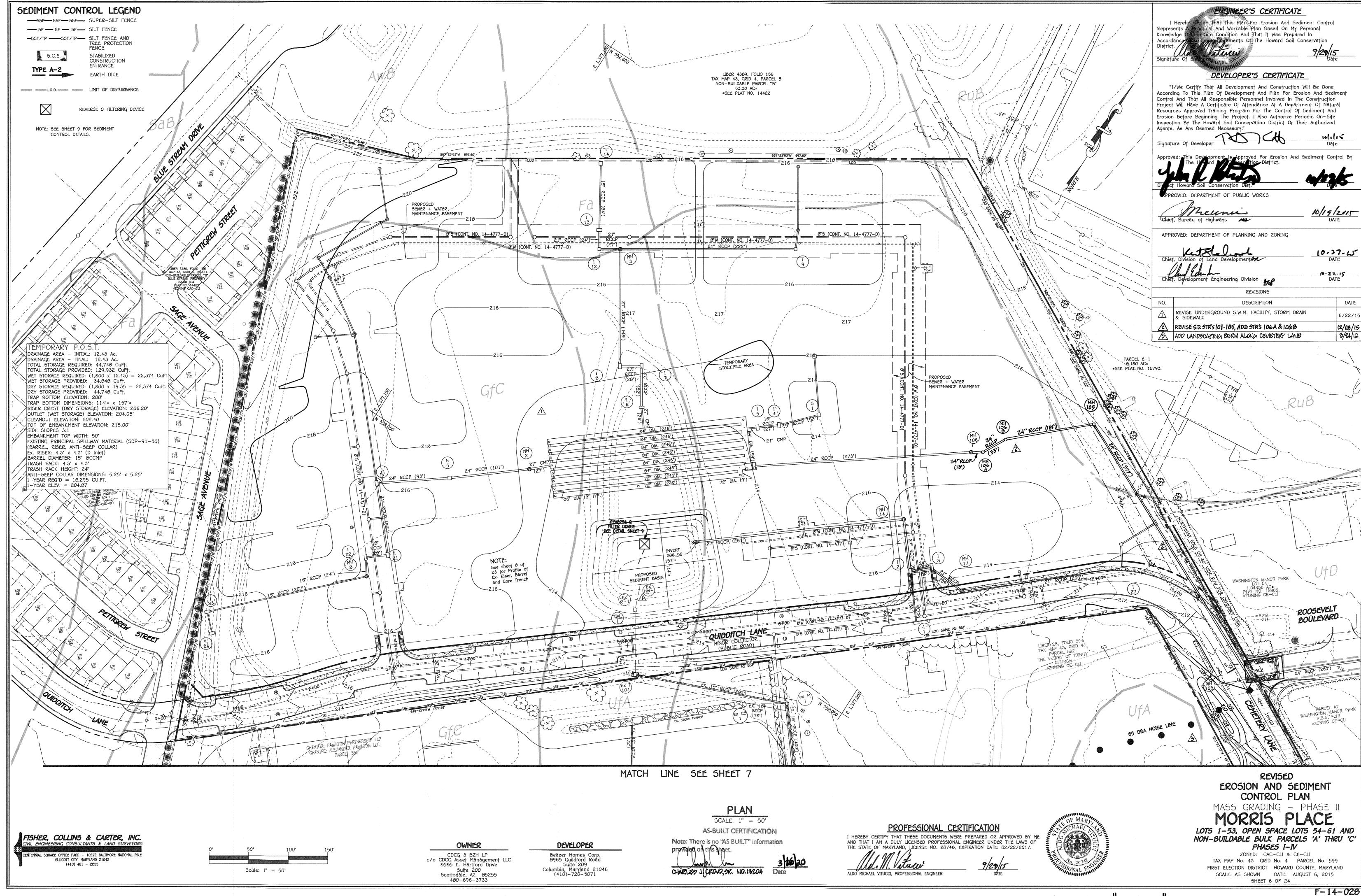
ELLICOTT CITY, MARYLAND 21042

(410) 461 - 2055

F-14-02

"AG-BUILT





ENGINEER'S CERTIFICATE

Represents A

Knowledge

Accordance

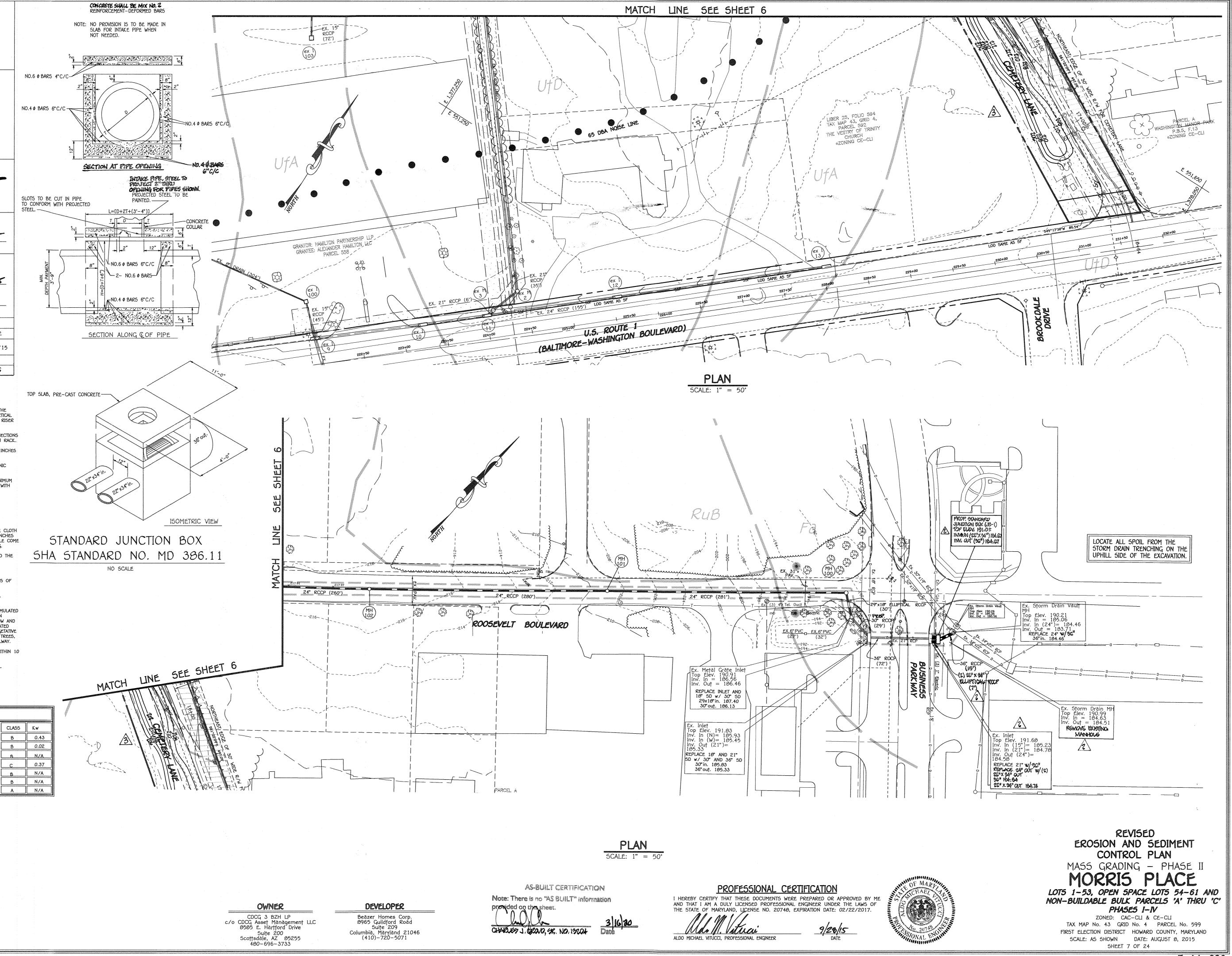
And Workable Plan Based On My Personal

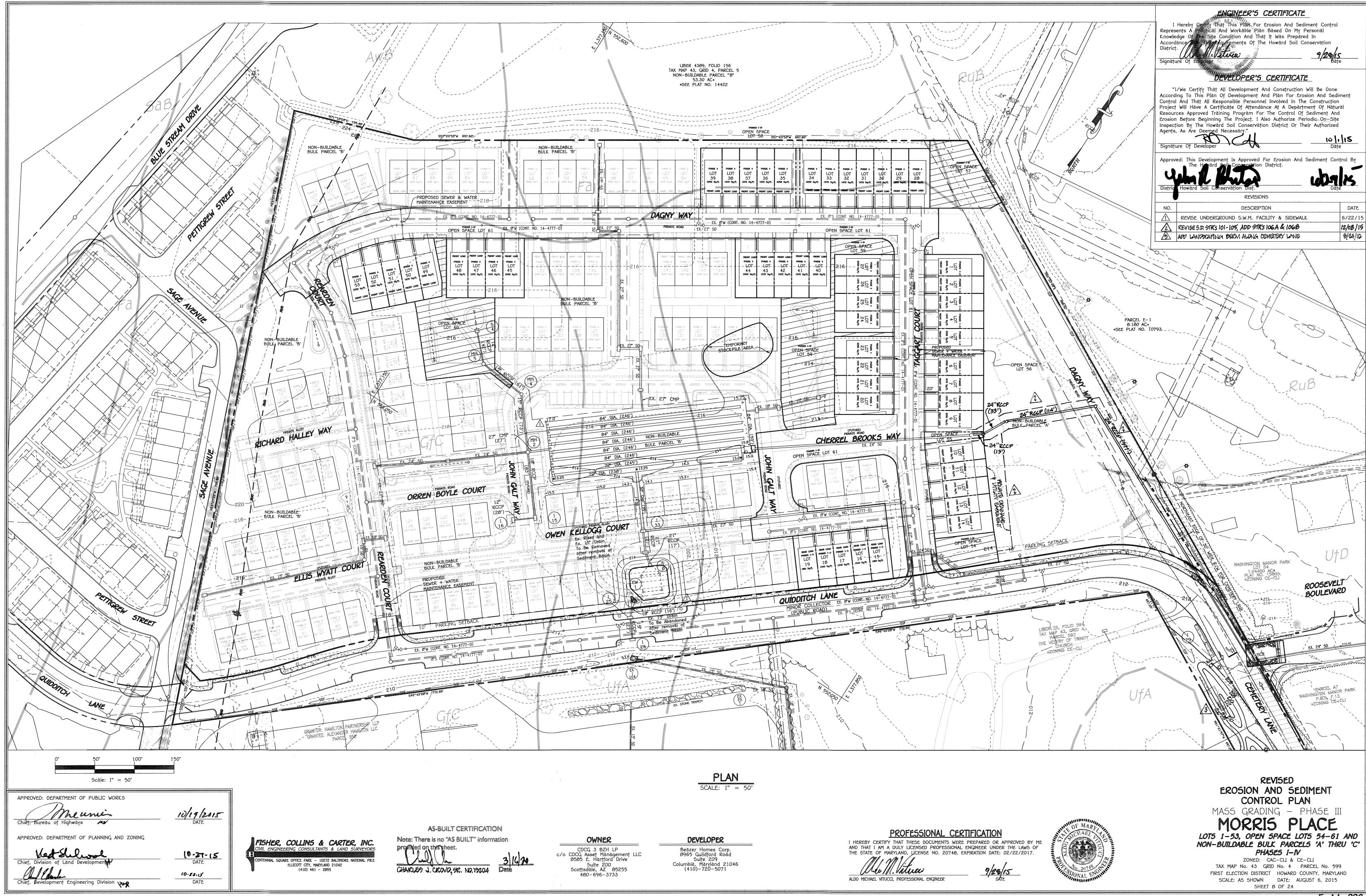
ements Of The Howard Soil Conservation

Condition And That It Was Prepared In

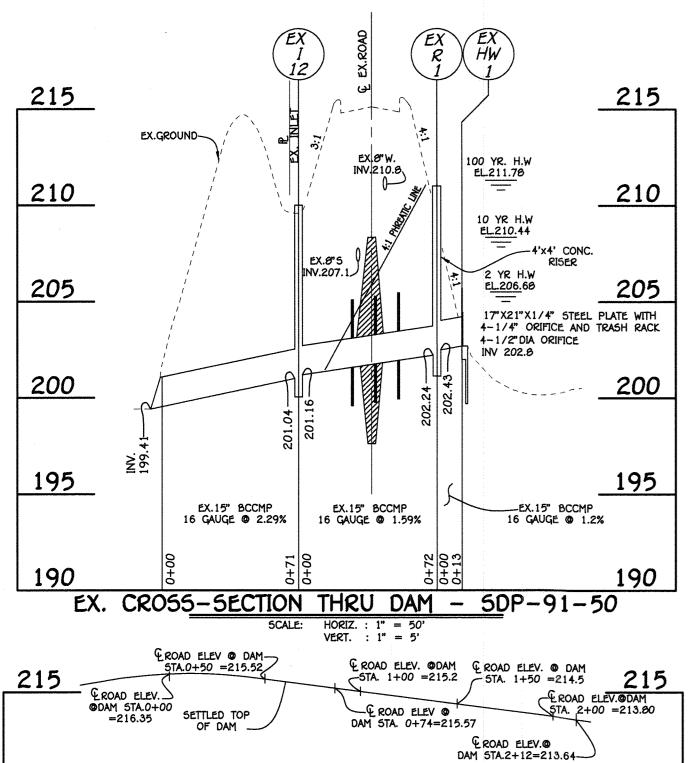
lan For Erosion And Sediment Control

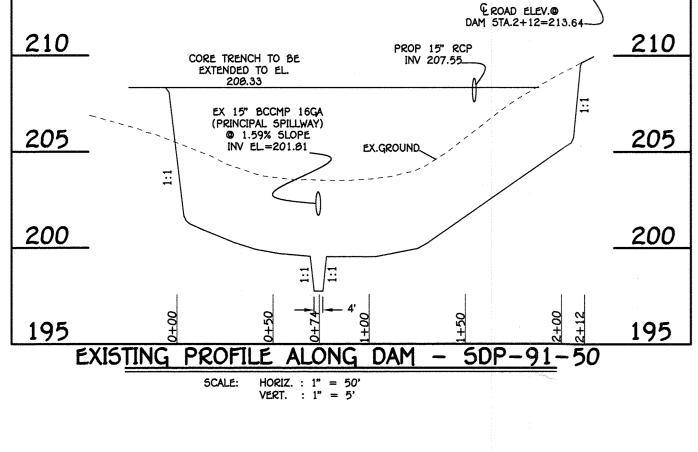
Urban land—Fallsington complex, 0 to 2 percent slopes Urban land-Udorthents complex, 0 to 15 percent slopes \* Hydric soils and/or contains hydric inclusions \*\* May contain hydric inclusions t Generally only within 100-year floodplain areas FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS INIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042

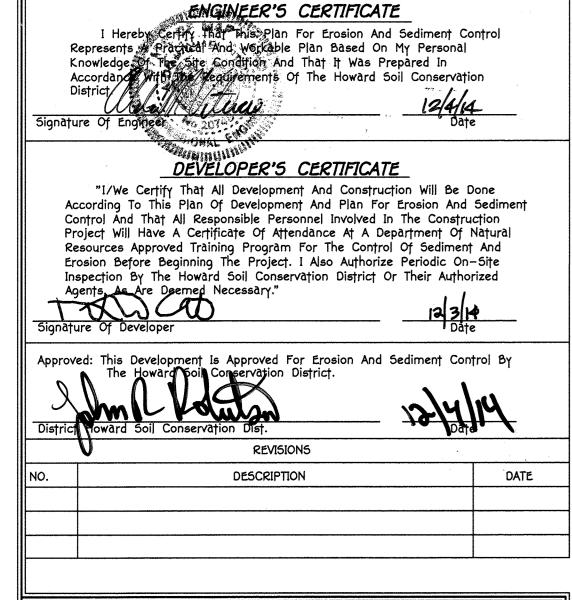


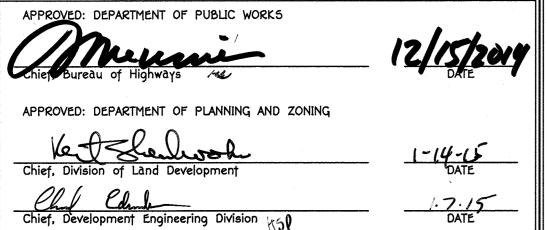


THERE IS NO "AG-BUILT" INFORMATION PROVIDED ON THIS SHEET









FISHER, COLLINS & CARTER, INC. OFFICE PARK - 10272 BALTIMORE NATIONAL ELLICOTT CITY, MARYLAND 21042

AS-BUILT CERTIFICATION Note: There is no "AS BUILT" information CHANCES J. CROVO. SK., NO. 13204 Day

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

DEFINITION

**PURPOSE** 

CONDITIONS WHERE PRACTICE APPLIES

TO THE SURFACE OF ALL PERIMETER CONTROLS, SLOPES, AND ANY DISTURBED AREA NOT UNDER ACTIVE GRADING.

CRITERIA

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

B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR

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

USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP

INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN

D. 500 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

I. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1,

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

II. APPLY SEED IN TWO DIRECTIONS, PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN

I. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES SHOULD NOT EXCEED

II. LIME: USE ONLY GROUND AGRICULTURAL LIMESTONE (UP TO 3 TONS PER ACRE MAY BE APPLIED BY

A. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, RYE, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR.

MUSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY. NOTE: USE ONLY STERILE STRAW MULCH IN AREAS

STRAW IS TO BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT

B. WOOD CELLULOSE FIBER MULCH (WCFM) CONSISTING OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED

I. WCFM IS TO BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN

III. WCFM MATERIALS ARE TO BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD

IV. WCFM MATERIAL MUST NOT CONTAIN ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL

V. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH OF APPROXIMATELY

A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH

B. WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS PER ACRE TO

50 THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE

C. WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED TO A NET DRY WEIGHT OF 1500 POUNDS PER

A. PERFORM MULCH ANCHORING IMMEDIATELY FOLLOWING APPLICATION OF MULCH TO MINIMIZE LOSS BY WIND OR

I. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR

ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS

WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON

MULCH INTO THE SOIL SURFACE A MINIMUM OF 2 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE

DRY WEIGHT OF 750 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER AT A MAXIMUM OF

AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON

II. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET

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

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

10 MILLIMETERS, DIAMETER APPROXIMATELY 1 MILLIMETER, PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF

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

APPROPRIATE COLOT TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

II. WCFM, INCLUDING DYE, MUST CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.

1.6 PERCENT MAXIMUM AND WATER HOLDING CAPACITY OF 90 PERCENT MINIMUM.

HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE

THE FOLLOWING: NITROGEN, 100 POUNDS PER ACRE TOTAL OF SOLUBLE NITROGEN; P2 05 (PHOSPHORUS),

I. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT

LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE.

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.

A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.

PERMANENT SEEDING TABLE B.3, OR SITE-SPECIFIC SEEDING SUMMARIES.

B. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.

C. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER).

III. MIX SEED AND FERTILIZER ON SITE AND SEED IMMEDIATELY AND WITHOUT INTERRUPTION.

LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.

200 POUNDS PER ACRE; K20 (POTASSIUM), 200 POUNDS PER ACRE.

TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.

IV. WHEN HYDROSEEDING DO NOT INCORPORATE SEED INTO THE SOIL.

WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

A. APPLY MULCH TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING.

OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

SLOPING LAND, THIS PRACTICE SHOULD FOLLOW THE CONTOUR.

50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

1. MULCH MATERIALS (IN ORDER OF PREFERENCE)

WHERE ONE SPECIES OF GRASS IS DESIRED.

INTO UNIFORM FIBROUS PHYSICAL STATE.

BY PHYTO-TOXIC.

APPLICATION RATE TO 2.5 TONS PER ACRE.

THE SIZE OF THE AREA AND EROSION HAZARD:

THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.

TO VERIFY TYPE OF SEED AND SEEDING RATE.

PHYTO-TOXIC MATERIALS.

WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE

A. SEEDING

2. APPLICATION

B. MULCHING

2. APPLICATION

3. ANCHORING

1. SPECIFICATIONS

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

OWNER CDCG 3 BZH LP Scottsdale, AZ 05255

DEVELOPER Beazer Homes Corp. 8965 Guildford Road Suite 209 Columbia, Maryland 21046 (410)-720-5071

15" BCCM

```@ 1.59%

TEMPORARY SEEDING NOTES (B-4-4)

DEFINITION

TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.

EXPOSED SOILS WHERE GROUND COVER IS NEEDED FOR A PERIOD OF 6 MONTHS OR LESS.

1. SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 FOR THE

TEMPORARY SEEDING SUMMARY BELOW ALONG WITH APPLICATION RATES. SEEDING DATES AND

SEEDING DEPTHS. IF THIS SUMMARY IS NOT PUT ON THE PLAN AND COMPLETED, THEN TABLE

2. FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY

3. WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH

Seeding

Dates

3/1 - 5/15,

8/15 - 10/15

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

DEFINITION

PURPOSE

TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE

POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS.

A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL

CONDITIONS WHERE PRACTICE APPLIES STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE

1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED

2. THE FOOTPRINT OF THE STOCKPILE MUST BE SIZED TO ACCOMMODATE THE ANTICIPATED VOLUME OF

3. RUNOFF FROM THE STOCKPILE AREA MUST DRAIN TO A SUITABLE SEDIMENT CONTROL PRACTICE.

6. WHERE RUNOFF CONCENTRATES ALONG THE TOE OF THE STOCKPILE FILL, AN APPROPRIATE

EROSION/SEDIMENT CONTROL PRACTICE MUST BE USED TO INTERCEPT THE DISCHARGE.

MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1. BENCHING MUST BE PROVIDED IN

5. CLEAR WATER RUNOFF INTO THE STOCKPILE AREA MUST BE MINIMIZED BY USE OF A DIVERSION DEVICE

7. STOCKPILES MUST BE STABILIZED IN ACCORDANCE WITH THE 3/7 DAY STABILIZATION REQUIREMENT AS

WELL AS STANDARD B-4-1 INCREMENTAL STABILIZATION AND STANDARD B-4-4 TEMPORARY STABILIZATION.

STOCKPILE TO FACILITATE CLEANUP. STOCKPILES CONTAINING CONTAMINATED MATERIAL MUST BE COVERED

MAINTENANCE

ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. SIDE SLOPES MUST BE

40 FEET FOR 4:1 SLOPES, BENCHING MUST BE PROVIDED IN ACCORDANCE WITH SECTION B-3 LAND

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

EX. RISER DETAIL

THE STOCKPILE AREA MUST CONTINUOUSLY MEET THE REQUIREMENTS FOR ADEQUATE VEGETATIVE

8. IF THE STOCKPILE IS LOCATED ON AN IMPERVIOUS SURFACE, A LINER SHOULD BE PROVIDED BELOW THE

SUCH AS AN EARTH DIKE, TEMPORARY SWALE OR DIVERSION FENCE. PROVISIONS MUST BE MADE FOR

Temporary Seeding Summary

Depths

Fertilizer Rate

436 lb/ac

- 'DIAMOND' MESH

SCREENING

-TOP ELEV. +211.00

10-YR.=210.44√

2-YR.=206.68 \(\nabla\)

204

(10 lb/

1000 sf)

(10-20-20)

Lime Rate

2 tons/ac

1000 sf)

OR STRAW MULCH ALONE AS PRESCRIBED IN SECTION B-4-3.A.1.B AND MAINTAIN UNTIL THE

FOR LONGER DURATION OF TIME, PERMANENT STABILIZATION PRACTICES ARE REQUIRED.

APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3), AND ENTER THEM IN THE

THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.

CONDITIONS WHERE PRACTICE APPLIES

CRITERIA

B.1 PLUS FERTILIZER AND LIME RATES MUST BE PUT ON THE PLAN.

Hardiness Zone (from Figure B.3): \_\_\_6b\_\_\_

Application Rate

(lb/ac)

72

Seed Mixture (from Table B.1):

AND STORE SOIL FOR LATER USE.

WITH IMPERMEABLE SHEETING.

ON THE EROSION AND SEDIMENT CONTROL PLAN.

ACCORDANCE WITH SECTION B-3 LAND GRADING.

4. ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.

DISCHARGING CONCENTRATED FLOW IN A NON-EROSIVE MANNER.

NEXT SEEDING SEASON.

BARLEY

OAT5

MEASURES

TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.

HEREBY CERTIFY THAT THESE NGINEER UNDER THE LAWS OF AND THAT I AM A DULY LICENSED

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

A. SOIL PREPARATION 1. 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.

C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

2. PERMANENT STABILIZATION

A. A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:

I. SOIL PH BETWEEN 6.0 AND 7.0.

II. SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM). III. SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED. THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE. IV. SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.

V. SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.

B. APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.

C. GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.

D. APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.

E. MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT

LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR

OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRIABLE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS. B. TOPSOILING

1. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION

2. 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.

3. 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 SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

4. AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN. 5. 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.

B. TOPSOIL MUST BE FREE OF NOXIOUS PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACK GRASS, JOHNSON GRASS, NUT SEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

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 NATURAL TOPSOIL.

6. TOPSOIL APPLICATION

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 ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS MUST BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

C. TOPSOIL MUST NOT BE PLACED IF THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION. WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

C. SOIL AMENDMENTS (FERTILIZER AND 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.

2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROPRIATE EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRIATE APPROVAL AUTHORITY, FERTILIZERS MUST ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE LAWS AND MUST BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTY OF THE PRODUCER.

3. 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

4. LIME AND FERTILIZER ARE TO BE EVENLY DISTRIBUTED AND INCORPORATED INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

5. 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.

STANDARD STABILIZATION NOTE

FOLLOWING 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

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

PERMANENT SEEDING NOTES (B-4-5) A. SEED MIXTURES

A. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE B.3 FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3) AND BASED ON THE SITE CONDITION OR PURPOSE FOUND ON TABLE B.2. ENTER SELECTED MIXTURE(5), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON

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 QUIDE, SECTION 342 - CRITICAL AREA

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 SUMMARY.

2. TURFGRASS MIXTURES

1. GENERAL USE

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(5), APPLICATION RATES, AND SEEDING DATES IN THE PERMANENT SEEDING SUMMARY. THE SUMMARY IS TO BE PLACED ON THE PLAN.

I. KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. IRRIGATION REQUIRED IN THE AREAS OF CENTRAL MARYLAND AND EASTERN SHORE. RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE: 1.5 TO 2.0 POUNDS PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

II. KENTUCKY BLUEGRASS/PERENNIAL RYE: FULL SUN MIXTURE: FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE: 2 POUNDS MIXTURE PER 1000 SQUARE FEET. CHOOSE A MINIMUM OF THREE KENTUCKY BLUEGRASS CULTIVARS WITH EACH

RANGING FROM 10 TO 35 PERCENT OF THE TOTAL MIXTURE BY WEIGHT.

III. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURE: FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. RECOMMENDED MIXTURE INCLUDES; CERTIFIED TALL FESCUE CULTIVARS 95 TO 100 PERCENT, CERTIFIED KENTUCKY BLUEGRASS CULTIVARS 0 TO 5 PERCENT. SEEDING RATE: 5 TO 8 POUNDS PER 1000 SQUARE FEET. ONE

IV. KENTUCKY BLUEGRASS/FINE FESCUE:

OR MORE CULTIVARS MAY BE BLENDED.

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.

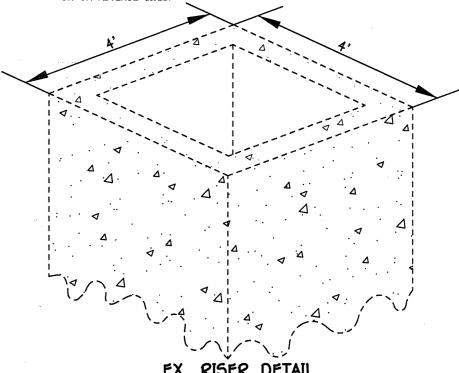
SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MEMO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS

CHOOSE CERTIFIED MATERIAL. CERTIFIED MATERIAL IS THE BEST GUARANTEE OF CULTIVAR PURITY. THE CERTIFICATION PROGRAM OF THE MARYLAND DEPARTMENT OF AGRICULTURE, TURF AND SEED SECTION, PROVIDES A RELIABLE MEANS OF CONSUMER PROTECTION AND ASSURES A PURE GENETIC LINE

C. IDEAL TIMES OF SEEDING FOR TURF GRASS MIXTURES WESTERN MD: MARCH 15 TO JUNE 1, AUGUST 1 TO OCTOBER 1 (HARDINESS ZONES: 58, 6A) CENTRAL MD: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15 (HARDINESS ZONE: 6B) SOUTHERN MD. EASTERN SHORE: MARCH 1 TO MAY 15, AUGUST 15 TO OCTOBER 15

D. TILL AREAS TO RECEIVE SEED BY DISKING OR OTHER APPROVED METHODS TO A DEPTH OF 2 TO 4 INCHES, LEVEL AND RAKE THE AREAS TO PREPARE A PROPER SEEDBED. REMOVE STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER. THE RESULTING SEEDBED MUST BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY.

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 ARE MADE LATE IN THE PLANTING SEASON, IN ABNORMALLY DRY OR HOT SEASONS, OR OR ON ADVERSE SITES.



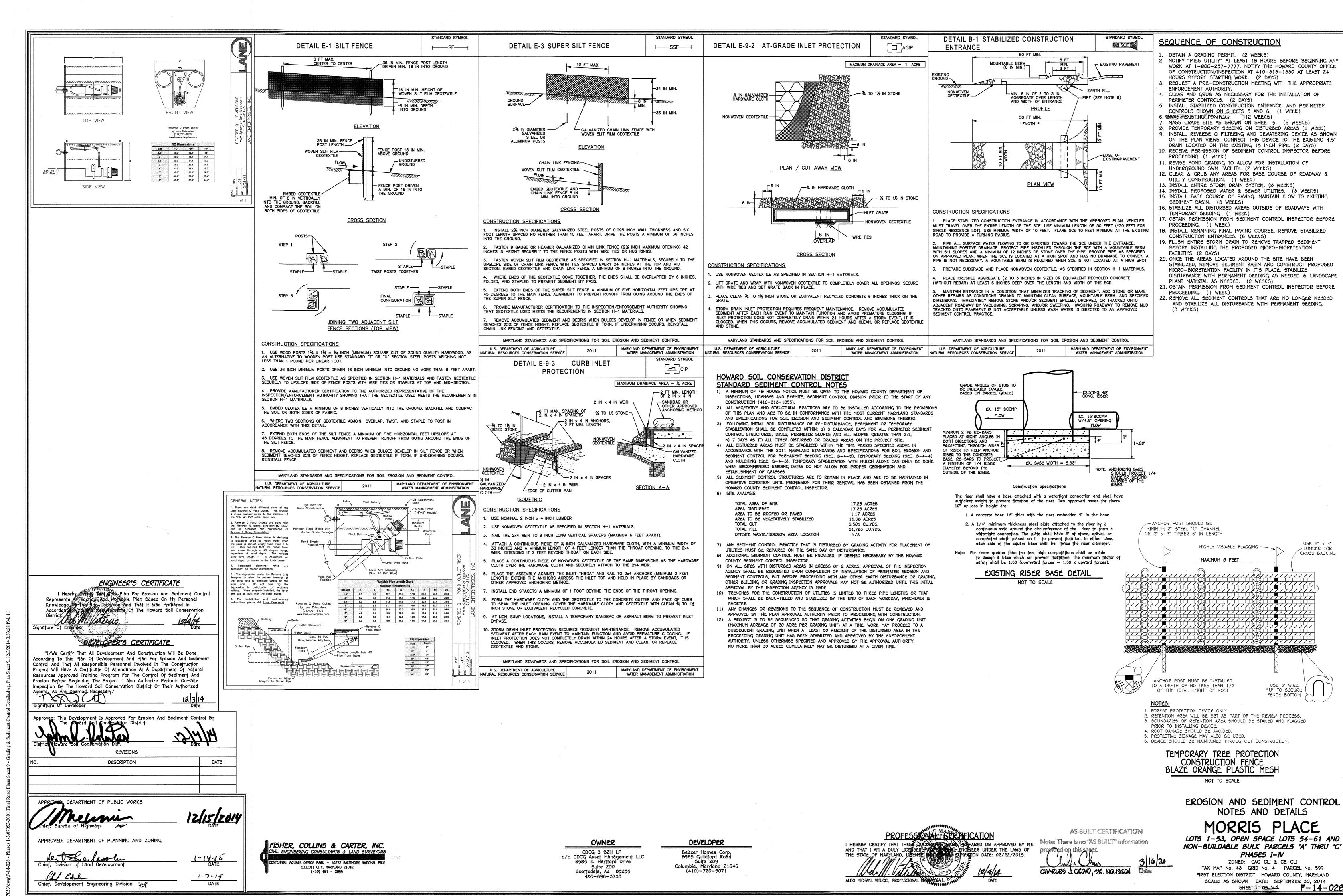
Permanent Seeding Summar Fertilizer Rate (10-20-20) Lime Rate Hardiness Zone (from Figure B.3): \_\_6b\_ Seed Mixture (from Table B.3): \_\_\_\_8\_\_\_ P205 (lb/ac)Depths Dates Mar. 1-May 15 1/4-1/2 45 lbs. 90 lb/ac 90 lb/ac 2 tons/ac Aug. 15-Oct. 15 in. per acre (2 lb/ (2 lb/ (90 lb/ 90 lb/ac | 90 lb/ac | 2 tons/ac TALL FESCUE (1.0 lb/ 1000 sf) 1000 sf) 1000 sf)

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

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

ZONED: CAC-CLI & CE-CLI TAX MAP No. 43 GRID No. 4 PARCEL No. 599 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPTEMBER 30, 2014

c/o CDCG Asset Management LLC 8585 E. Hartford Drive



THERE IS NO "AS-BLILT" INFORMATION PROJUED ON THIS SHEET

USE 2" x 4"

LUMBER FOR

USE 3' WIRE "U" TO SECURE

FENCE BOTTOM

EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

MORRIS PLACE

LOTS 1-53, OPEN SPACE LOTS 54-61 AND

PHASES I-IV

ZONED: CAC-CLI & CE-CLI

TAX MAP No. 43 GRID No. 4 PARCEL No. 599

FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: SEPTEMBER 30, 2014

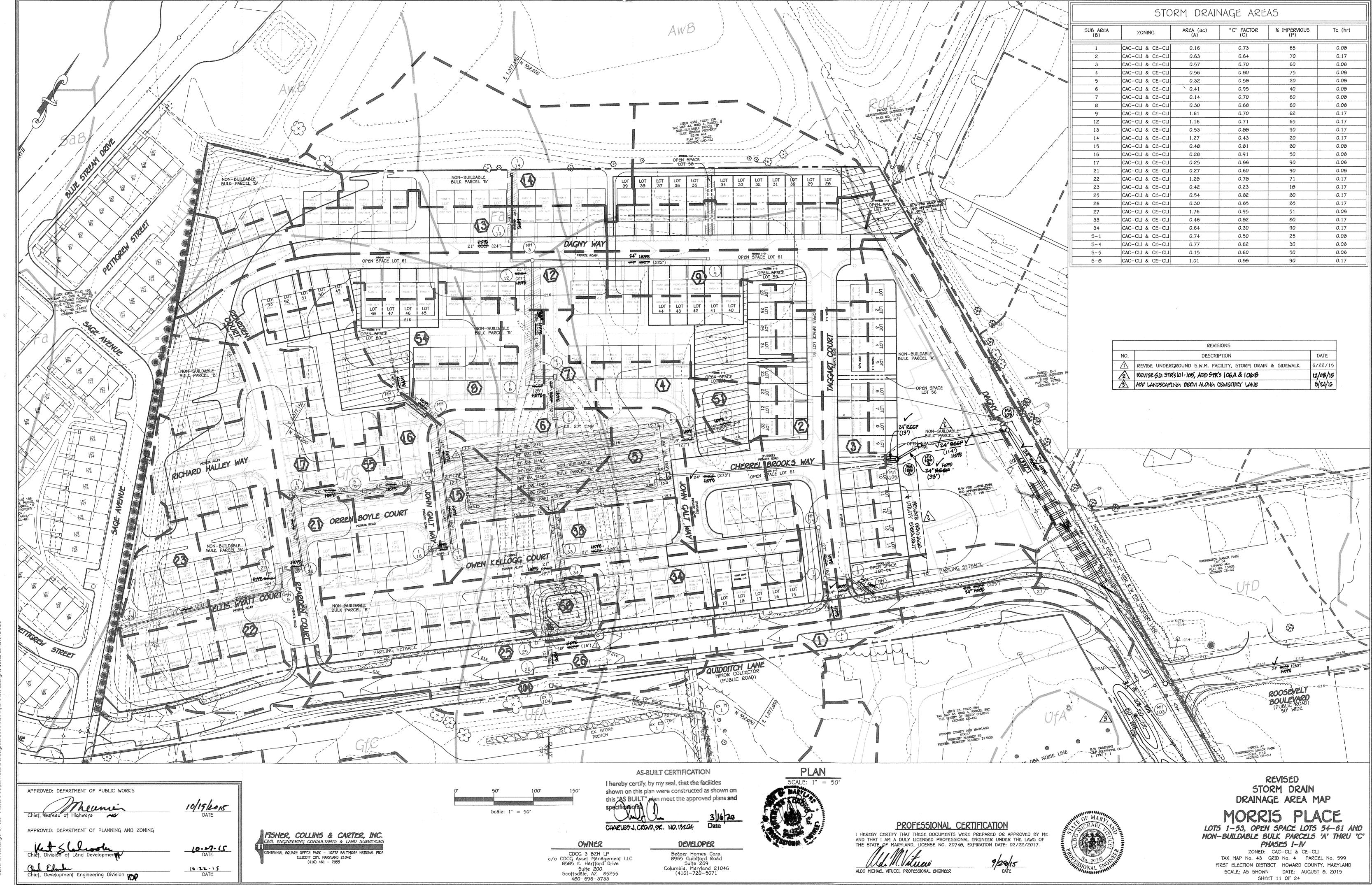
SHEET 10 OF 24 F-14-028

CROSS BACKING

HIGHLY VISIABLE FLAGGING

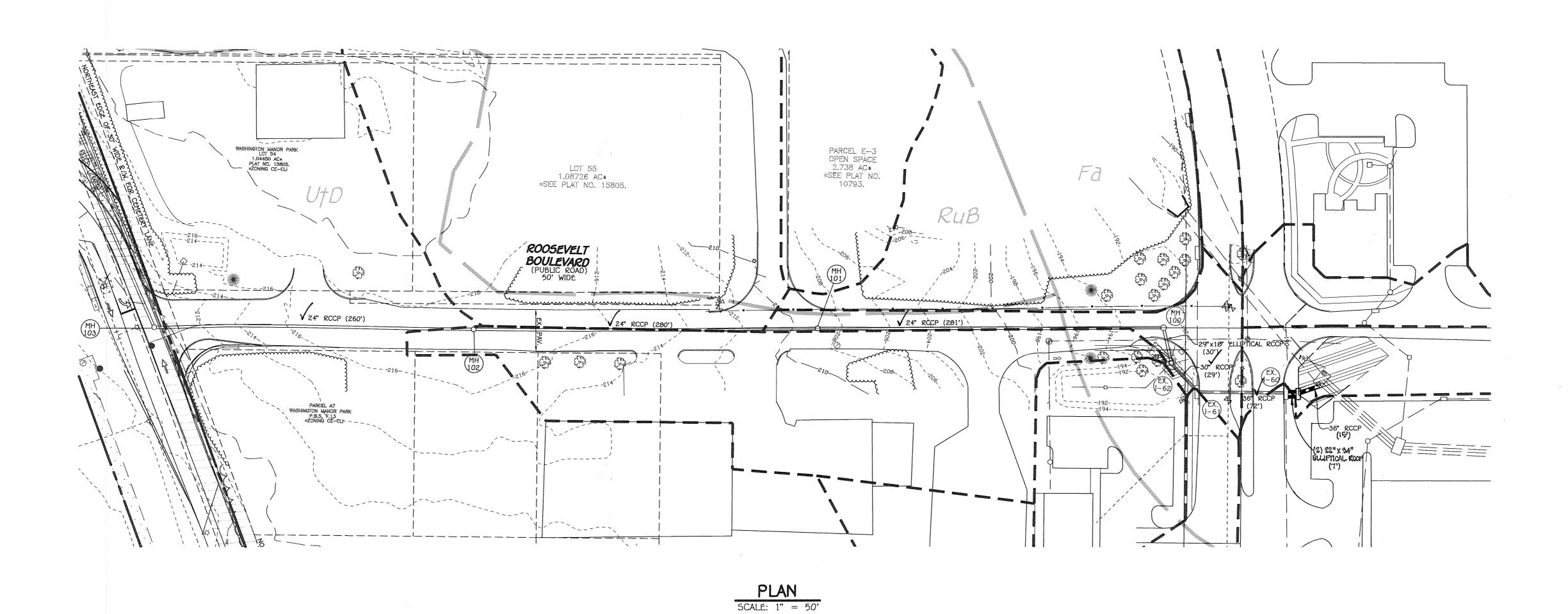
MAXIMUM & FEET

NOT TO SCALE



F-14-02 "AD-BUILT

APPROVED: DEPARTMENT OF PUBLIC WORKS APPROVED: DEPARTMENT OF PLANNING AND ZONING 10.27-15 10.22.15 DATE DESCRIPTION REVISE UNDERGROUND S.W.M. FACILITY, STORM DRAIN & SIDEWALK 6/22/15 2/1/16 REMOVE MANHOLE AND REPLACE WITH JUNCTION BOX



#### **AS-BUILT CERTIFICATION**

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and

CHARLES J. CROVO, 9R. NO. 19204 Date



**REVISED** STORM DRAIN DRAINAGE AREA MAP

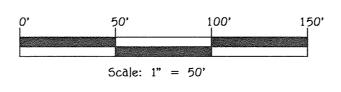
LOTS 1-53, OPEN SPACE LOTS 54-61 AND NON-BUILDABLE BULK PARCELS 'A' THRU 'C' PHASES I-IV

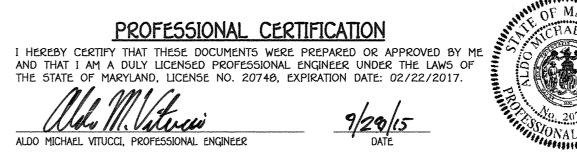
ZONED: CAC-CLI & CE-CLI TAX MAP No. 43 GRID No. 4 PARCEL No. 599 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: AUGUST 0, 2015 SHEET 12 OF 24

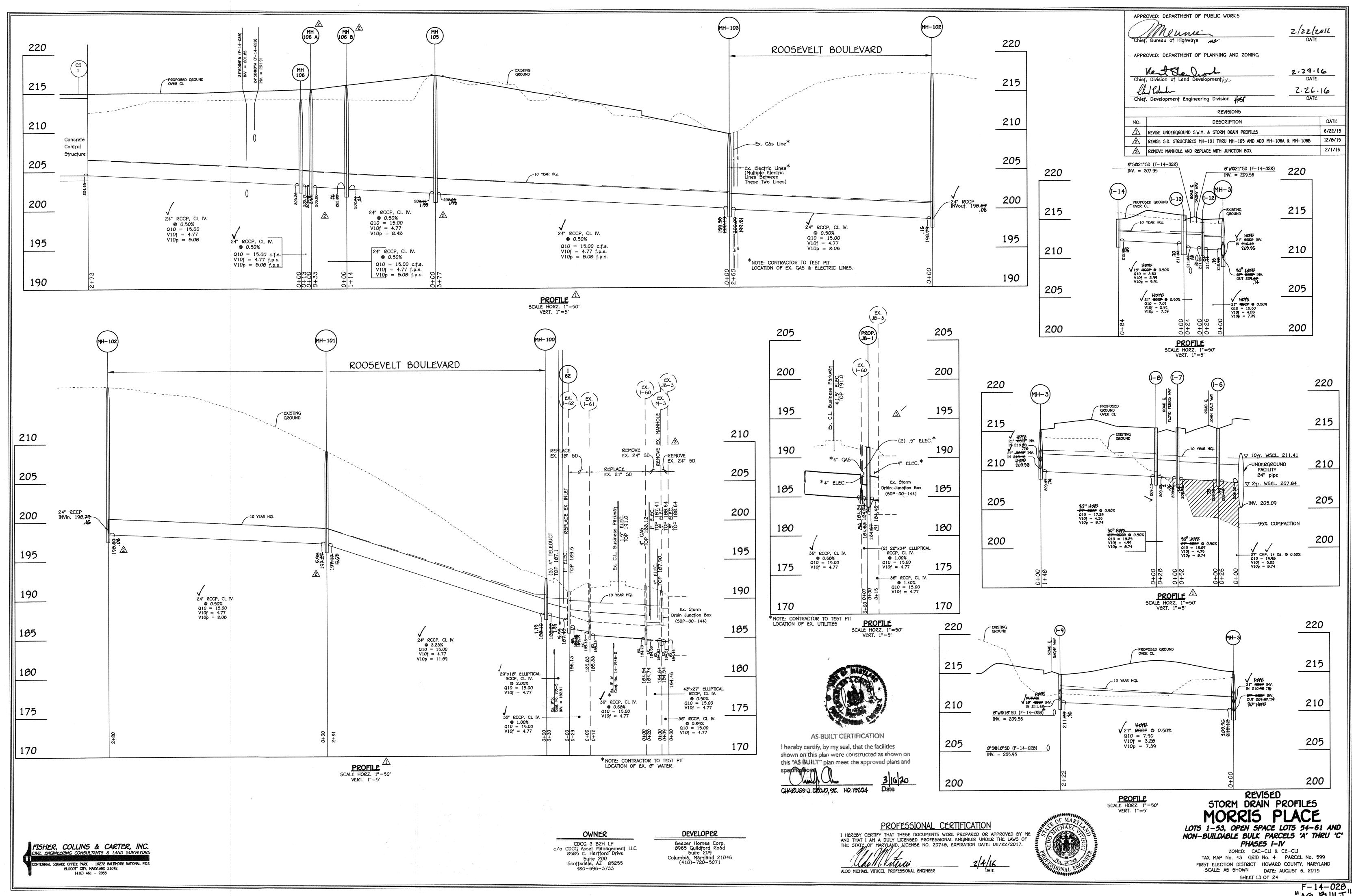
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS ENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2055

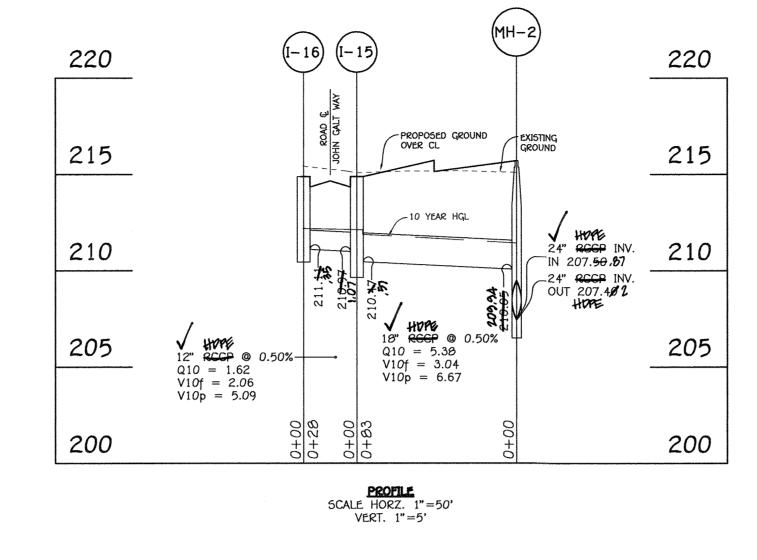
OWNER CDCG 3 BZH LP
c/o CDCG Asset Management LLC
0505 E. Hartford Drive
Suite 200
Scottsdale, AZ 05255
400-696-3733 Bedzer Homes Corp. 8965 Guildford Rodd Suițe 209 Columbia, Maryland 21046 (410)—720—5071

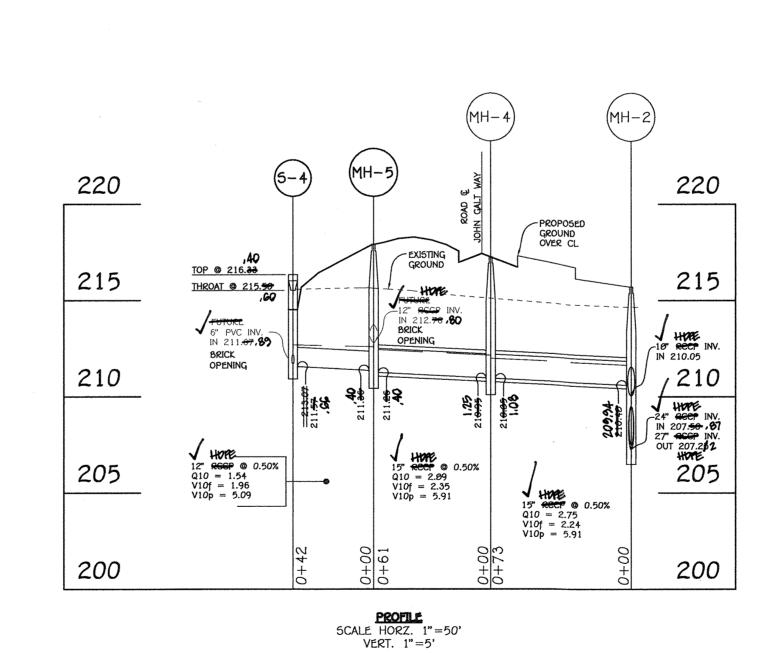
DEVELOPER

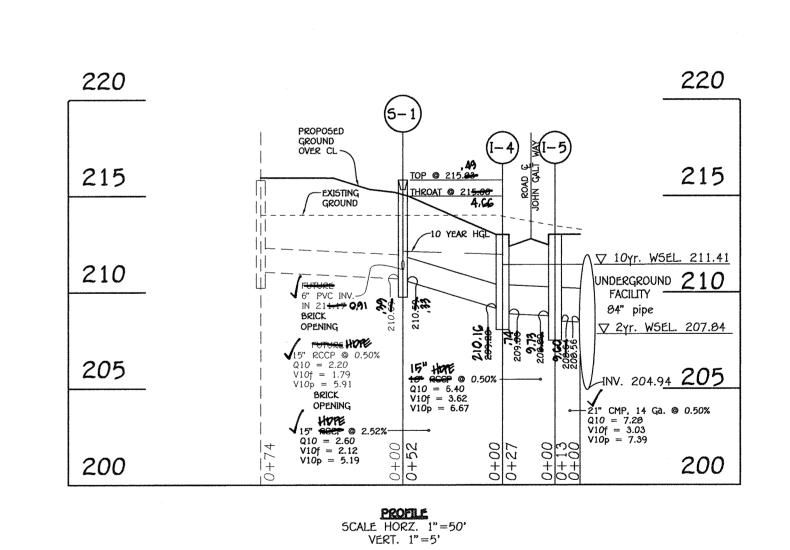












APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Division of Land Development

Meunin

APPROVED: DEPARTMENT OF PLANNING AND ZONING

**REVISIONS** 

**DESCRIPTION** 

REVISE UNDERGROUND S.W.M. & STORM DRAIN PROFILES

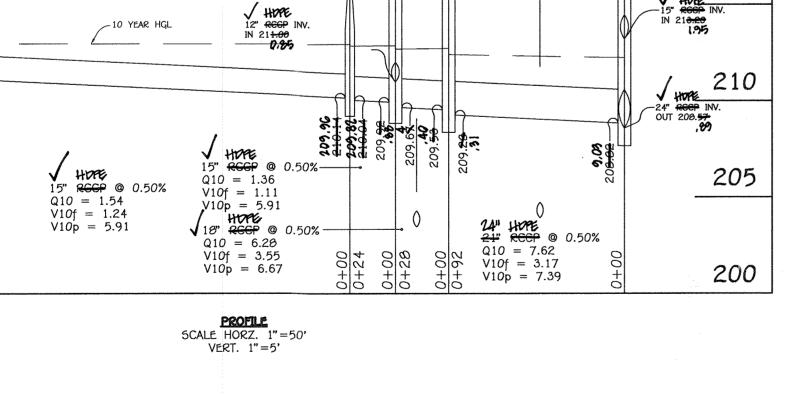
10/19/2015 DATE

10-27-15 DATE

DATE

DATE

6/22/15



(I-22) e

220



AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and specifications.

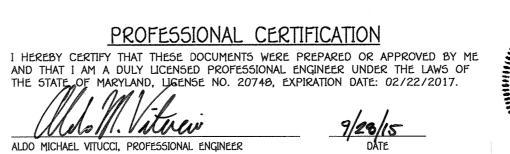
3 16 29

CHARLES & CROW, SR. NO. 13204 Date

CDCG 3 BZH LP
c/o CDCG Asset Management LLC
0505 E. Hartford Drive
Suite 200
5cottsdale, AZ 05255
400-696-3733

DEVELOPER

Beazer Homes Corp.
8965 Guildford Road
Suite 209
Columbia, Maryland 21046
(410)-720-5071





REVISED

STORM DRAIN PROFILES

MORRIS PLACE

LOTS 1-53, OPEN SPACE LOTS 54-61 AND
NON-BUILDABLE BULK PARCELS 'A' THRU 'C'

PHASES I-IV

ZONED: CAC-CLI & CE-CLI

TAX MAP No. 43 GRID No. 4 PARCEL No. 599

FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: AUGUST 6, 2015
SHEET 14 OF 24

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2055

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TUTURE
12" RECP INV.—
IN 211-12-.00
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OPENING

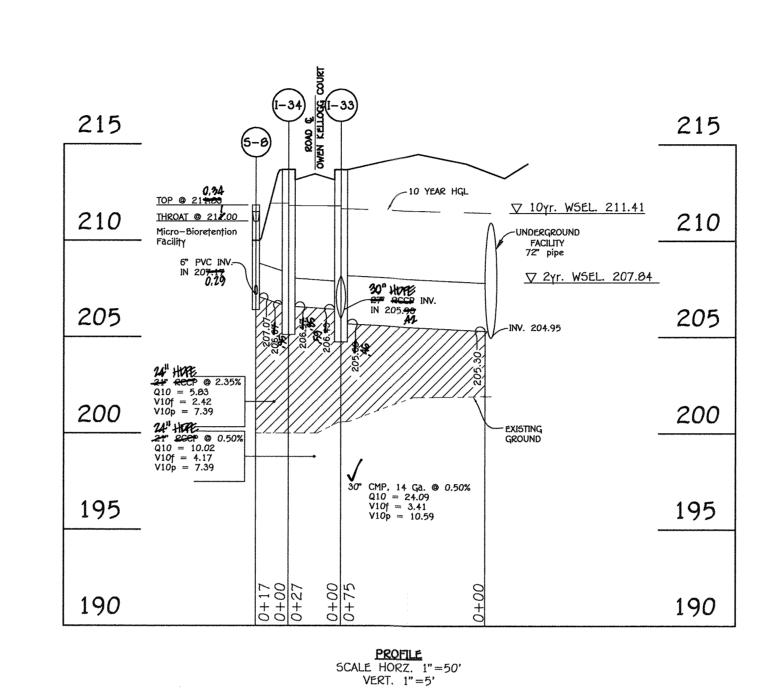
F-14-028 "AG-BUILT"

|                    |                              |                                                         |                                                                                       | ructure s                        |                                                                                                              |                                        |                 |                           |
|--------------------|------------------------------|---------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------|---------------------------|
| STRUCTURE<br>NO.   | OWNERSHIP AND<br>MAINTENANCE | TOP<br>ELEVATION                                        | INV IN                                                                                | INV OUT                          | COORDINATES                                                                                                  | TYPE                                   | W               | REMAR                     |
| I-1                | PUBLIC                       | 214.64                                                  | ,15 ,                                                                                 |                                  | N 551598.40 E 1377266.52                                                                                     | ✓ A-5 INLET                            | 2.5'            | D-4.0                     |
| I-2                | PUBLIC                       | 213.901                                                 | 210. <del>13</del> (I-1) 15"<br>200. <del>26</del> (I-3) 24"<br><b>938</b> 18 24"     | 200. <del>01</del> 27            | N 551649. <del>65</del> E 137722 <del>7.03</del>                                                             | ✓A-5 INLET                             | 2.5'            | D-4.0                     |
| I-3                | PUBLIC                       | 213. <del>99</del>                                      | 20 <del>8:65</del> (MH-17) <del>21</del>                                              | 208.40 24                        |                                                                                                              | ✓ A-10 INLET                           | 3.0'            | D-4.0                     |
| I-4                | PUBLIC                       | 213. <del>98</del>                                      | 210,1€<br>209.20 (5-1) 15♥                                                            | 209:03 187                       | N 551712. <del>21</del> E 13798 <del>5.55</del>                                                              | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-5                | PUBLIC                       | 213.00                                                  | 200. <del>09</del> (I-4) 187                                                          | 208.64 21                        | N 551697.00 E 1376966.92                                                                                     | A-5 INLET                              | 2.5'            | D-4.0                     |
| I-6                | PUBLIC                       | * 215. <del>27</del>                                    | 208. <del>53</del> (1-7) 27                                                           | 208.43 271                       | N 5516 <del>23.09</del> E 13760 <del>37.90</del>                                                             | DOUBLE 5 INLET                         |                 | D-4.2                     |
| I-7                | PUBLIC                       | 215.30                                                  | 20 <del>8.89</del> (I-8) <del>27</del> 30"                                            | 208.79 27                        | N 55160 <del>1.09</del> E 13 <del>7790.7</del>                                                               | A-5 INLET                              | 3.5'            | D-4.0                     |
| I-8                | PUBLIC                       | 215.30                                                  | 209.13 (MH-3) 27 30                                                                   |                                  | N 55166 <del>6.15</del> E 137677 <del>3.52</del>                                                             | A-5 INLET                              | 3.5'            | D-4.0                     |
| I-9                | PUBLIC                       | * 214.8 <b>10</b>                                       | 211.4% (I-10) 18°                                                                     | 211. <del>23</del> 21            | N 5519 <del>09.95</del> E 137688 <del>5.61</del>                                                             | DOUBLE 5 INLET                         |                 | D-4.2                     |
| I-12               | PUBLIC                       | * 214. <b>58</b>                                        | 211. <del>21</del> (I-13) 21.                                                         | 211.44 217                       | N 55177 <del>5.06</del> E 137667 <del>6.27</del>                                                             | ✓ DOUBLE 5 INLET                       |                 | D-4.2                     |
| I-13               | PUBLIC                       | 215.48                                                  | 211: <del>63</del> (I-14) 15                                                          | 211:35 217                       | N 55179 <del>6.23</del> E 13766 <del>3.34</del>                                                              | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-14               | PUBLIC                       | 215.00                                                  | 1.07                                                                                  | 212:25 15                        |                                                                                                              | ✓ D INLET                              |                 | D-4.                      |
| I-15               | PUBLIC                       | 214.7%                                                  | 21 <del>0.97</del> (I-16) 12                                                          | 210:47 187                       | N 55143 <del>0.51</del> E 137680 <del>1.03</del>                                                             | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-16               | PUBLIC                       | 214.79                                                  | 1,45                                                                                  | }                                | N 551415.53 E 1376782.53                                                                                     | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-17               | PUBLIC                       | 215. <del>04-</del>                                     | 21 <del>3.26</del> (MH-6) 157<br>20 <del>0.32</del> (I-21) <del>21</del> 7<br>9.02,40 | 208. <del>57</del> 247           | N 55137 <del>5.91</del> E 137659 <del>6.85</del>                                                             | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-21               | PUBLIC                       | 214.62                                                  | 209. <del>53</del> (I−22) 18 <b>∀</b>                                                 | 209.20 21                        | N 55130 <del>7.03</del> E 137665 <del>6.72</del>                                                             | ✓ A-5 INLET                            | 2.5'            | D-4.0                     |
| I-22               | PUBLIC                       | 214.6/3                                                 | 209. <del>92</del> (MH-8) 157<br>21 <del>1.89</del> (FUTURE) 127                      | 209. <del>67</del> 18 <b>√</b>   | N 551292.05 E 1376637.04                                                                                     | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-23               | PUBLIC                       | 215.22                                                  | 211.45 (FUTURÉ) 127<br>211.45 (I-24) 127                                              | 21 <del>1.12</del> 15.           | N 551128.55 E 1376505.95                                                                                     | √A−5 INLET                             | 2.5'            | D-4.0                     |
| I-25               | PUBLIC                       | 213.74                                                  | 210.7 <b>3</b> (1–26) 15 √                                                            | ar ·                             | / 44                                                                                                         | ✓A-5 INLET                             | 2.5'            | D-4.0                     |
| I-26               | PUBLIC                       | 213.74                                                  | 50.                                                                                   | 210:86 157                       |                                                                                                              | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-27               | PUBLIC                       | 213.05                                                  | 210.36 (1-28) 21                                                                      | 210.26 27                        | N 551792.77 E 1377451.60                                                                                     | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I33                | PUBLIC                       | 213.6 🔰 1                                               | 206. <del>13</del> (I−34) 21 <b>"√</b><br>205.93 (MH−14) <del>27"</del> 30            | 205. <del>88</del> 36"           | 9033 .51<br>N 5514 <del>89.02</del> E 1376927. <del>07</del>                                                 | √A-5 INLET                             | 2.5'            | D-4.0                     |
| I-34               | PUBLIC                       | 213.6 <b>84</b>                                         | 206 <del>.67</del> (5-8) <del>21</del> 24 11                                          | 1                                | N 5514 <del>71.12</del> E 1376942.51                                                                         | √A-5 INLET                             | 2.5'            | D-4.0                     |
| EX. I-60           | PUBLIC                       | EX. 191.68                                              | 104.04 (EX. I-61) 36"                                                                 | 184.74<br>(2) 22"×34"            | N 552331.74 E 1370306.55                                                                                     | ✓A-10 INLET                            | 2.5'            | D-4.0                     |
| EX. I-61           | PUBLIC                       | EX. 191.83                                              | 185.83 (I−62) 30 <b>√</b>                                                             | 105.33 36"                       | N 552287.09 E 1378334.83                                                                                     | √A-10 INLET                            | 2.5'            | D-4.0                     |
| I-62               | PUBLIC                       | 190.91✔                                                 | 18 <del>7.40</del> (MH-100) 29"×18"                                                   | 18 <del>6.13</del> 30°           | N 552286.37 E 1378296.18                                                                                     | ✓ D INLET                              |                 | D-4.                      |
| STRUCTURE<br>NO.   | OWNERSHIP AND<br>MAINTENANCE | TOP<br>ELEVATION                                        | INV IN                                                                                | INV OUT                          | COORDINATES                                                                                                  | TYPE                                   |                 | REMARK5                   |
| MH-2               | PUBLIC                       | 20                                                      | %4 <del>210.05</del> (I−15) 18° <b>√</b>                                              | 207. <del>25</del> 27            | 7,61<br>N 55149 <del>6.24</del> E 1376750. <del>67</del>                                                     | √5° STANDARD MANHOLE                   |                 | G-5.13                    |
| MH-3               | PUBLIC                       | 215. <del>21</del> 20                                   | 210. <del>26</del> (I-9) 21"<br>210. <del>26</del> (I-12) 21"                         | 74 30"<br>209. <del>87 27"</del> | N 55179 <del>1:05</del> E 1376697. <del>57</del>                                                             | √5' STANDARD MANHOLE                   |                 | G-5.13                    |
| <del>-MH-3A-</del> | -PUBLIC-                     | -191.20-                                                | 184.70 (I 60) 36°                                                                     | 101.52 36"                       | N 552319.61 & 1370398.20<br>SA,02 05,61                                                                      | 5' STANDARD MANHOLE                    |                 | <del>G 5.13</del>         |
| MH-4               | PUBLIC                       | 21 <del>7.00</del><br>, <b>89</b>                       | 21 <del>0.95</del> (MH-5) 15 <b>V</b>                                                 | 21 <del>0.05</del> 15 <b>4</b>   | N 5515 <del>19:15</del> E 13767 <del>12:38</del>                                                             | ✓ STANDARD MANHOLE                     |                 | G-5.12                    |
| MH-5               | PUBLIC                       | 217. <del>96</del><br><b>4.56</b>                       | 211.36 (5-4) 12"                                                                      | 211. <del>26</del> 15" <b>√</b>  | N 5515 <del>59.10</del> E 1376643. <del>90</del>                                                             | √STANDARD MANHOLE                      |                 | G-5.12                    |
| MH-Ø               | PUBLIC                       | 216.00                                                  | 210.11 (I−23) 15"√                                                                    | 210:04 15V                       | N 55127 E 1376650.29                                                                                         | ✓ STANDARD MANHOLE                     |                 | G-5.12                    |
| MH-14              | PUBLIC                       | 214. <del>51-</del>                                     | 207. <del>66</del> (I-2) <del>27"</del> 30"                                           | 207.50 27"                       | N 551698.44 E 1377183.53                                                                                     | 5' STANDARD MANHOLE                    |                 | G-5.13                    |
| MH-17              | PUBLIC                       | 215.2 <b>\$3</b>                                        | 20 <del>9.23</del> (I-27) <del>21"</del> <b>24</b> "                                  | 209:13 271                       | N 55166 <del>1.96</del> E 137729 <del>1.11</del>                                                             | √5' STANDARD MANHOLE                   |                 | G-5.13                    |
|                    |                              | .36                                                     | 7.73                                                                                  | 100.00                           | 5.02. 5.33                                                                                                   | ,                                      |                 |                           |
| MH-100             | PUBLIC                       | 192. <del>65</del><br>208. <del>98</del>                | 18 <del>0.10</del> (MH-101) 24"<br>19 <del>7.27</del> (MH-10Z) 24"                    | 10 <del>0.00</del><br>29"x18"    | N 55230 <del>6:32</del> E 137827 <del>6:13</del>                                                             | 5' STANDARD MANHOLE                    | -               | G-5.13                    |
| MH-101             | PUBLIC                       | .48                                                     |                                                                                       | <i></i>                          | N 552 <del>966.37</del> E 13790 <del>90.74</del><br>N 55 <del>9077.51</del> E 13779 <del>01.22</del>         | STANDARD MANHOLE                       | Sec.            | G-5.12                    |
| MH-102             | PUBLIC                       | 217.27                                                  | 198.79 (MH-103) 24"\<br>200.19 (MH-105) 24"\                                          | 199.81                           | N 55 <del>0077.51</del> E 1377 <del>961.22</del><br><b>764.02</b>                                            | ✓ STANDARD MANHOLE                     | -               | G-5.12                    |
| MH-103             | PUBLIC                       | 209. <del>64</del><br>21 <del>6.00</del>                |                                                                                       |                                  | N 551903.40 E 1377074.05<br>N 551929.42 E 1377321.79                                                         | STANDARD MANHOLE                       |                 | G-5.12                    |
| MH-105             | PUBLIC                       | 21 <del>6.00</del><br><b>5.42</b><br>21 <del>1.19</del> | 203.16 (MH-1068) Z4"\<br>203.26 (MH-107) 24"\                                         |                                  | N 5519 <del>23.42</del> E 1377321.49<br>N 5519 <del>15.75</del> E 13772 <del>65.65</del>                     | ✓ STANDARD MANHOLE  ✓ STANDARD MANHOLE | _               | G-5.12                    |
| JB-1               | PUBLIC                       | - 69                                                    | 184.67 (2) 22"X 34"V                                                                  | r 91                             | N 55233937 E 1376395-26                                                                                      |                                        | 966             | G-5.12                    |
| 5W-1               | PUBLIC                       | 211.92                                                  | 210.00 (I-25) 10"                                                                     | 104.9T 36"                       | N 55140 <del>9.63</del> E 137696 <del>4.15</del>                                                             | CONCRETE END SECTION                   | <del>' (M</del> | <b>7386.11)</b><br>0-5.51 |
| Loff I             | LODITC                       | to 4 1 0 7500                                           | 209,90                                                                                |                                  | 22.107.00 12 107090                                                                                          | CONCRETE END SECTION                   |                 | <u>0−9.91</u>             |
| 1                  | PRIVATE                      | 215.63                                                  | <u>,39</u><br>210. <del>69 (FUTURE</del> ) 15"✓                                       | /210 <del>50</del> 153/          | N 551751 49 F 1377022 49                                                                                     |                                        | -               |                           |
| <u> </u>           | PKIVAIE                      | 216                                                     | 211-62 (FUTURE U.D.) 62                                                               | 211 2 12                         | N 551751:29 E 1377022:30<br>N 551509:31 E 1376614:33                                                         | D INLET                                |                 | D-4.10                    |
| 5-1                | DOI\/AT#                     |                                                         | TITISE (I OTORL O.D.) OF                                                              | 7 1.57 16 V                      | 17 JJIJO7.71 L 10/0014+33                                                                                    | ✓ p inlet                              |                 | D-4.10                    |
| 5-4                | PRIVATE                      | 217,24                                                  | 213. 7 (FUTURE U.D.) 64                                                               | 208 0 24"                        | N 551432 40 F 13766718                                                                                       | -/                                     |                 |                           |
| 5-4<br>5-5         | PRIVATE                      | 217:05                                                  | 213.17 (FUTURE U.D.) 63<br>200.11 (I-17) 24"                                          | 208.01 247                       | N 551432.40 E 1376674.81                                                                                     | D INLET                                |                 | D-4.10                    |
| 5-4                |                              | 217.00<br>217.00<br>219.00<br>217.00                    | 213.7 (FUTURE U.D.) 64<br>200.11 (1-17) 24"<br>215.10 6"<br>211.09 6"                 | 21 <del>5.07</del> 12* <b>√</b>  | N 551432.46 E 1376674.81<br>N 551490.56 E 1376432.66<br>N 551313.11 E 1376666.61<br>N 551457.66 E 1376957.46 | D INLET                                |                 | D-4.10<br>D-4.10          |

\* GRATE ELEVATION
'D' INLET - TOP ELEVATION = TOP OF STRUCTURE

|         | PIPE 5CHEDULE                 |             |
|---------|-------------------------------|-------------|
| SIZE    | CLA55                         | LENGTH      |
| 12"     | RCCP, CL. IV                  | 70'         |
| 15"     | RCCP, CL. IV                  | 585'        |
| 18"     | RCCP, CL. IV                  | 170'        |
| 21"     | RCCP, CL. IV                  | 647'        |
| 24"     | RCCP, CL. IV                  | 1804'       |
| 27"     | RCCP, CL. IV                  | 669'        |
| 30"     | RCCP, CL. IV                  | 29'         |
| 36"     | RCCP, CL. IV                  | <i>81</i> ′ |
| 21"     | CMP, 14 Ga.                   | 13'         |
| 27"     | CMP, 14 Ga.                   | 53'         |
| 30"     | CMP, 14 Ga.                   | 75'         |
| 29"x18" | ELLIPTICAL RCCP, CL. IV       | 30'         |
| 43"x27" | ELLIPTICAL RCCP, CL. IV       | 20'         |
| 6"      | Perforațed Schedule<br>40 PVC | 130'        |

NOTE: CONTRACTOR MAY SUBSTITUTE HDPE PIPE FOR CONCRETE WHERE DEPTH OF COVER PERMITS.



APPROVED: DEPARTMENT OF PUBLIC WORKS

Chief, Bureau of Highways

APPROVED: DEPARTMENT OF PLANNING AND ZONING

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development

Chief, Division of Land Development

Chief, Development Engineering Division

REVISIONS

NO.

DESCRIPTION

DATE

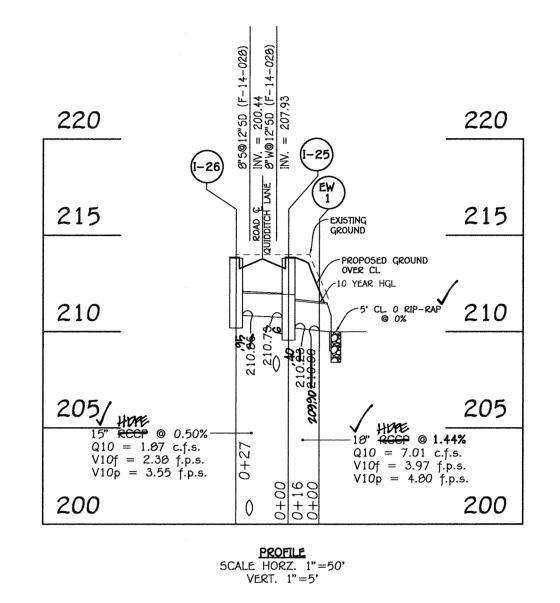
A REVISE UNDERGROUND S.W.M. & STORM DRAIN PROFILES

REVISES D.STR'S 101-105, ADD STR'S 106A & 106B

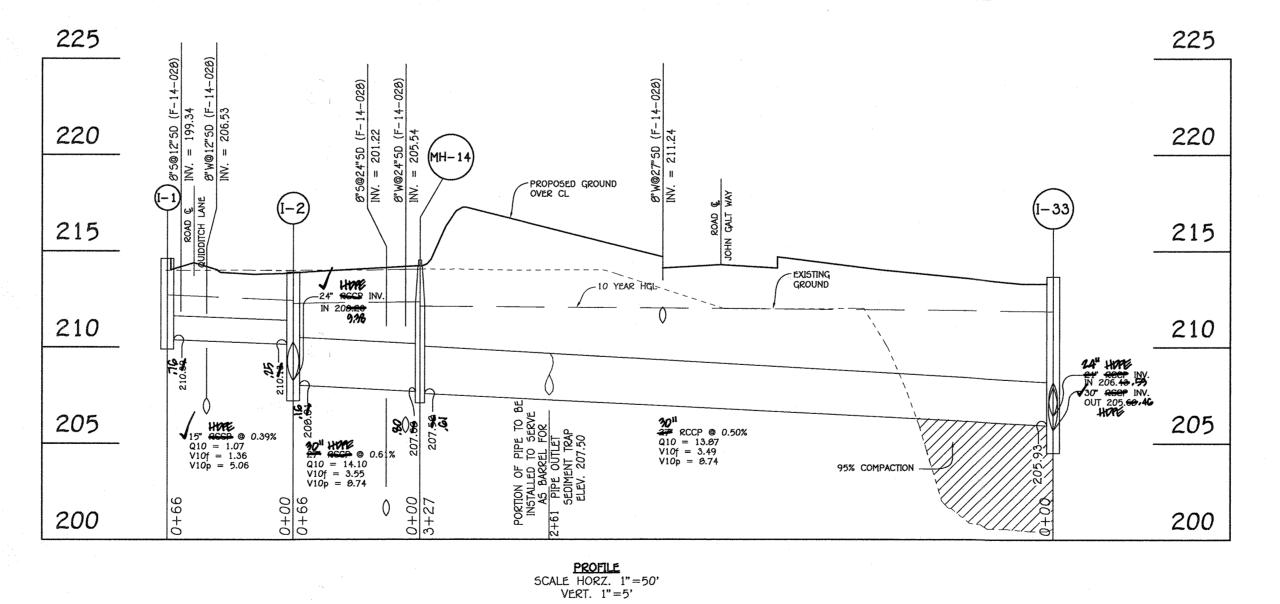
REMOVE MANHOUL AND REPLACE WITH JUNCTION BOX

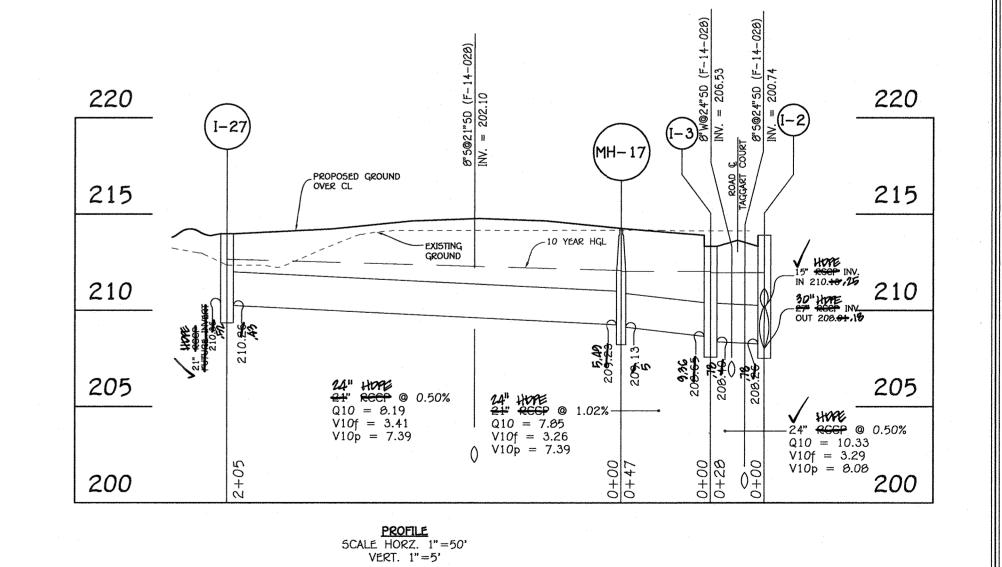
REVISIONS

REMOVE MANHOUL AND REPLACE WITH JUNCTION BOX



| STRUCTURE<br>NO. | OWNERSHIP AND<br>MAINTENANCE | TOP<br>ELEVATION | INV IN                           | INV OUT    | COORDINATES | TYPE             | REMARKS |
|------------------|------------------------------|------------------|----------------------------------|------------|-------------|------------------|---------|
| MH-106A          | PUBLIC                       | 214-24           | 203-10 (MH-106) 24"              | 203.00 24" | N 55182     | STANDARD MANHOLE | G-5.12  |
| MH-106B          | PUBLIC                       | 215.47           | 202. <del>83</del> (MH-106A) 247 | 202.74 24" | N 55185     | STANDARD MANHOLE | G-5.12  |





Tions.

AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and

CHARLES J. CROJO, GR. NO. 13204 Date

CDCG 3 BZH LP
c/o CDCG Asset Management LLC
0505 E. Hartford Drive
Suite 200
Scottsdale, AZ 05255
480-696-3733

DEVELOPER

Beazer Homes Corp.

8965 Guildford Road

Suite 209

Columbia, Maryland 21046

(410)-720-5071

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20740, EXPIRATION DATE: 02/22/2017.

ALDO MICHAEL VITUCCI, PROFESSIONAL ENGINEER

DATE

REVISED

STORM DRAIN PROFILES

MORRIS PLACE

LOTS 1-53, OPEN SPACE LOTS 54-61 AND

NON-BUILDABLE BULK PARCELS 'A' THRU 'C'

PHASES I-IV

ZONED: CAC-CLI & CE-CLI
TAX MAP No. 43 GRID No. 4 PARCEL No. 599
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: AUGUST 6, 2015

SHEET 15 OF 24

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 desthetic 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 25% 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 18 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 Characteris   | sțics                     |
|---------------------------------------|---------------------------|
| Parameter                             | Value                     |
| pH range                              | 5.2 to 7.00               |
| Organic matter                        | 1.5 to 4.0% (by weight)   |
| Magnesium                             | 35 lbs. per acre, minimum |
| Phosphorus (phosphate — P2O5)         | 75 lbs. per acre, minimum |
| Po†assium (po†ash —1(K2O)             | 85 lbs. per acre, minimum |
| Soluble salts                         | 500 ppm                   |
| Clay                                  | 10 to 25 %                |
| Silt                                  | 30 to 55 %                |
| Sand                                  | 35 †o 60%                 |
| · · · · · · · · · · · · · · · · · · · |                           |

### Mulch Layer

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 mylch/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

is 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

APPROVED: DEPARTMENT OF PUBLIC WORKS 'heune 10/19/2015 hief, Bureau of Highways APPROVED: DEPARTMENT OF PLANNING AND ZONING 10-27-15 10-22-15

#### OPERATION AND MAINTENANCE SCHEDULE FOR MICRO BIO-RETENTION AREAS (M-6)

1. The owner shall maintain the plant material, mulch layer and soil layer annually. maintenance of mulch and soil is limited to correcting areas of erosion or wash out. Any mulch replacement shall be done in the spring. Plant material shall be checked for disease and insect infestation and maintenance will address dead material and pruning. Acceptable replacement plant material is limited to the following: 2000 Maryland stormwater design manual volume II, table A.4.1 and 2.

2. The owner shall perform a plant in the spring and in the fall each year. during the inspection, the owner shall remove dead and diseased vegetation considered beyond treatment, replace dead plant material with acceptable replacement plant material, Treat diseased trees and shrubs and replace all deficient stakes and wires.

3. The owner shall inspect the mulch each spring. The mulch shall be replaced every two to three years, The previous mulch layer shall be removed before the new layer is applied.

4. The owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

UNDERDRAIN PIPE SHALL BE 4" TO 6" DIAMETER, SLOTTED OR PERFORATED RIGID PLASTIC PIPE (ASTMF 758, TYPE PS 28 OR AASHTO-M- 278) IN A GRAVEL LAYER. THE PREFERRED

PERFORATIONS SHALL BE 3/8" DIAMETER LOCATED 6" ON CENTER WITH A MINIMUM OF FOUR HOLES PER ROW. PIPE SHALL BE WRAPPED WITH A 1/4" (No. 4 OR 4 x 4) GALVANIZED HARDWARE CLOTH.

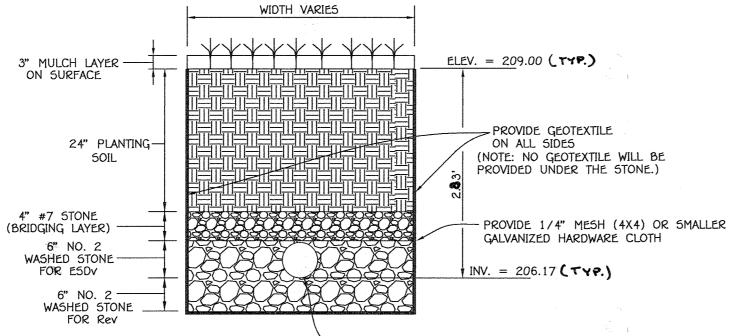
MATERIAL IS SLOTTED 4" RIGID PIPE (e.g., PVC OR HDPE).

GRAVEL LAYER SHALL BE (No. 57 STONE PREFERRED) AT LEAST 3" THICK ABOVE AND BELOW THE UNDERDRAIN.

THE MAIN COLLECTOR PIPE SHALL BE AT A MINIMUM 0.5%

A RIGID, NON PERFORATED OBERSERVATION WELL MUST BE PROVIDED (ONE PER EVERY 1,000 SQ.FT.) TO PROVIDE A CLEANOUT PORT AND MONITOR PERFORMANCE OF THE FILTER.

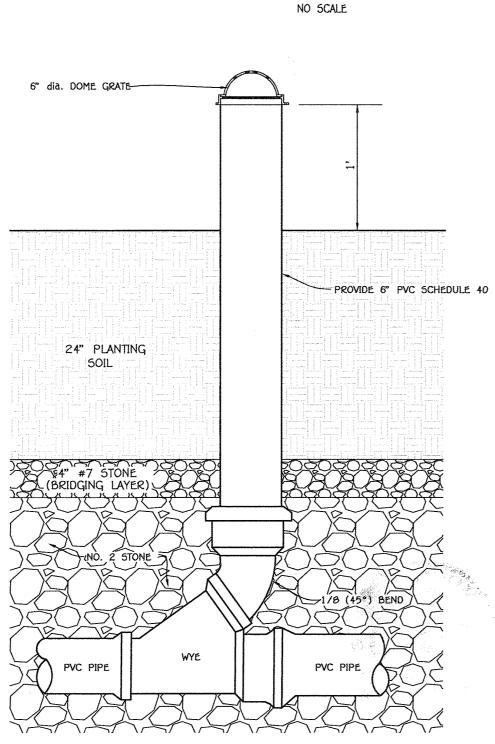
A 4" LAYER OF PEA GRAVEL (1/8" TO 3/8" STONE) SHALL BE LOCATED BETWEEN THE FILTER MEDIA AND UNDERDRAIN TO PREVENT MIGRATION OF FINES INTO THE UNDERDRAIN. THIS LAYER MAY BE CONSIDERED PART OF THE FILTER BED WHEN BED THICKNESS EXCEEDS 24".



6" PERFORATED PIPE/GRAVEL

NOTE: THE BOTTOM OF THE BIO-RETENTION FACILITY (F-6) SHALL BE ROTOTILLED PRIOR TO STONE INSTALLATION.

#### TYPICAL SECTION - BIO-RETENTION FACILITY (M-6)

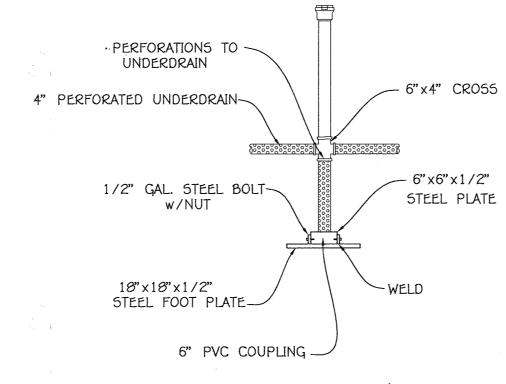


FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

ELLICOTT CITY, MARYLAND 21042

(410) 461 - 2855

SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE



REAR LO

5 l.f. CL. 0 RIP-RAP OUTFALL

Bio-Retention plant and shrub species OBSERVATION WELL ANCHOR DETAIL

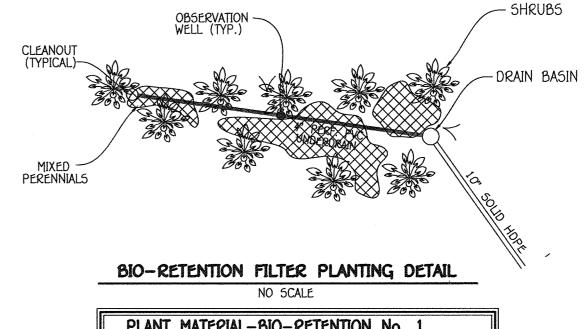
\_\_\_\_\_\_\_

NO SCALE 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 NO 5CALE

### CUT-LEAF CONEFLOWER CARDINAL FLOWER TRADUSCANT ASTER BAYBERRY SPICEBUSH ARROWWOOI ANY OF THE SHRUBS LISTED MAY BE USED WINTERBERRY INKBERRY BUTTONBRUSH BUCKEYE BOTTLEBRUSH BUCKEYE **REVISIONS** DESCRIPTION

/1\ REVISE UNDERGROUND S.W.M. FACILITY, STORM DRAIN & SIDEWALK



PLANT MATERIAL-BIO-RETENTION No. 1 NAME MAXIMUM SPACING (FT.) QUANTITY MIXED PERENNIALS 232 1 FT. SHRUB5 2 FT.

> **REVISED** STORMWATER MANAGEMENT BIO RETENTION PLANTING PLAN AND DETAILS

Scale: 1" = 20'

REAR, LOAD

LOTS 1-53, OPEN SPACE LOTS 54-61 AND NON-BUILDABLE BULK PARCELS 'A' THRU 'C'

PHASES I-IV ZONED: CAC-CLI & CE-CLI TAX MAP No. 43 GRID No. 4 PARCEL No. 599 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: AUGUST 6, 2015 SHEET 16 OF 24

AS-BUILT CERTIFICATION

I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and specifications.

CHARLES J. CROVO, SR. NO. 13204

OWNER CDCG 3 BZH LP c/o CDCG Asset Management LLC 0505 E. Hartford Drive Suite 200 Scottsdale, AZ 85255

480-696-3733

DEVELOPER Beazer Homes Corp. 8965 Guildford Road Suite 209 Columbia, Maryland 21046 (410)-720-5071

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2017.

ALDO MICHAEL VITUCCI, PROFESSIONAL ENGINEER

--- INV. 207.17-

6" PERF. PVC @ 0%

- PRIVATE STORMWATER

- 20' PUBLIC DRAINAGE AND

UTILITY EASEMENT

BIO-RETENTION FACILITY (F-6)

DRAINAGE AREA: 44,733 5qFt. FILTER AREA: 1858 Saft.

ELEVATION 210.00

PERIMETER 161' WEIR ELEVATION 211.00

QUIDDITCH LANE MINOR COLLECTOR

(PUBLIC ROAD)

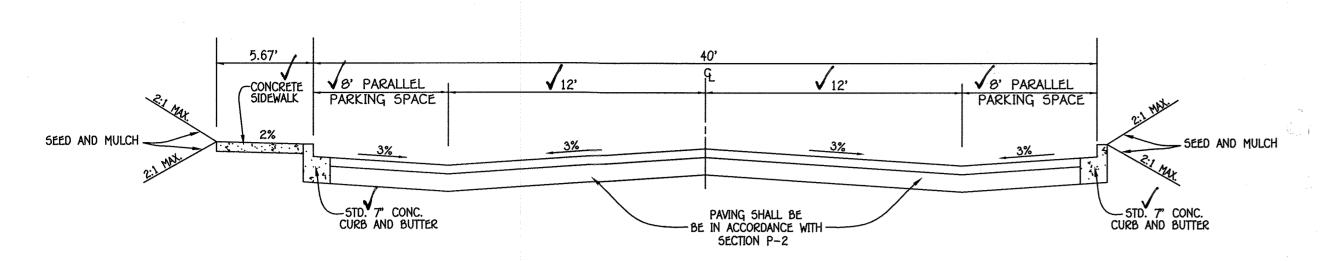
MANAGEMENT.

DRAINAGE AND

UTILITY EASEMENT

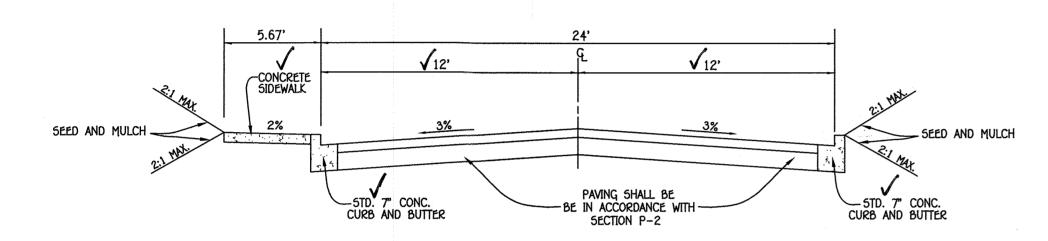
INV. 207.47





ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR

#### TYPICAL ROADWAY SECTION WITH PARALLEL PARKING NO SCALE



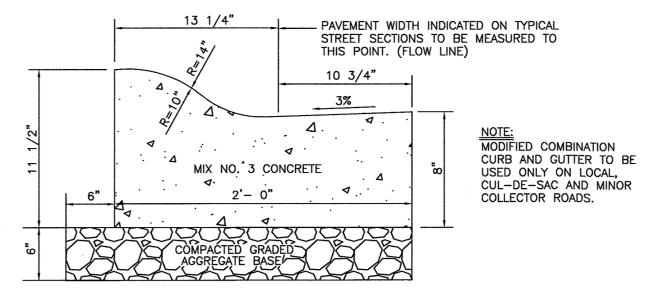
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATION AND DETAILS FOR CONSTRUCTION.

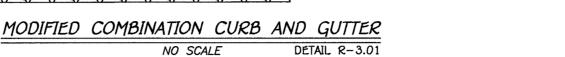
### TYPICAL ROADWAY SECTION

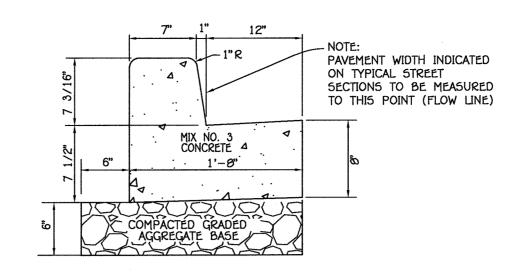
NO SCALE

| ROADWAY INFORMATION CHART |                                                                              |           |      |                       |     |  |  |  |
|---------------------------|------------------------------------------------------------------------------|-----------|------|-----------------------|-----|--|--|--|
| ROAD NAME                 | ROAD NAME CLASSIFICATION DESIGN SPEED ZONING & STATION LIMITS PAVING SECTION |           |      |                       |     |  |  |  |
| QUIDDITCH LANE            | MINOR COLLECTOR                                                              | 30 M.P.H. | R-20 | V0+27.90 TO 9+43.79 V | P-2 |  |  |  |

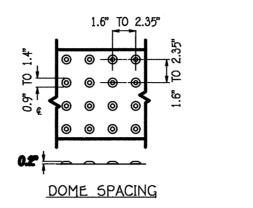
DETAIL R-2.01 CALIFORNIA BEARING RATIO (CBR) 3 TO <5 | 5 TO <7 | \( \geq 7 \) | 3 TO <5 | 5 TO <7 | \( \geq 7 \) SECTION | ROAD AND STREET NUMBER CLASSIFICATION PAVEMENT MATERIAL HMA WITH CONSTANT GAB (INCHES) HMA SUPERPAVE FINAL SURFACE 9.5 MM, PG 64-22, LEVEL 1 (ESAL) PARKING DRIVE AISLES: RESIDENTIAL AND NON-RESIDENTIAL WITH N MORE THAN 10 HEAVY TRUCKS PER DAY HMA SUPERPAVE INTERMEDIATE SURFACE 9.5 MM. PG 64-22; LEVEL 1 (ESAL) P-21.0 1.0 1.0 1.0 1.0 LOCAL ROADS: ACCESS PLACE, ACCESS STREET HMA SUPERPAVE BASE 19.0 MM. PG 64-22, LEVEL 1 (ESAL) 2.0 2.0 2.0 2.0 2.0 3.5 CUL-DE-5AC5: RESIDENTIAL 3.0 GRADED AGGREGATE BASE (GAB)







5TD. 7" CONC. CURB AND GUTTER DETAIL R-3.01 NO SCALE

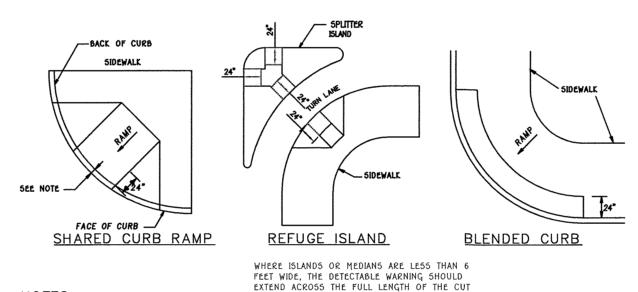


PLACEMENT GUIDELINES

0.9" TO 1.4"

DOME SECTION

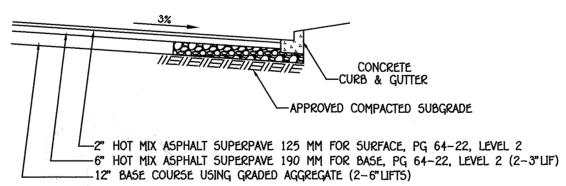
(MATT DETAILS OR OPTIONAL 12"x12" TILE TECH PAVERS(RED))

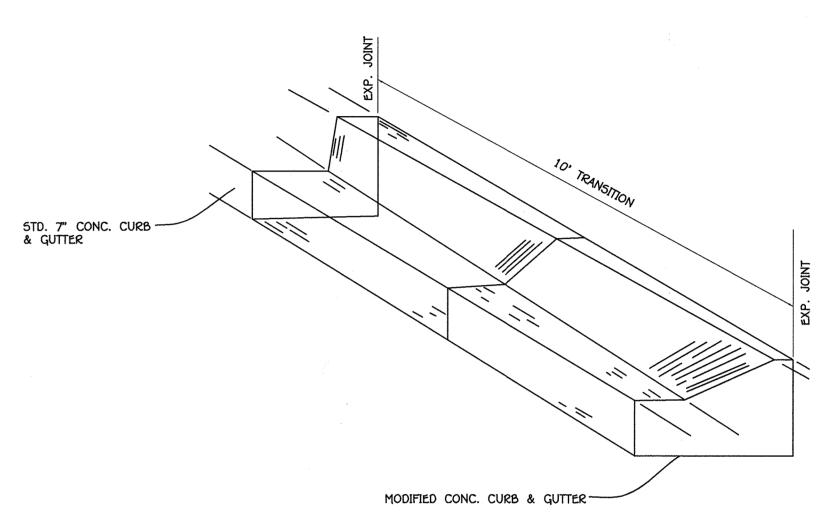


TO 8 INCHES FROM THE FACE OF CURB.

- THROUGH THE ISLAND OR MEDIAN 1. THE DETECTABLE WARNING SURFACE SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6
- 2. FOR SKEWED APPLICATIONS DETECTABLE WARNING SHALL BE PLACED SUCH THAT THE DOMES CLOSEST TO THE BACK OF CURB ARE NO LESS THAN 0.5" AND NO MORE THAN 3.0" FROM THE BACK OF CURB. TRUNCATED DOME SURFACES SHALL BE FABRICATED TO PROVIDE FULL DOMES ONLY.
- 3. DETECTABLE WARNING SURFACE SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 611 OF THE SPECIFICATIONS. 4. DETECTABLE WARNING SURFACES ARE REQUIRED AT STREET CROSSING & SIGNALIZED INTERSECTIONS.

DETECTABLE WARNING SURFACE GUIDELINES 5TD. DETAIL MD. 655-40





CONCRETE CURB & GUTTER TRANSITION NO SCALE

TYPICAL ROADWAY SECTION

NOT TO SCALE



1-14-15

1-7.15

APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

F15HER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS NIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2055



I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and specifications.

CHARLES W. CROVO, SR. WO. 13204 DATE

OWNER CDCG 3 BZH LP
c/o CDCG Asset Management LLC
8585 E. Hartford Drive Suite 200 Scottsdale, AZ 85255 480-696-3733

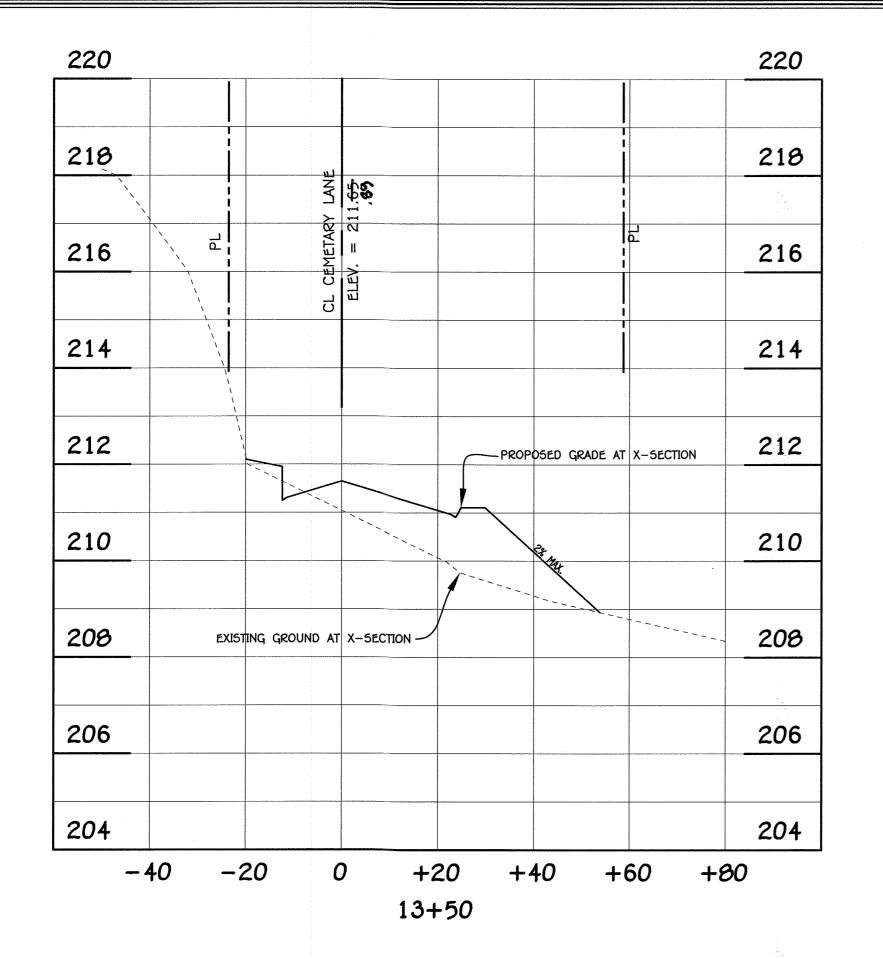
DEVELOPER Beazer Homes Corp. 8965 Guildford Road Suite 209 Columbia, Maryland 21046 (410)-720-5071



ROADWAY DETAILS

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

ZONED: CAC-CLI & CE-CLI TAX MAP No. 43 GRID No. 4 PARCEL No. 599 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SEPTEMBER 30, 2014
SHEET 17 OF 22 F-14-028



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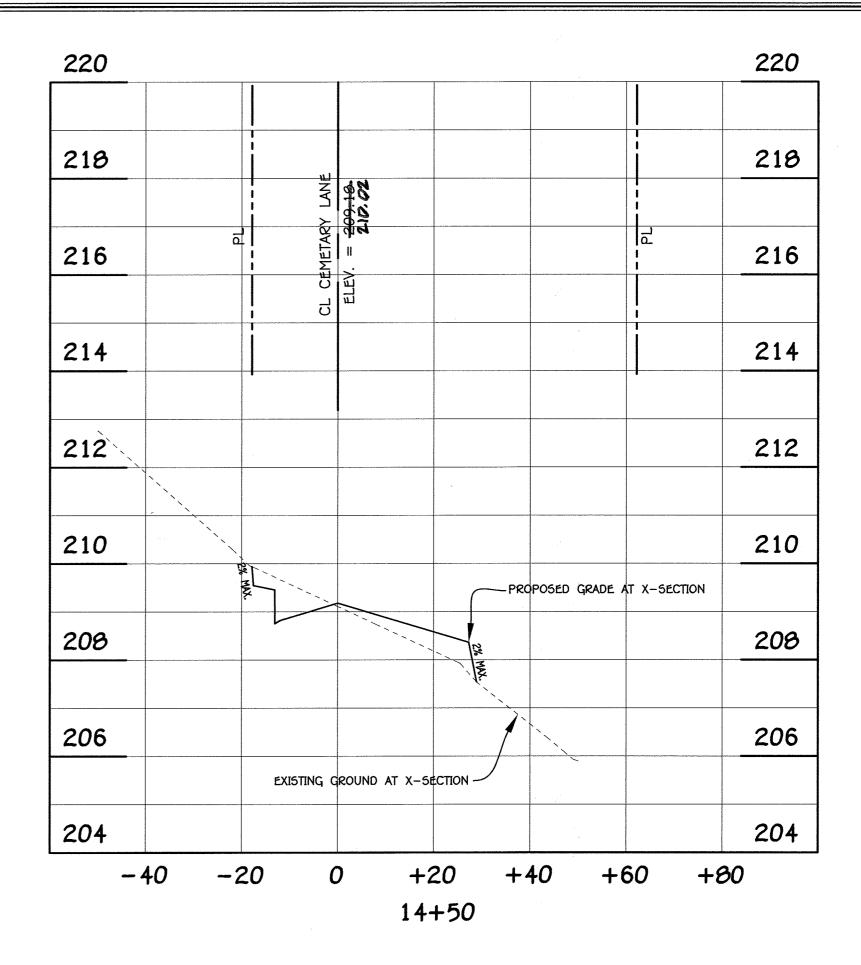
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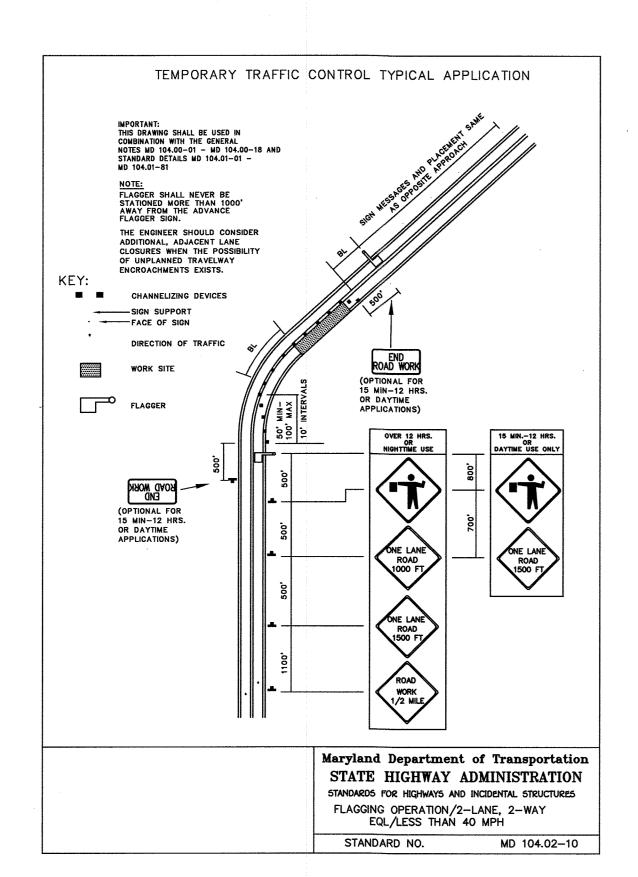
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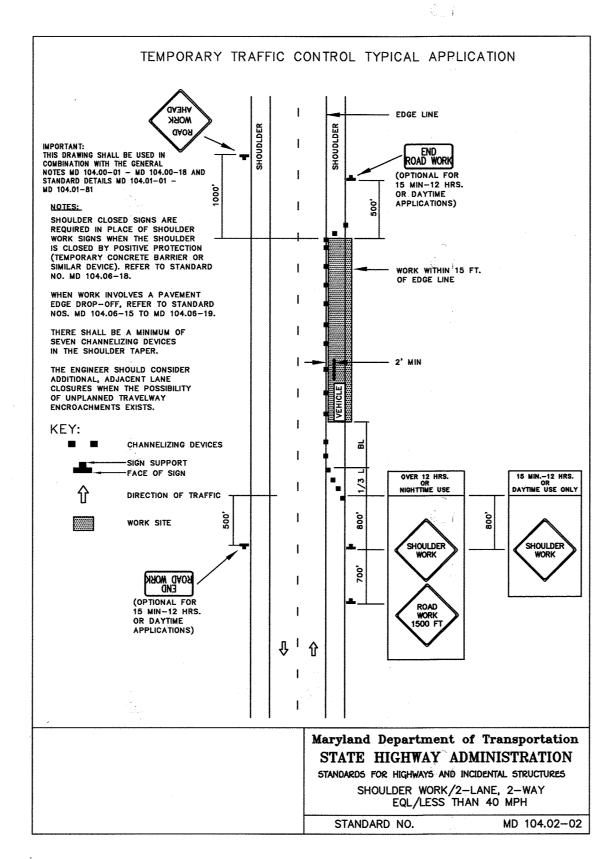


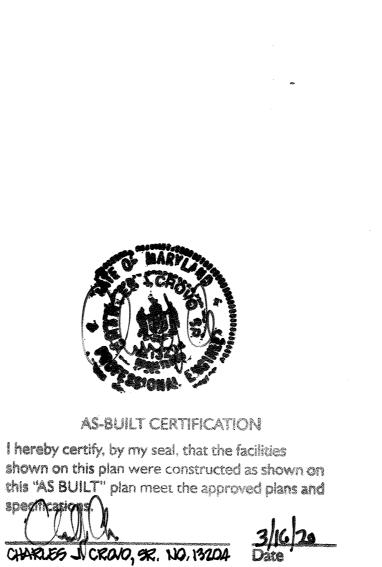
Scale: HORIZ: 1" = 20' VERT: 1" = 2'

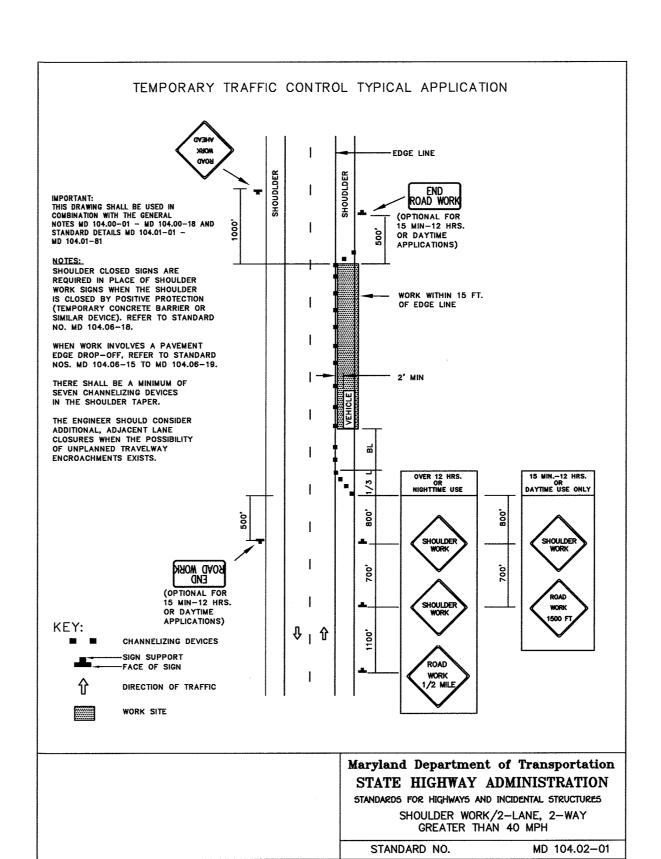
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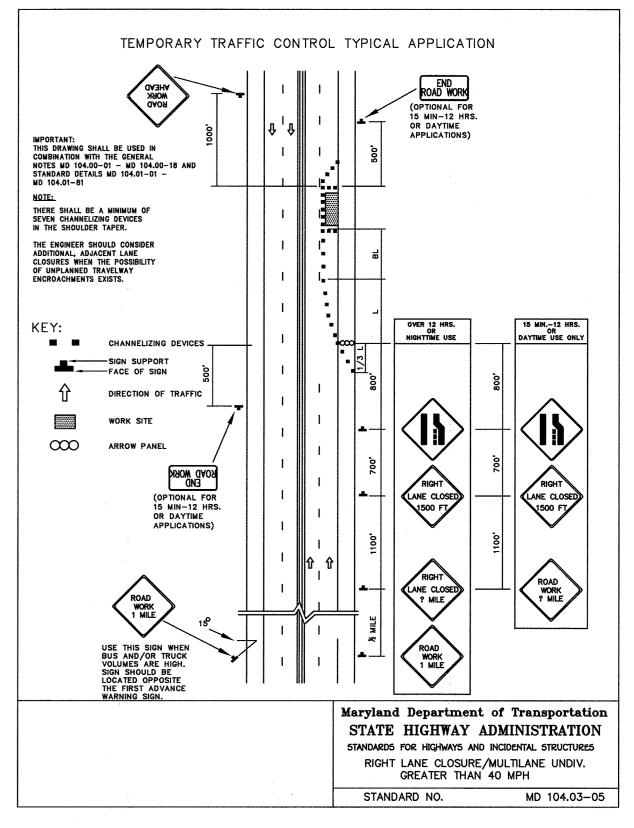
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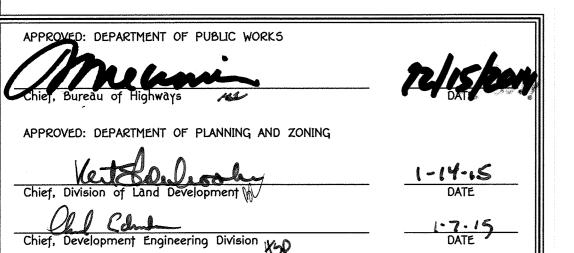




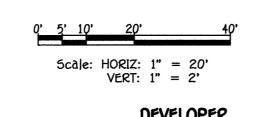




MOT PLANS FOR CEMETERY LANE







CDCG 3 BZH LP

c/o CDCG Asset Management LLC

8585 E. Hartford Drive

Suite 200

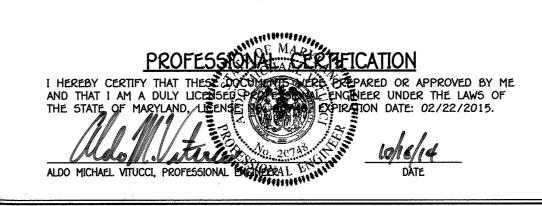
Scottsdale, AZ 85255

480-696-3733

DEVELOPER

Beazer Homes Corp.
8965 Guildford Road
Suite 209
Columbia, Maryland 21046
(410)-720-5071

MOT PLANS FOR U.S. 1



ROADWAY X-SECTIONS
& TEMPORARY TRAFFIC PLANS
MORRIS PLACE
LOTS 1-53, OPEN SPACE LOTS 54-61 AND
NON-BUILDABLE BULK PARCELS 'A' THRU 'C'
PHASES I-IV

PHASES I-IV

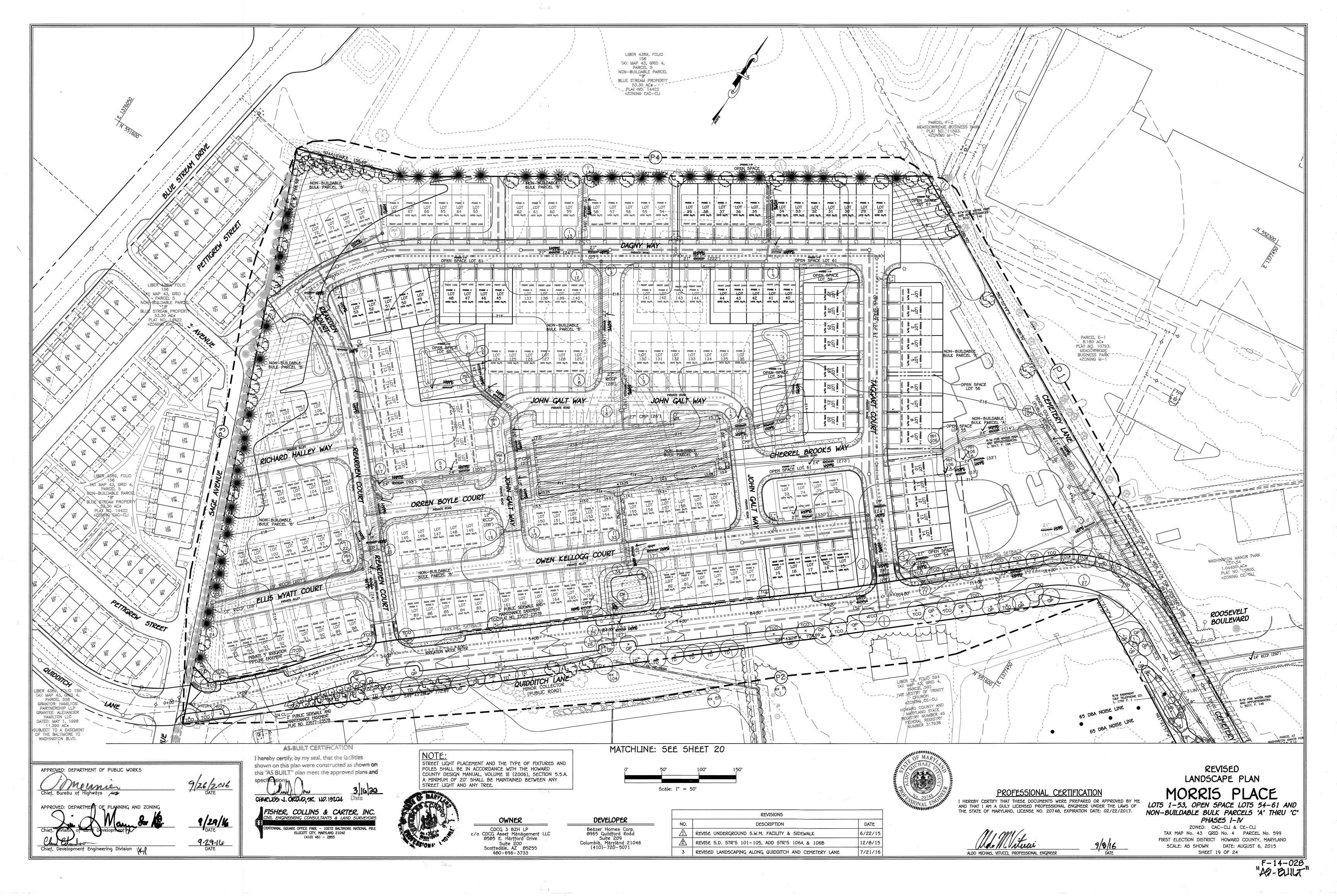
ZONED: CAC-CLI & CE-CLI

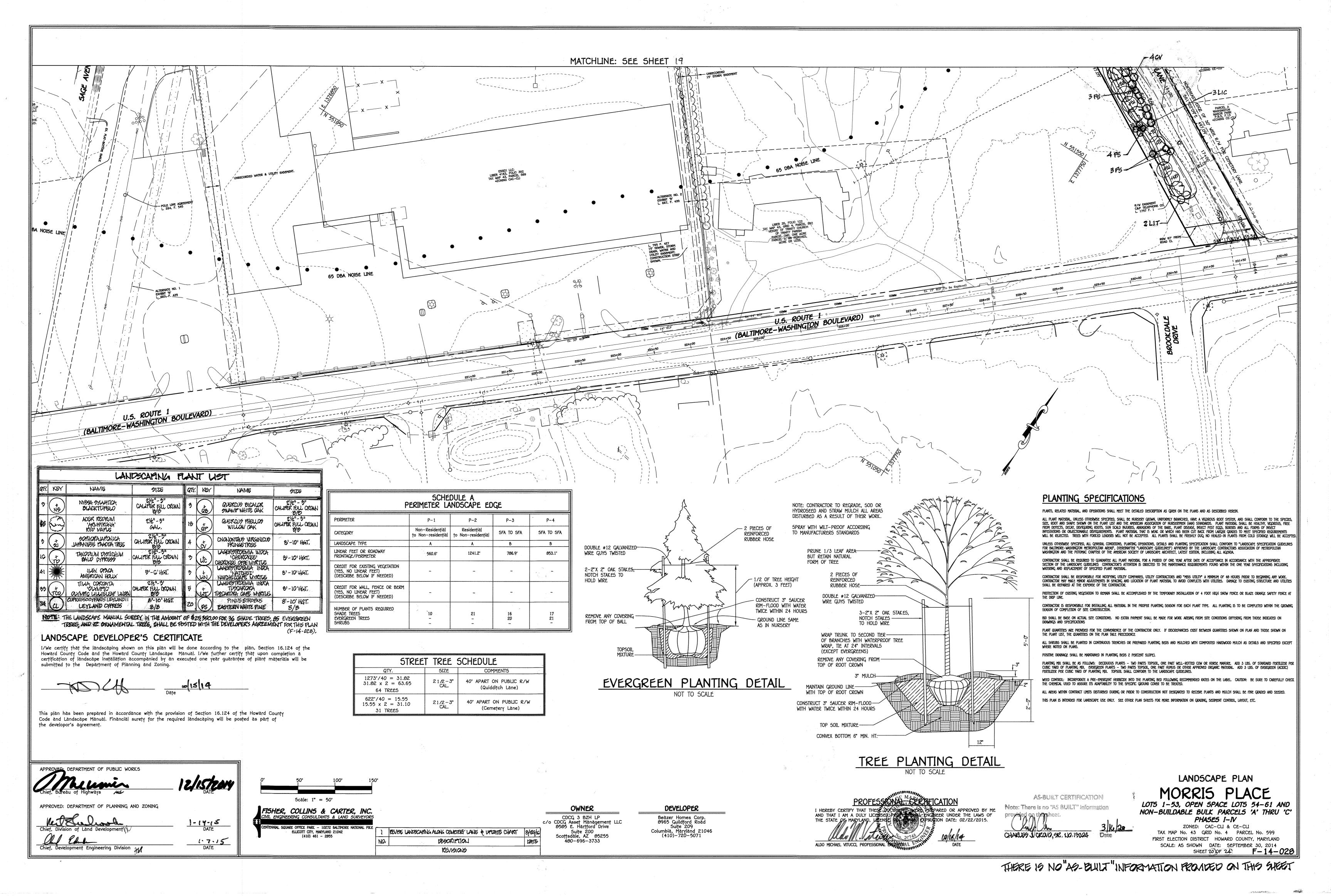
TAX MAP No. 43 GRID No. 4 PARCEL No. 599

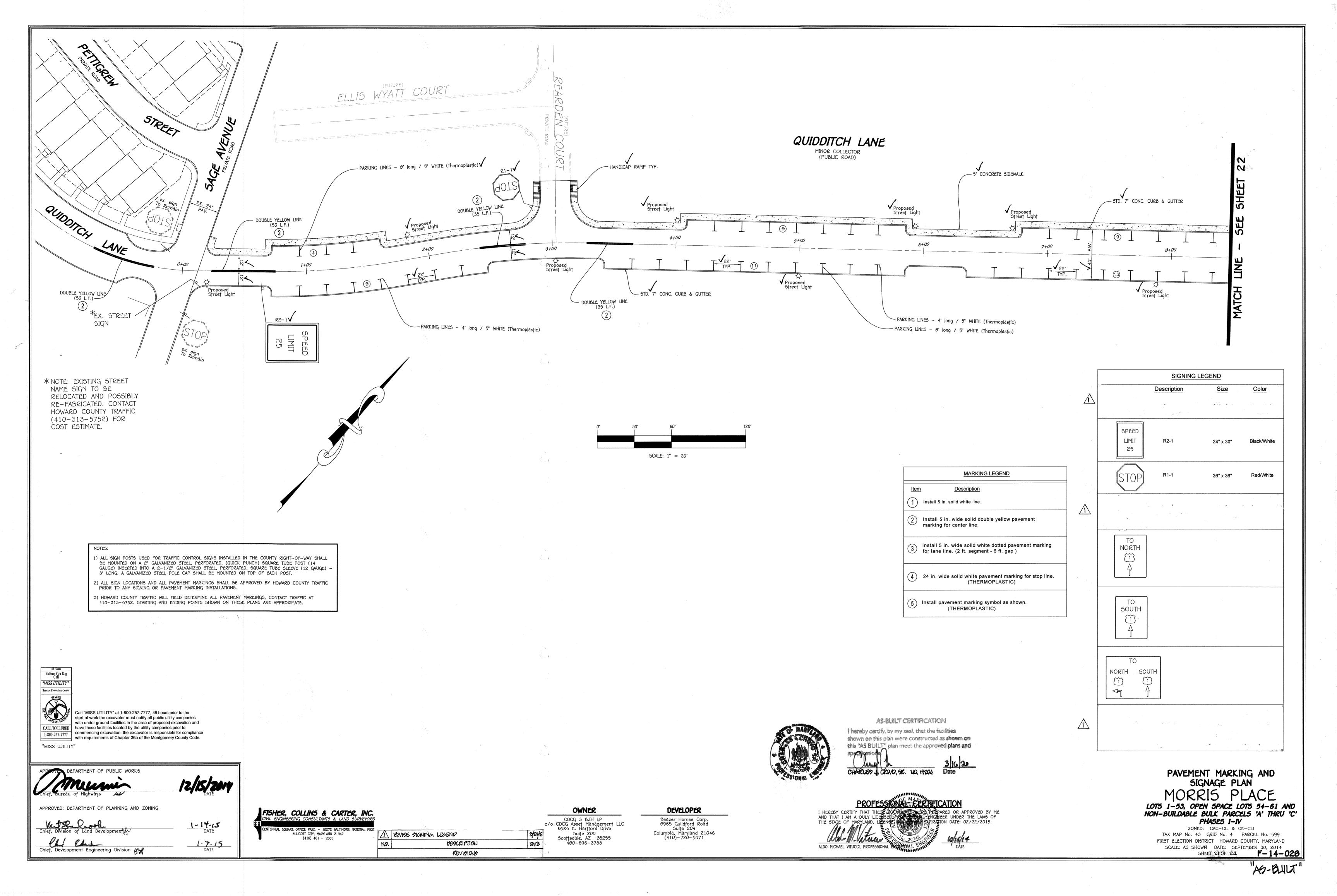
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

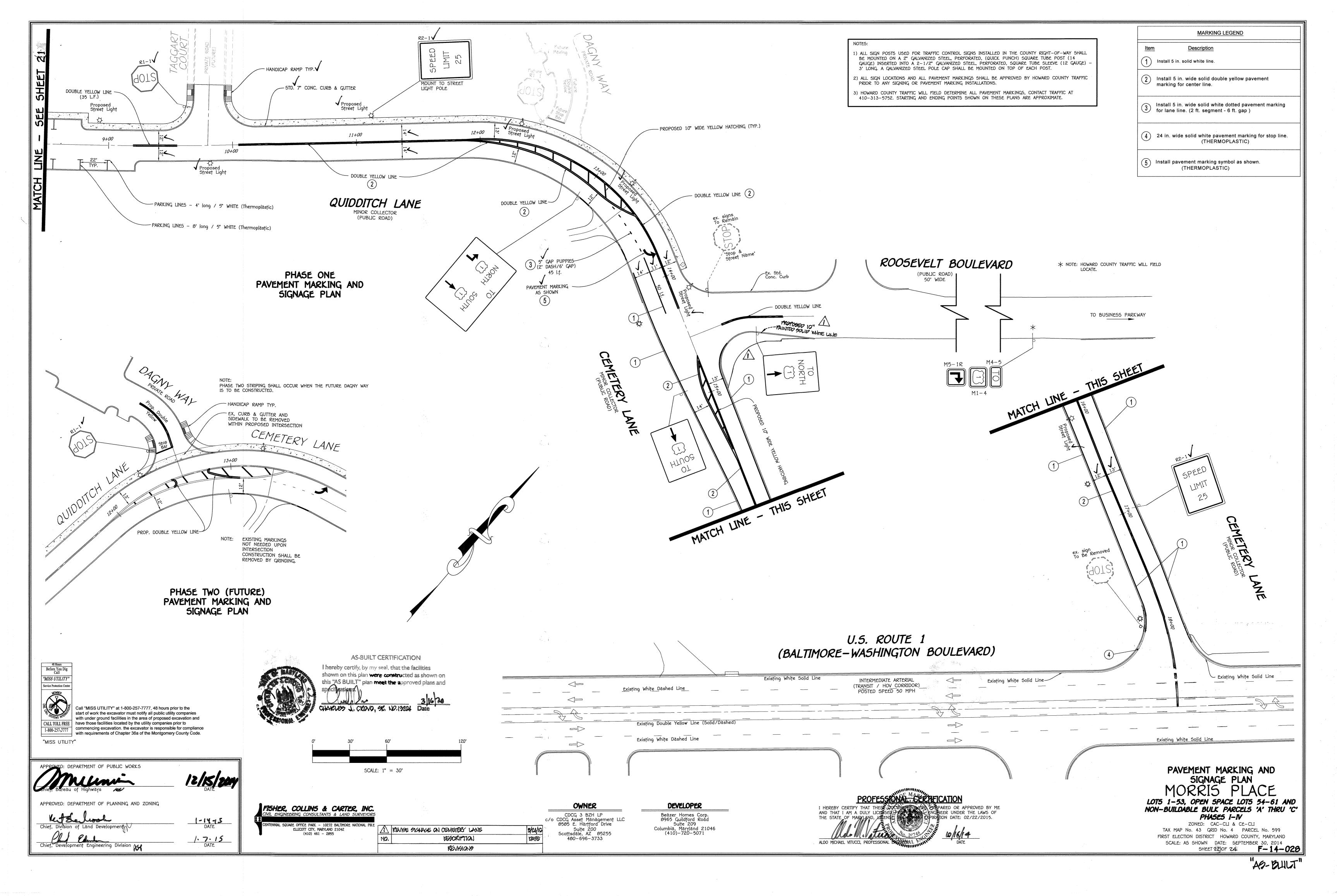
SCALE: AS SHOWN DATE: SEPTEMBER 30, 2014

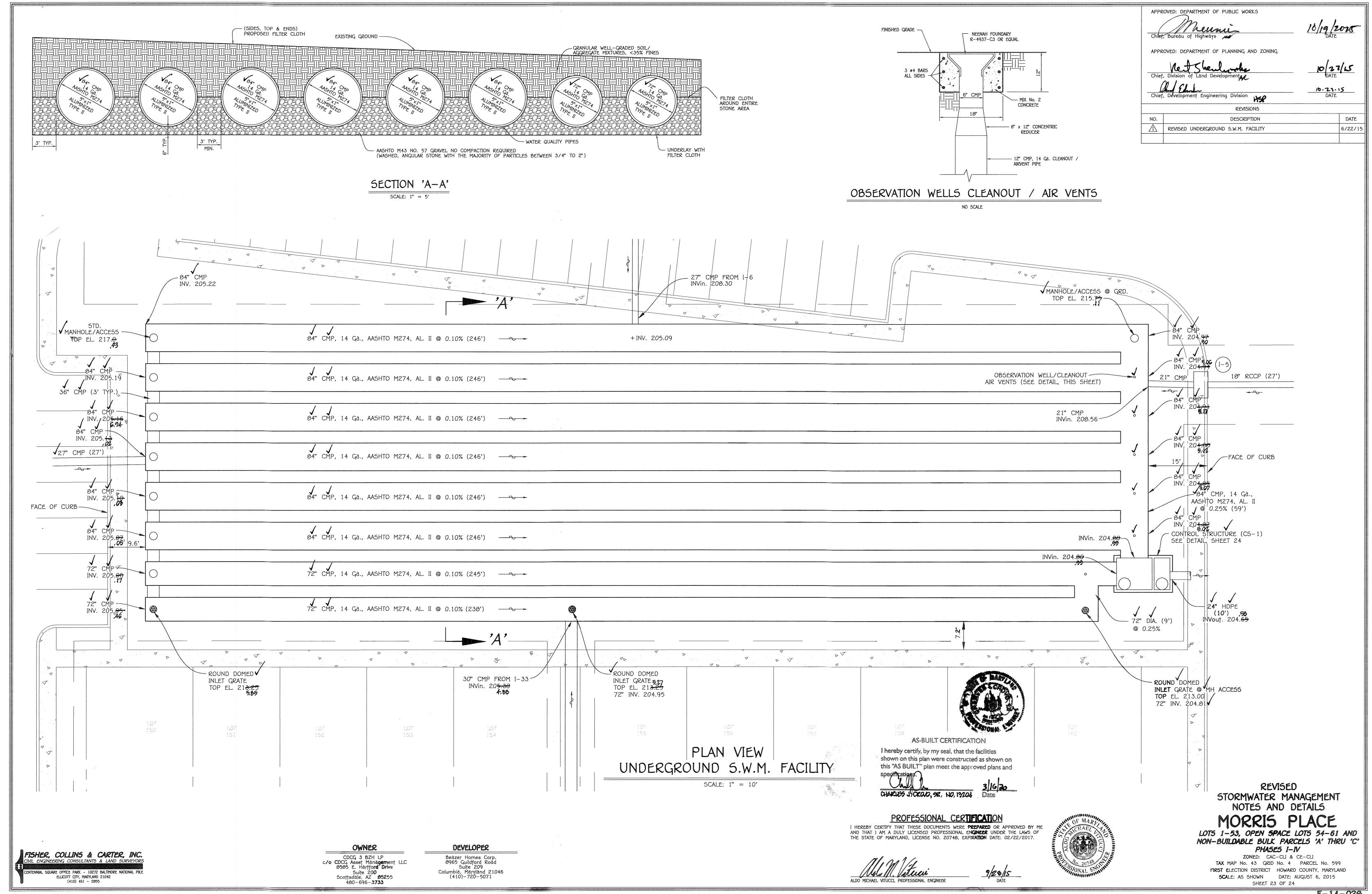
SHEET 18 OF 24 F-14-028











IN 2007/107053 dww/E-14-008 - Dhaces 1-3\f nlan redline underground swm\new mylar sheet 23 &

"F-14-028" "AG-BLILT"

- 1. Water quality structures will require periodic cleaning. Owners of these facilities will have to clean them as needed. 2. Maintenance of these facilities will consist of cleaning out the stormceptor and disposal of the waste and repair of the facility as needed. Periodic inspections of these facilities will be made by the
- 3. The disposal of the liquid and solid matter shall be as follows:

  A. All liquid material in the stormceptor shall be pumped into a suitable tank truck and disposed of at an approved sanitary district discharge manhole or be taken to an approved sewage treatment plant for discharge. The solid material shall be landfilled in an approved sanitary
- 4. The inlet pipes and structural parts shall be repaired as needed.
  5. Stormceptor inlet and outlet assembly shall be periodically inspected. Blockages shall be removed and disposed of as required

#### OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

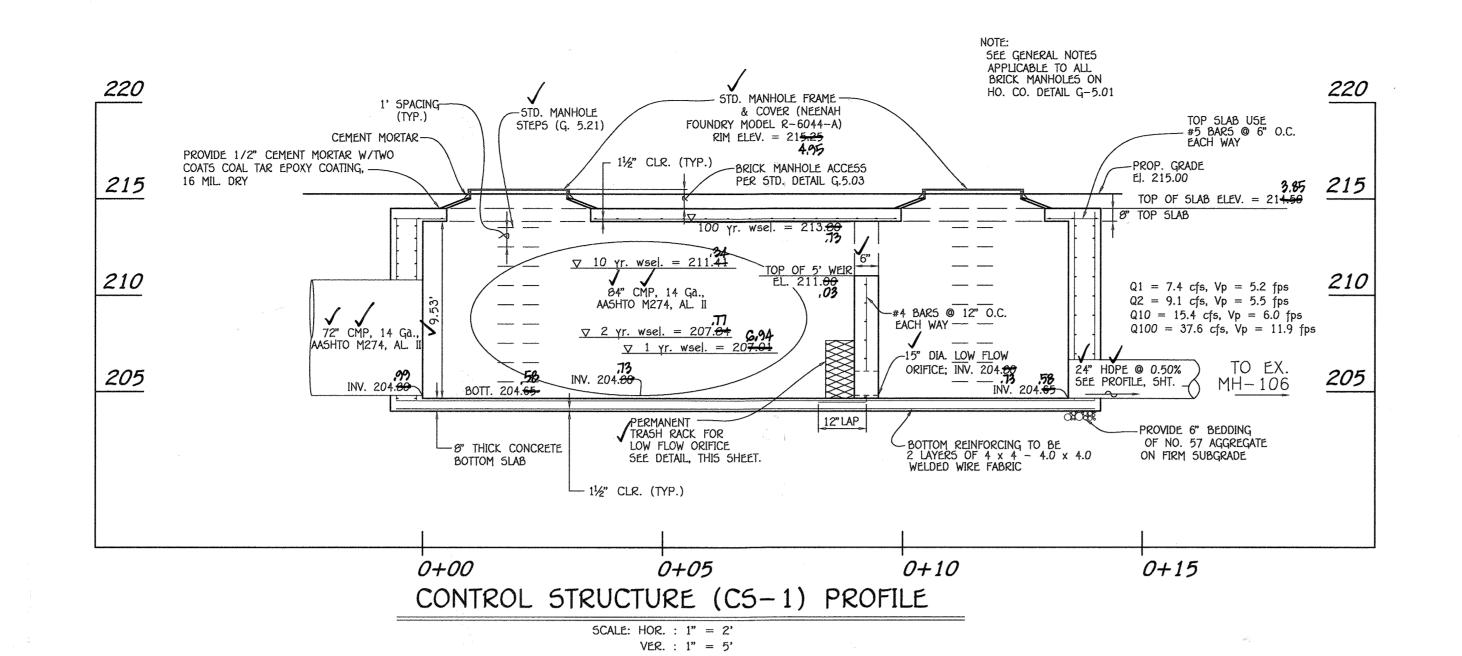
- 1. Stormceptor water quality structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the Stormceptor unit inspected yearly or as required by Howard County, utilizing the Stormceptor Inspection/Monitoring Form. Inspections can be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When sediment depths exceed the specified level (Table 9 of Technical Manual) then cleaning of the unit
- 2. Stormceptor water quality structures must be checked and cleaned immediately after petroleum spills, contact appropriate regulatory agencies.
- 3. Maintenance of Stormceptor units should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in unit. The proper cleaning and disposal of the removed materials and liquid must be followed.
- 4. Inlet and outlet pipes must be checked for any obstructions and if any obstructions are found they must be removed. Structural parts of the Stormceptor will be repaired
- 5. Owner shall retain and make Stormceptor Inspection/Monitoring Forms available to Howard County officials upon their request.

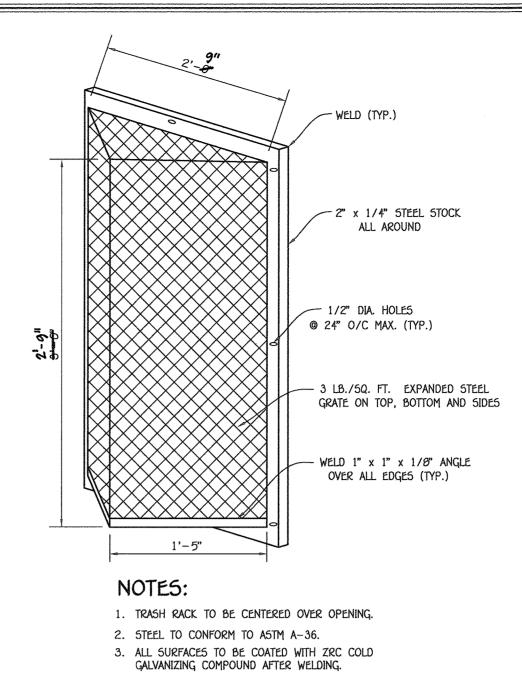
#### OPERATION AND MAINTENANCE SCHEDULE FOR H.O.A. OWNED AND MAINTAINED UNDERGROUND S.W.M. FACILITY

A. H.O.A. ROUTINE MAINTENANCE RESPONSIBILITIES:

B. H.O.A. NON-ROUTINE MAINTENANCE:

- THE UNDERGROUND S.W.M. FACILITY SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
- 2. MAINTENANCE OF THE 66-INCH PIPES SHALL BE PERFORMED BY FLUSHING THE SYSTEM THROUGH THE CLEAN-OUTS PROVIDED AND BY VACUUMING AT MANHOLE M-10. THE DISCHARGE ORIFICE OF THE UNDERGROUND S.W.M. FACILITY SHALL BE TEMPORARILY BLOCKED DURING SAID MAINTENANCE OPERATION.
- 3. DISPOSAL OF MATERIAL SHALL BE IN ACCORDANCE WITH SIMILAR B.M.P. THAT RANGE FROM DISPOSAL IN A SANITARY LANDFILL TO INCINERATION IN A LICENSED FACILITY. PETROLEUM WASTE PRODUCTS SHOULD BE REMOVED BY A LICENSED WASTE MANAGEMENT COMPANY.
- 1. STRUCTURAL COMPONENTS OF THE UNDERGROUND FACILITY SUCH AS THE STORMCEPTOR, MANHOLES, PIPES AND ORIFICE SHALL BE REPAIRED UPON DETECTION OF ANY DAMAGE. THE COMPONENTS SHOULD BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS. INSPECTION REPORTS SHALL BE KEPT UNTIL THE NEXT SUBSEQUENT INSPECTION.
- 2, "PROBLEMS IDENTIFIED DURING INSPECTION WILL BE PROMPTLY CORRECTED. MAJOR PROBLEMS SHALL ALSO BE BROUGHT TO THE ATTENTION OF THE HOWARD COUNTY DEPT. OF PUBLIC WORKS TO INSURE THAT PUBLIC SAFETY IS MAINTAINED. BLOCKED DURING SAID MAINTENANCE OPERATION.





APPROVED: DEPARTMENT OF PUBLIC WORKS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

REVISED UNDERGROUND S.W.M. FACILITY

**REVISIONS** 

DESCRIPTION

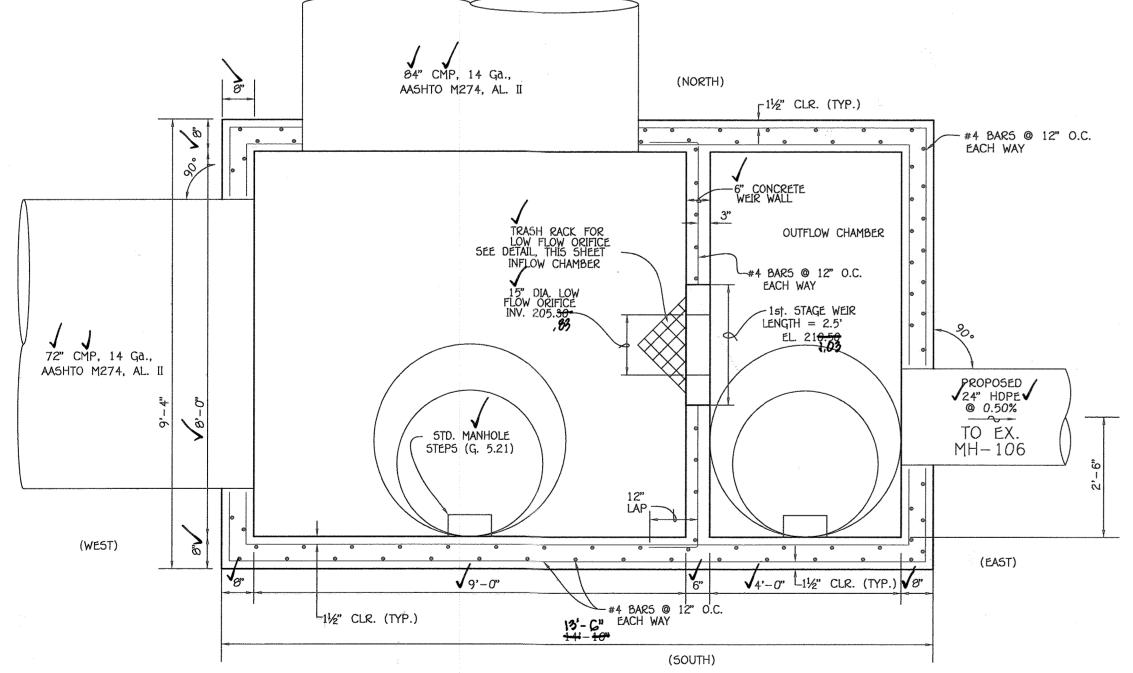
10/19/2015

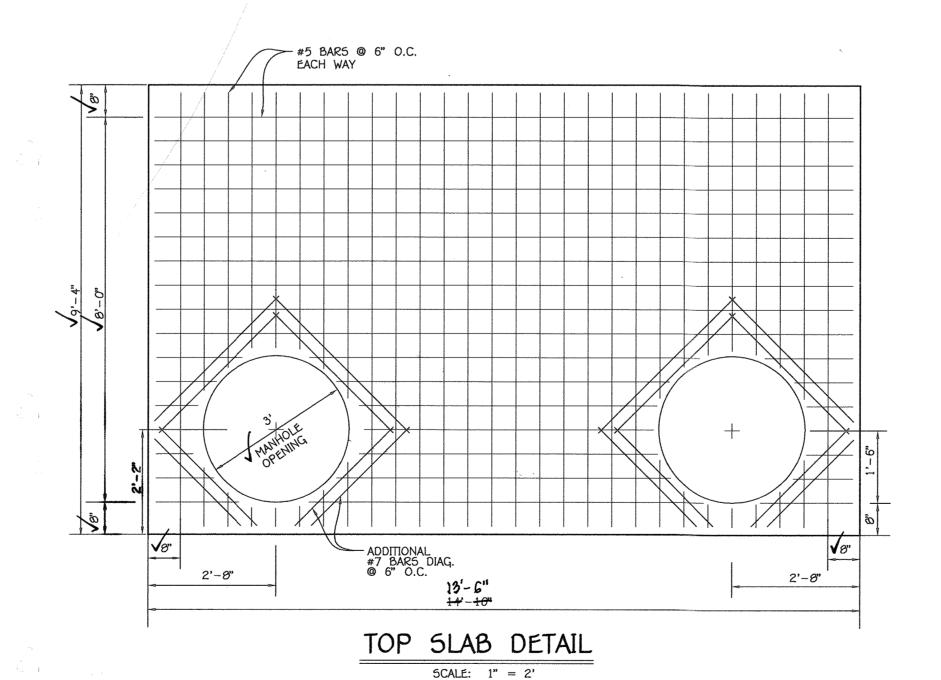
10-27-15

DATE 6/22/15

- 4. TRASH RACK TO BE FASTENED TO THE WALL WITH 1/2" MASONRY ANCHORS. TRASH RACK TO BE REMOVABLE.

LOW FLOW TRASH RACK DETAIL





TOP SLAB ELEV. = 214.50 INSIDE BOTTOM OF TOP SLAB EL. = 213.<del>83</del>.18 √ 10 yr. wsel. = 211.41 NOTES: CONCRETE SHALL BE M5HA MIX No. 6 (FC > 4,500 P.S.I.). REINFORCING STEEL: GRADE 60 FACE FORMS FOR WALLS OF OUTLET STRUCTURE SHALL UTILIZE L.M. SCOFIELD CO. T-9055 FORM LINERS (RANDOM SPLIT-FACE ROCK) OPTIONAL PROVIDE ROUGH BROOM FINISH ON TOP OF SLAB. ANCHOR BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 6.07.03.59
OF THE MSHA STANDARDS AND SPECS. ALL EXPOSED METAL SURFACES SHALL BE PAINTED IN ACCORDANCE WITH SECTION  $\nabla$  1 yr. wsel. = 20<del>7.01</del> 6.07.03.60 OF THE MSHA STANDARDS AND 15" DIA. LOW FLOW ORIFICE ALL REINFORCING SPLICES SHALL BE LAP SPLICES OF 30 BAR DIA. UNLESS OTHERWISE ALL FILTER FABRIC SHALL BE POLY FILTER-X OR EQUAL . ALL EXPOSED EDGES OF CONCRETE TO BE CHAMFERED 1/2" x 1/2". **√**4.0' FRONT VIEW OF CONTROL WALL

5CALE: 1" = 2'

AS-BUILT CERTIFICATION I hereby certify, by my seal, that the facilities shown on this plan were constructed as shown on this "AS BUILT" plan meet the approved plans and CHARLES J. CROVO, SR. NO. 13204

REVISED STORMWATER MANAGEMENT NOTES AND DETAILS

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

ZONED: CAC-CLI & CE-CLI TAX MAP No. 43 GRID No. 4 PARCEL No. 599 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: AUGUST 6, 2015 SHEET 24 OF 24

CONTROL STRUCTURE (C5-1) PLAN VIEW

c/o CDCG Asset Management 8585 E. Hartford Drive

OWNER CDCG 3 BZH LP Suite 200 Scottsdale, AZ 85255 480-696-3733

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF

THE STATE OF MARYLAND, LICENSE NO. 20748, EXPIRATION DATE: 02/22/2017.

