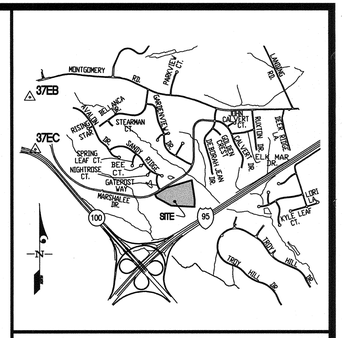
CENTRE 9500 -- PARCEL 'C'
SITE DEVELOPMENT PLAN

FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

HOWARD COUNTY CONTROL

37EB N 1,375,430.82
E 562,552.473
ELV. = 385.385

37EC N 1,375,580.43
E 561,099.801
ELV. = 346.233



VICINITY MAP
SCALE: 1"=2000'

GENERAL NOTES

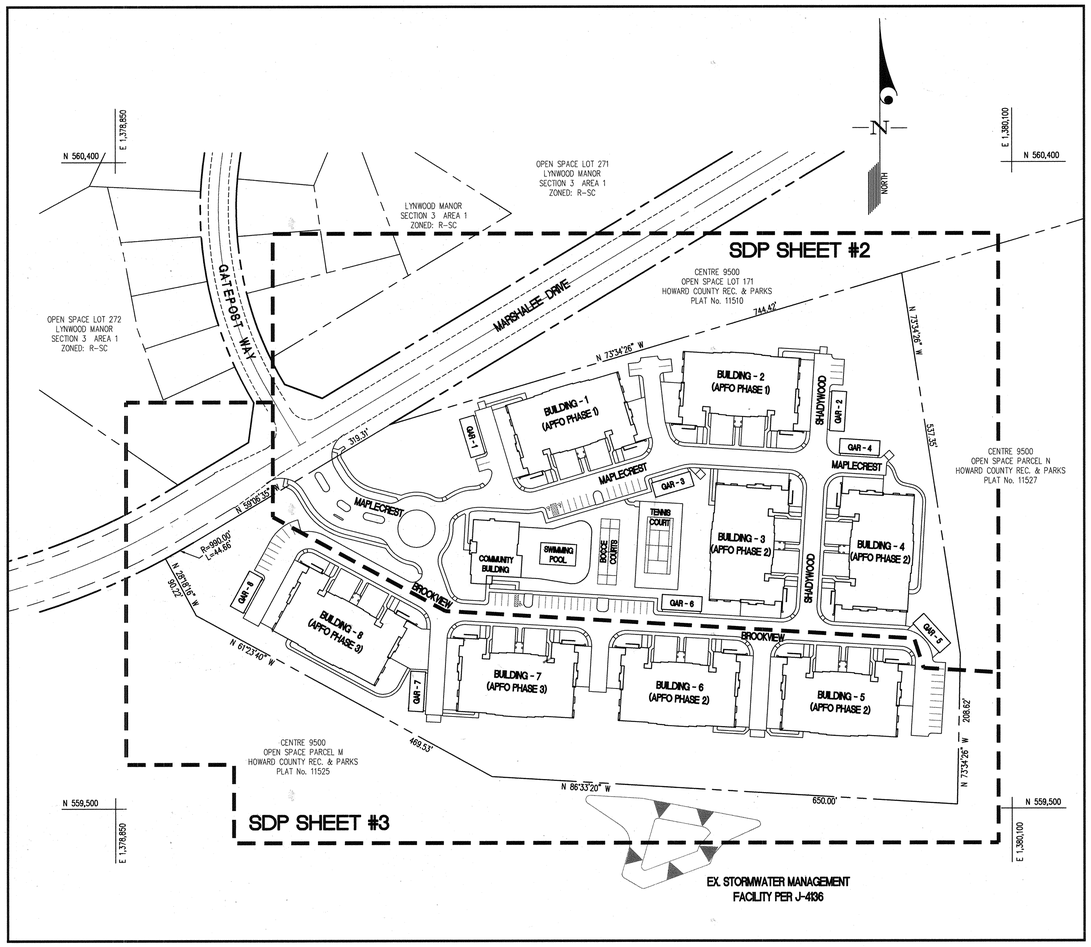
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48-HOURS PRIOR TO ANY EXCAVATION WORK.
4. PROJECT BACKGROUND:
   LOCATION: ON THE SOUTHEAST SIDE THE INTX. OF MARSHALEE DRIVE & GATEPOST WAY
   TAX MAP: 37
   ZONING: PARCEL-C IS ZONED POR PER ZB-1021M (SEPT. 06, 2002).
   ELECTION DISTRICT: 1
   GROSS AREA OF PARCEL 'C': 12.38 ± ACRES PER PLAT #14213 (F-00-87)

   FOR OTHER SUBMISSIONS RELATED TO THIS SITE, SEE HOWARD COUNTY FILE Nos.:
   P-93-11, F-94-96, CAPITAL PROJECT J-4136, WP-04-018, F-04-094 (PLAT 16515) AND F-04-099 (PLAT 16538).
5. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTC). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
6. ALL PLAN DIMENSIONS ARE TO THE FACE OF CURB OR FACE OF BUILDING UNLESS OTHERWISE NOTED. DIMENSIONS ARE MEASURED PERPENDICULAR OR RADIALLY BETWEEN ITEMS UNLESS OTHERWISE NOTED.
7. EXISTING TOPOGRAPHY AND FEATURES COMPILED FROM C.P. J-4136 AND F-94-96.
8. COORDINATES ARE BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATION NUMBERS 37 EB AND 37 EC.
9. STORMWATER MANAGEMENT IS PROVIDED BY AN EXISTING EXTENDED DETENTION FACILITY (PER C.P. J-4136) STRADDLING THE SOUTH SIDE OF PARCEL 'C' AND THE ADJACENT PARCEL 'M'.
10. PUBLIC WATER AND SEWER SHALL BE UTILIZED (AS PROVIDED BY W&S CONTRACT NOS. 14-3369-D, 14-3373-D AND THE ON-SITE 44-4167-D). HOWEVER, ALL SEWER AND STORMDRAIN (LINES AND STRUCTURES) PROPOSED WITHIN PARCEL-A ARE PRIVATELY (NOT PUBLICLY) MAINTAINED. WITHIN PARCEL-C, ONLY THE WATER LINE AND FIRE HYDRANTS WITHIN THE EASEMENT FOR CONTRACT #44-4167-D IS PUBLICLY MAINTAINED. WATER METERS ARE INSIDE THE BUILDINGS.
11. THE EXISTING UTILITIES SHOWN HEREIN WERE DERIVED FROM AVAILABLE PUBLIC RECORDS. THE CONTRACTOR MUST DIG TEST PITS (BY HAND) AT ALL UTILITY CROSSINGS AND CONNECTION POINTS TO VERIFY EXACT LOCATION. IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONFLICTS.
12. ALL ON-SITE DRIVEWAYS AND PARKING ARE PRIVATELY OWNED AND MAINTAINED.
13. ANY DAMAGE TO THE ADJACENT COUNTY OWNED RIGHT-OF-WAY AND PROPERTY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
14. ALL PROPOSED RAMPS SHALL BE IN ACCORDANCE WITH CURRENT A.D.A. STANDARDS. MAXIMUM SIDEWALK CROSS (2%) TWO PERCENT. PROVIDE A (5'X5') FIVE FOOT BY FIVE FOOT LEVEL (2% MAX.) LANDING AREA SLOPE SHALL BE AT THE TOP AND BOTTOM OF ALL RAMPS AND BUILDING INGRESS/EGRESS POINTS.
15. TRENCH BEDDING FOR STORM DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH HOWARD COUNTY STANDARD G2.01. CLASS "C" BEDDING, UNLESS OTHERWISE NOTED.
16. GUTTER PAN OF CURBS SHALL BE PITCHED TO CONFORM TO THE ADJACENT DRAINAGE PATTERNS OF THE ADJOINING PAVING FOR VEHICULAR USE. SPOT ELEVATIONS ALONG THE CURB ARE TO THE FLOW LINE (BOTTOM OF CURB), UNLESS NOTED OTHERWISE. ALL CURB FILLETS ARE 5' RADIUS UNLESS NOTED OTHERWISE.
17. THERE ARE NO KNOWN GRAVE SITES OR CEMETERIES ON THIS SITE.
18. OTHER TOPICS RELATED THE DEVELOPMENT OF THIS SITE:
    - TRANSPORTATION ANALYSIS BY LEE CUNNINGHAM & ASSOCIATES, INC. DATED APRIL, 2003 AND SUBMITTED WITH THIS SDP.
    - GEOTECHNICAL ENGINEERING STUDY BY HILLIS-CARNES (JANUARY 10, 2003. HCEA #02638A).
    - AS A CONSEQUENCE OF ITS SUBMISSION FOR COUNTY REVIEW AFTER NOVEMBER 15, 2001, THIS SDP IS SUBJECT TO COMPLIANCE WITH THE FIFTH EDITION OF THE SUBDIVISION REGULATIONS. IN ADDITION, IT IS SUBJECT TO COMPLIANCE WITH COUNTY COUNCIL BILL 50-2001 WHICH AMENDS PORTIONS OF THE ZONING REGULATIONS.
    - SEE HOA/CONDO DOCUMENTS PLUS DOCUMENTS & COVENANTS THAT CONTAIN THE AGE RESTRICTION INFORMATION (L. 8914 F. 200-209)
19. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING TO DEVELOP THIS PARCEL (AS SHOWN ON SHEETS #18 & 19 TO SATISFY SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL) HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF $73,200 (SEE SHEET #19 FOR THE BREAK DOWN OF THIS AMOUNT).
20. THERE ARE NO FLOOD PLAINS OR WETLANDS WITHIN PARCEL 'C'.
21. ALL OUTSIDE LIGHTING SHALL COMPLY WITH ZONING REGULATION SECTION 134 WHICH REQUIRES LIGHTS TO BE INSTALLED TO DIRECT/REFLECT LIGHT DOWNWARDS AND INWARDS ON SITE AWAY FROM ALL ADJOINING PUBLIC STREETS AND RESIDENTIAL AREAS.
22. THE FOREST CONSERVATION OBLIGATION FOR THIS PLAN OF 1.57 ACRES OF REFORESTATION HAS BEEN MET BY A FEE-IN-LIEU PAYMENT OF $34,194.60 TO THE HOWARD COUNTY FOREST CONSERVATION FUND. (C.E. # 04-0100-01)
23. DUE TO ALLOCATION AVAILABILITY THIS PROJECT PROJECT IS PHASED AS FOLLOWS:
    PHASE-1: APARTMENT BUILDINGS 1-2 AND THEIR CORRESPONDING FREE STANDING GARAGE BUILDINGS PLUS THE COMMUNITY BUILDING, RECREATIONAL AMENITIES AND ALL OTHER OTHER SITE IMPROVEMENTS EXCEPT FOR BUILDINGS IN PHASES 2 AND 3.

    PHASE-2: APARTMENT BUILDINGS 3-6 AND THEIR CORRESPONDING FREE STANDING GARAGES.

    PHASE-3: APARTMENT BUILDINGS 7-8 AND THEIR CORRESPONDING FREE STANDING GARAGES.

PHASE	No. TENTATIVE ALLOCATIONS	ALLOCATIONS YEAR	SITE DEVELOPMENT PLAN SUBMISSION
PHASE 1	54	2006	SDP-03-138, PLAN ORIGINALS SUBMISSION BY 3/24/04
PHASE 2	108	2007	BETWEEN 7/1/04 AND 4/1/05
PHASE 3	54	2008	BETWEEN 7/1/05 AND 1/1/06



SITE OVERVIEW & APFO PHASING PLAN
SCALE: 1" = 100'

SITE DATA

1. GENERAL SITE DATA
   A. PRESENT ZONING: POR
   B. PROPOSED USE OF SITE: AGE-RESTRICTED ADULT HOUSING (WITH A COMMUNITY CENTER)
2. AREA TABULATION FOR PARCEL-C

GROSS ACRE	12.38± AC.
STEEP SLOPE 25% OR GREATER*	1.75±
NET ACRE	10.63± AC.

   * CREATED STEEP SLOPES PER PHASE-1 MASS GRADING (NOT NATURAL STEEP SLOPE)
3. AREA OF THIS SDP SUBMISSION: 12.38± AC.
4. LIMIT OF GRADING DISTURBANCE: 10.9± AC.
5. PARCEL 'C' DEVELOPMENT DATA
   A. PROPOSED NUMBER OF APT. BUILDINGS: 8
   B. PROPOSED NUMBER OF CONDOMINIUM APT. UNITS: 216 TOTAL (27 PER BUILDING) (Phase 1: 54 units)
   C. PARKING REQUIRED:
      216 APT. UNITS @ 1 SPACE PER UNIT = 216 SPACES REQUIRED FOR CONDO APTS.
      4684 SF COMMUNITY CENTER @
      10 SPACES/1000 SF PLUS
      1 SPACE/EMPLOYEE @ 2 EMPLOYEE = 49 SPACES
      30'x 50' SWIMMING POOL AT 1 SPACE
      PER 10 PERSON = 13 (1 PERSON/12 S.F. OF POOL AREA IS PERMITTED BY THE HEALTH DEPARTMENT FOR A POOL THAT IS LESS THAN 5' DEEP. THE NUMBER OF PEOPLE PERMITTED IN A 30'x50' POOL WOULD BE 125)
      278 TOTAL SPACES REQUIRED
   D. PARKING PROVIDED:
      COMMON SURFACE SPACES = 66 SPACES
      * GARAGE SPACES (FREE STANDING) = 40 SPACES
      * GARAGE SPACES (INTEGRAL TO APT. BLDG) = 176 SPACES (EA. APT HAS 22 SPACES)
      * DRIVEWAY SPACES = 230 SPACES (BLDG. 8 = 34 SP.)
      (BLDG. 1-7 = 28 SP. EA.)
      512 TOTAL SPACES PROVIDED

      * THE GARAGE AND DRIVEWAY SPACES (446 TOTAL) ARE FOR THE APARTMENT UNITS. AN AVERAGE OF 2 SPACES PER UNIT (446/216) IS PROVIDED. NOTE THAT AT LEAST ONE GARAGE SPACE PER UNIT IS PROVIDED (216 GARAGE SPACES FOR 216 UNITS). A UNIT THAT OWNS A GARAGE WITH A DRIVEWAY WOULD HAVE AN EXCLUSIVE PARKING AREA FOR 2 OR MORE CARS (DEPENDING ON THE LENGTH OF THE DRIVEWAYS).
   E. OPEN SPACE/RECREATION OPEN SPACE:
      1. THE REQUIRED OPEN SPACE PER SUBDIVISION SECTION 16.121(a)(4)(vi) IS 400 S.F./APT. UNIT. FOR THE 216 UNITS PROPOSED, THE AREA RECREATIONAL OPEN SPACE THAT WOULD BE REQUIRED IS 86,400 SQUARE FEET.

      2. THE RECREATIONAL OPEN SPACE PROVIDED FOR THIS PROJECT IS 48,972 SQUARE FEET (226 S.F. PER UNIT) AS APPROVED BY WP-04-18.

      3. WP-04-18 WAS APPROVED ON SEPTEMBER 26, 2003 TO WAIVE SECTION 16.121(a)(4)(vi) TO REDUCE THE AREA OF RECREATION OPEN SPACE REQUIRED FOR AN APARTMENT UNIT FROM 400 SQUARE FEET TO 226 SQUARE FEET. AS SHOWN ON THIS SDP, AN AMENITY PACKAGE (INCLUDING A TENNIS COURT, BOCCE COURTS, A POOL AND A COMMUNITY BUILDING) WITHIN AN AREA OF 48,972 SQUARE FEET PROVIDES RECREATION FOR THIS COMMUNITY.

SHEET INDEX

1 COVER SHEET
2 SITE DEVELOPMENT PLAN
3 SITE DEVELOPMENT PLAN
4 PAVING AND CURB DELINEATION PLAN
5 SITE DETAILS
6 SITE DETAILS
7 SITE DETAILS
8 WATER AND SEWER PROFILES
9 STORM DRAIN PROFILES
10 STORM DRAIN PROFILES
11 STORM DRAIN PROFILES
12 DRAINAGE AREA MAP
13 SEDIMENT CONTROL PLAN (PHASE 2)
14 SEDIMENT CONTROL PLAN (PHASE 3)
15 SEDIMENT CONTROL NOTES & DETAILS
16 SEDIMENT CONTROL NOTES & DETAILS
17 SEDIMENT CONTROL NOTES & DETAILS
18 LANDSCAPE PLAN
19 LANDSCAPE NOTES & DETAILS
20 ROOF DRAIN PLAN
21 RETAINING WALL ELEVATIONS AND DETAILS
22 MASS GRADING PLAN
23 DRAINAGE DETAILS
24 MASS GRADING NOTES AND DETAILS
25 FOREST CONSERVATION PLAN

STREET ADDRESS		
COMMUNITY BUILDING	7300	MAPLECREST
BUILDING 1	7305	
BUILDING 2	7315	
BUILDING 3	6150	SHADYWOOD
BUILDING 4	6155	SHADYWOOD
BUILDING 5	7335	BROOKVIEW
BUILDING 6	7325	
BUILDING 7	7315	
BUILDING 8	7305	
GARAGE 1	7303	MAPLECREST
GARAGE 2	6153	SHADYWOOD
GARAGE 3	7312	MAPLECREST
GARAGE 4	7317	MAPLECREST
GARAGE 5	7337	BROOKVIEW
GARAGE 6	7322	
GARAGE 7	7313	
GARAGE 8	7303	

WATER CODE:	SEWER CODE:
H02	1454500

SUBDIVISION PLAT NAME:				SECTION/AREA	PARCEL	CENSUS TRACT
CENTRE 9500 PARCEL 'C'				N/A	C	6029
PLAT	ZONE	TAX MAP	BLOCK	ELEC. DIST.		
14213/16515	POR	37	11	1		

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

Penny Rosenstein (PR)	4/2/04
County Health Officer	Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Marsha McLaughlin	6/1/04
Director	Date
Cindy Hamilton	6/1/04
Chief, Division of Land Development	Date
[signature]	3/30/04
Chief, Development Engineering Division	Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP-CS.dwg | DES. | DRN. kjP | CHK.

DATE	REVISION	BY	APP'R.
12-13-05	Update APFO Phasing; adding/completing Phase III		
12-20-04	Update APFO Phasing		

PREPARED FOR:

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

COVER SHEET

CENTRE 9500 PARCEL-C, PL. 1
AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213/16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	1 OF 25

SDP-03-138

NOTES:

1. UNLESS NOTED OTHERWISE, PROPOSED SPOT ELEVATIONS ALONG THE CONCRETE CURB & GUTTER ARE TO THE FLOW LINE (BOTTOM OF CURB) AT THE PC'S/PT'S AND CORNERS.

2. FOR CURB TYPE, PAVING DELINEATION AND DRIVE WAY CENTER LINE INFORMATION SEE SHEET #4.

3. ALL ON-SITE PAVING AND ROADWAYS ARE PRIVATE.

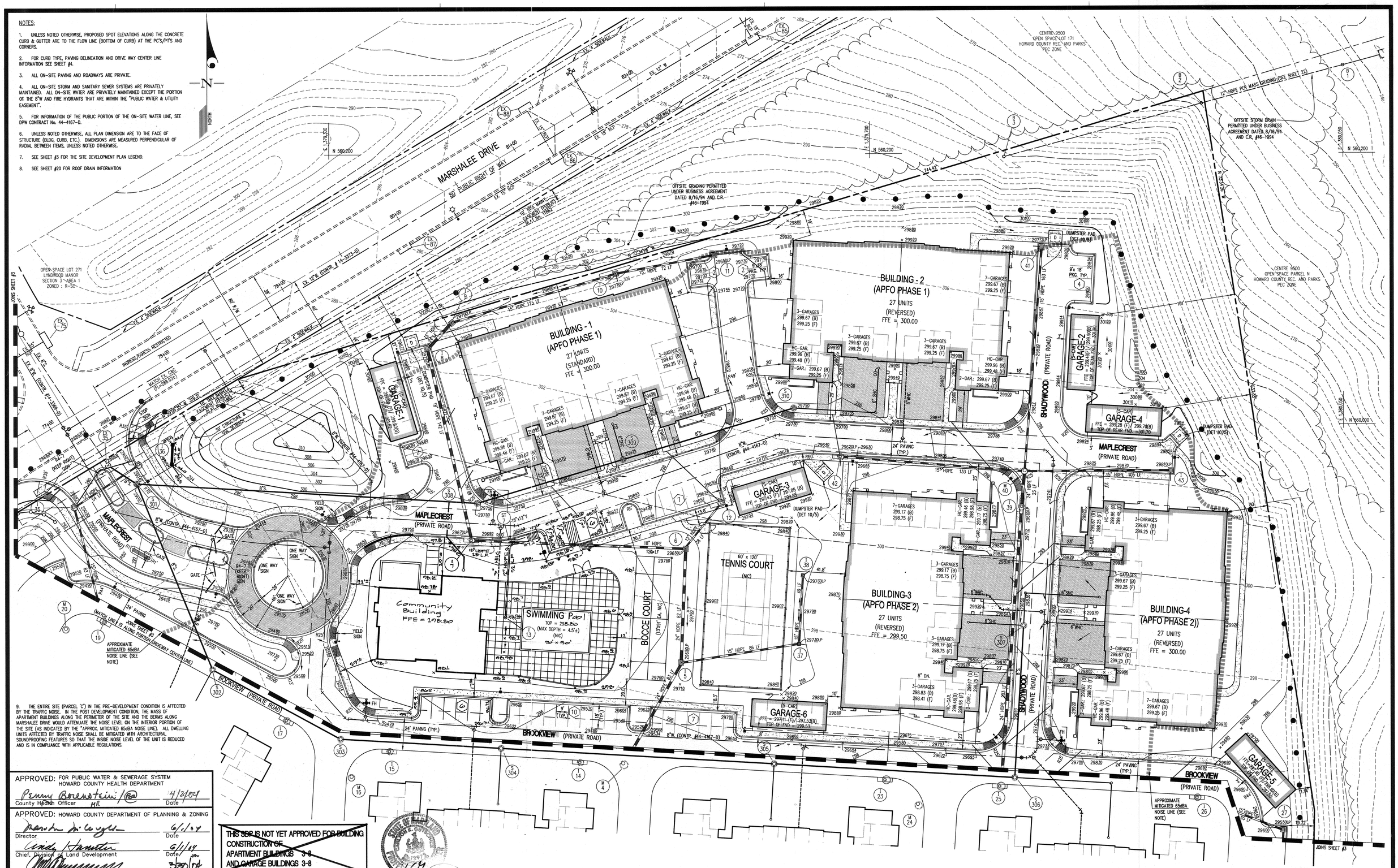
4. ALL ON-SITE STORM AND SANITARY SEWER SYSTEMS ARE PRIVATELY MAINTAINED. ALL ON-SITE WATER ARE PRIVATELY MAINTAINED EXCEPT THE PORTION OF THE 8"W AND FIRE HYDRANTS THAT ARE WITHIN THE "PUBLIC WATER & UTILITY EASEMENT".

5. FOR INFORMATION OF THE PUBLIC PORTION OF THE ON-SITE WATER LINE, SEE DPW CONTRACT No. 44-4167-D.

6. UNLESS NOTED OTHERWISE, ALL PLAN DIMENSION ARE TO THE FACE OF STRUCTURE (BLDG, CURB, ETC.). DIMENSIONS ARE MEASURED PERPENDICULAR OF RADIAL BETWEEN ITEMS, UNLESS NOTED OTHERWISE.

7. SEE SHEET #3 FOR THE SITE DEVELOPMENT PLAN LEGEND.

8. SEE SHEET #20 FOR ROOF DRAIN INFORMATION



9. THE ENTIRE SITE (PARCEL 'C') IN THE PRE-DEVELOPMENT CONDITION IS AFFECTED BY THE TRAFFIC NOISE. IN THE POST DEVELOPMENT CONDITION, THE MASS OF APARTMENT BUILDINGS ALONG THE PERIMETER OF THE SITE AND THE BERMS ALONG MARSHALEE DRIVE WOULD ATTENUATE THE NOISE LEVEL ON THE INTERIOR PORTION OF THE SITE (AS INDICATED BY THE "APPROX. MITIGATED 65dBA NOISE LINE). ALL DWELLING UNITS AFFECTED BY TRAFFIC NOISE SHALL BE MITIGATED WITH ARCHITECTURAL SOUNDPROOFING FEATURES SO THAT THE INSIDE NOISE LEVEL OF THE UNIT IS REDUCED AND IS IN COMPLIANCE WITH APPLICABLE REGULATIONS.

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

Penny Bornstein / RM	4/21/04
County Health Officer	Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Marsha McLaughlin	6/1/04
Director	Date
Cindy Hamilton	6/1/04
Chief, Division of Land Development	Date
[illegible]	3/30/04
Chief, Development Engineering Division	Date

THIS SDP IS NOT YET APPROVED FOR BUILDING CONSTRUCTION OF APARTMENT BUILDINGS 3-8 AND GARAGE BUILDINGS 3-8

STATE OF MARYLAND
GARY R. GUTSCHICK
No. 12973

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP2-3.dwg | DES. MBT | DRN. MBT/MP | CHK. MBT

DATE	REVISION	BY	APP'R.
07-12-05	add entrance monument features and rev. grading around entrance monument		
6-6-05	Revise Community bldg.		
11-20-04	Rewite community bldg. & update APFO Phasing		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SITE DEVELOPMENT PLAN

CENTRE 9500 PARCEL-C, PH. 1

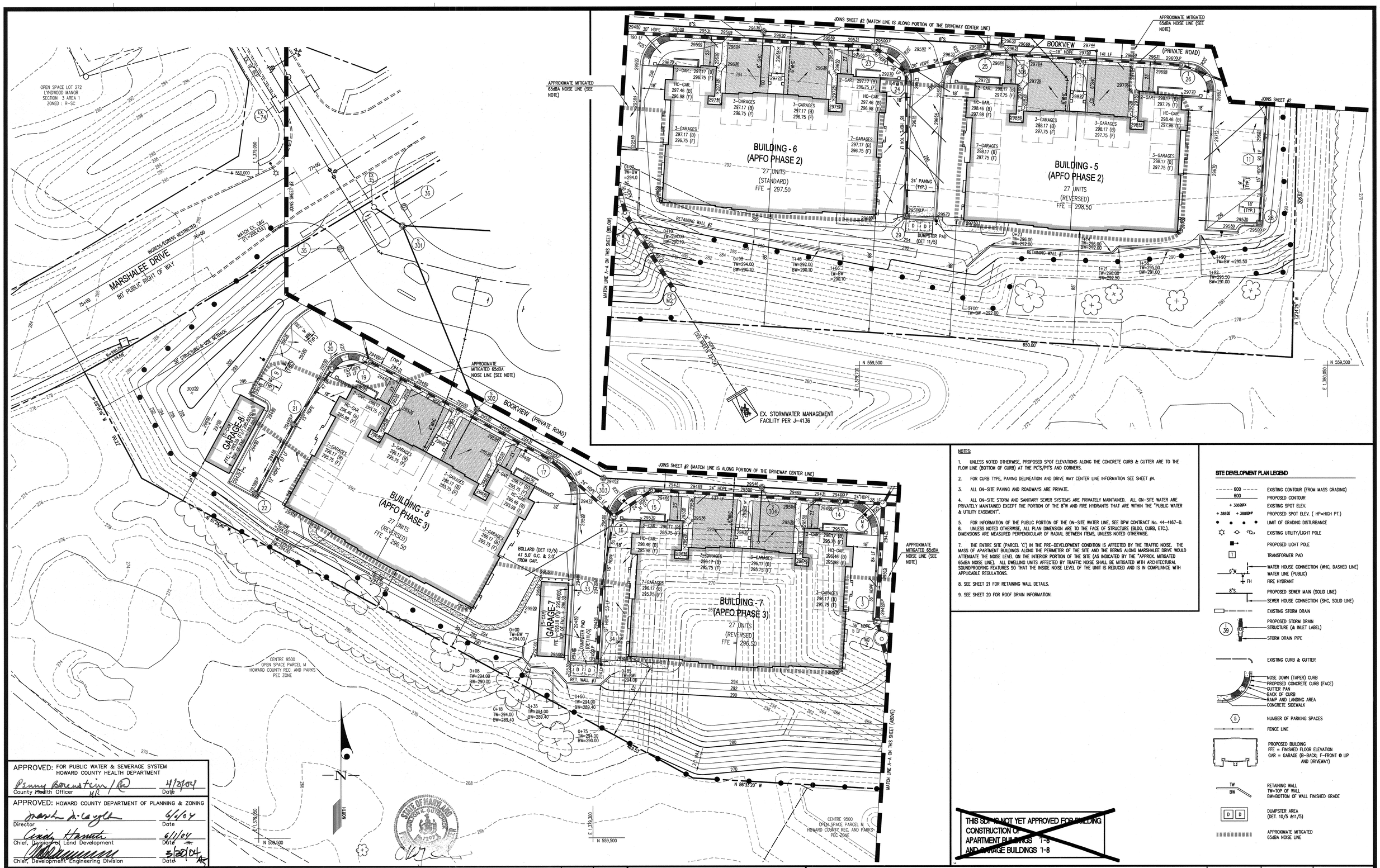
AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213/16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	2 OF 25

SDP-03-138



NOTES:

1. UNLESS NOTED OTHERWISE, PROPOSED SPOT ELEVATIONS ALONG THE CONCRETE CURB & GUTTER ARE TO THE FLOW LINE (BOTTOM OF CURB) AT THE PC'S/PT'S AND CORNERS.
2. FOR CURB TYPE, PAVING DELINEATION AND DRIVE WAY CENTER LINE INFORMATION SEE SHEET #4.
3. ALL ON-SITE PAVING AND ROADWAYS ARE PRIVATE.
4. ALL ON-SITE STORM AND SANITARY SEWER SYSTEMS ARE PRIVATELY MAINTAINED. ALL ON-SITE WATER ARE PRIVATELY MAINTAINED EXCEPT THE PORTION OF THE 8"W AND FIRE HYDRANTS THAT ARE WITHIN THE "PUBLIC WATER & UTILITY EASEMENT".
5. FOR INFORMATION OF THE PUBLIC PORTION OF THE ON-SITE WATER LINE, SEE DPW CONTRACT No. 44-4167-D.
6. UNLESS NOTED OTHERWISE, ALL PLAN DIMENSION ARE TO THE FACE OF STRUCTURE (BLDG, CURB, ETC.). DIMENSIONS ARE MEASURED PERPENDICULAR OF RADIAL BETWEEN ITEMS, UNLESS NOTED OTHERWISE.
7. THE ENTIRE SITE (PARCEL 'C') IN THE PRE-DEVELOPMENT CONDITION IS AFFECTED BY THE TRAFFIC NOISE. THE MASS OF APARTMENT BUILDINGS ALONG THE PERIMETER OF THE SITE AND THE BERMS ALONG MARSHALEE DRIVE WOULD ATTENUATE THE NOISE LEVEL ON THE INTERIOR PORTION OF THE SITE (AS INDICATED BY THE "APPROX. MITIGATED 65dBA NOISE LINE). ALL DWELLING UNITS AFFECTED BY TRAFFIC NOISE SHALL BE MITIGATED WITH ARCHITECTURAL SOUNDPROOFING FEATURES SO THAT THE INSIDE NOISE LEVEL OF THE UNIT IS REDUCED AND IS IN COMPLIANCE WITH APPLICABLE REGULATIONS.
8. SEE SHEET 21 FOR RETAINING WALL DETAILS.
9. SEE SHEET 20 FOR ROOF DRAIN INFORMATION.

SITE DEVELOPMENT PLAN LEGEND

600	EXISTING CONTOUR (FROM MASS GRADING)
600	PROPOSED CONTOUR
+ 38600EX	EXISTING SPOT ELEV.
+ 38800 + 38800HP	PROPOSED SPOT ELEV. (HP=HIGH PT.)
	LIMIT OF GRADING DISTURBANCE
	EXISTING UTILITY/LIGHT POLE
	PROPOSED LIGHT POLE
T	TRANSFORMER PAD
6"W	WATER HOUSE CONNECTION (WHC, DASHED LINE)
	WATER LINE (PUBLIC)
FH	FIRE HYDRANT
8"S	PROPOSED SEWER MAIN (SOLID LINE)
	SEWER HOUSE CONNECTION (SHC, SOLID LINE)
	EXISTING STORM DRAIN
39	PROPOSED STORM DRAIN STRUCTURE (& INLET LABEL)
	STORM DRAIN PIPE
	EXISTING CURB & GUTTER
	NOSE DOWN (TAPER) CURB
	PROPOSED CONCRETE CURB (FACE)
	GUTTER PAN
	BACK OF CURB
	RAMP AND LANDING AREA
	CONCRETE SIDEWALK
5	NUMBER OF PARKING SPACES
	FENCE LINE
	PROPOSED BUILDING FFE = FINISHED FLOOR ELEVATION GAR = GARAGE (B-BACK; F-FRONT @ LIP AND DRIVEWAY)
TW BW	RETAINING WALL TW=TOP OF WALL BW=BOTTOM OF WALL FINISHED GRADE
D D	DUMPSTER AREA (DET. 10/5 &11/5)
	APPROXIMATE MITIGATED 65dBA NOISE LINE

~~THIS SDP IS NOT YET APPROVED FOR BUILDING CONSTRUCTION OF APARTMENT BUILDINGS 7-8 AND GARAGE BUILDINGS 7-8~~

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

Penny Bernstein / MR	4/2/04
County Health Officer	Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Marsha S. McLaughlin	6/1/04
Director	Date
Craig Hansen	6/1/04
Chief, Division of Land Development	Date
	3/30/04
Chief, Development Engineering Division	Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP2-3.dwg DES. MBT DRN. MBT/MP CHK. MBT

DATE	REVISION	BY	APP'R.
11-19-05	Update APFO info.; adding/completing Phase III		
11-30-04	Update APFO info		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SITE DEVELOPMENT PLAN

CENTRE 9500 PARCEL-C, Ph. I

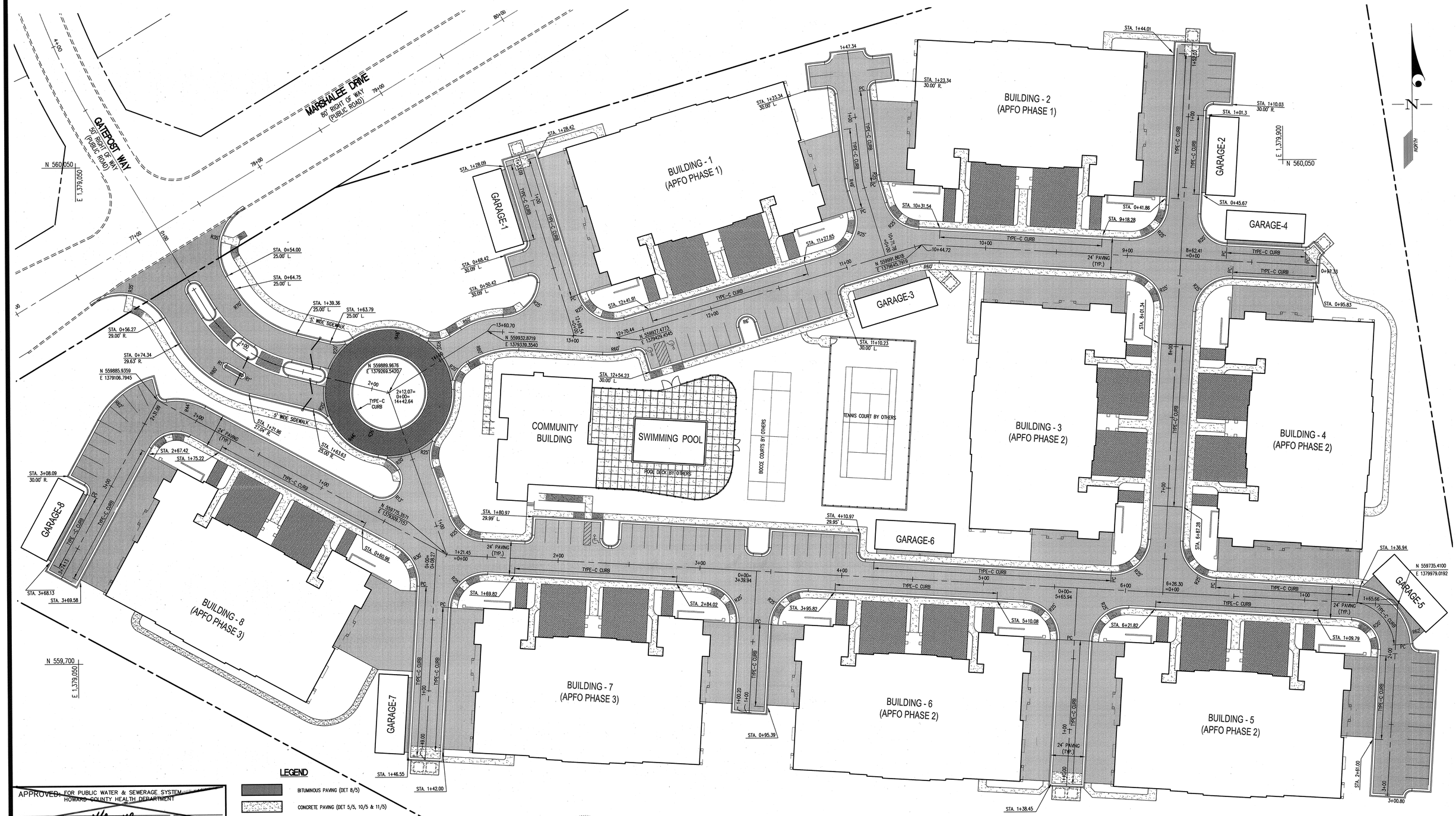
AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213/16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	3 OF 25

SDP-03-138



LEGEND

- BITUMINOUS PAVING (DET 8/5)
- CONCRETE PAVING (DET 5/5, 10/5 & 11/5)
- BRICK PAVERS (SEE SHEET 6)

NOTES:

1. ALL CURB AND GUTTER ARE TYPE-A (DET 6/5) UNLESS NOTED OTHERWISE ON THIS PLAN.
2. PROVIDE 3 L.F. OF TRANSITION BETWEEN TYPE-A & TYPE-C CURBS.
3. ALL SIDEWALKS NOT ADJACENT TO CURB & GUTTER ARE 4' WIDE UNLESS OTHERWISE NOTED.
4. SEE DETAIL ON SHEET 6 FOR THE PORTION OF CURB THAT IS DEPRESSED IN FRONT OF EACH APARTMENT BUILDING.

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director 6/1/04 Date

Chief, Division of Land Development 6/1/04 Date

Chief, Development Engineering Division 3/30/04 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP-PAV.dwg | DES. | DRN. KIP | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

PAVING & CURB DELINEATION PLAN

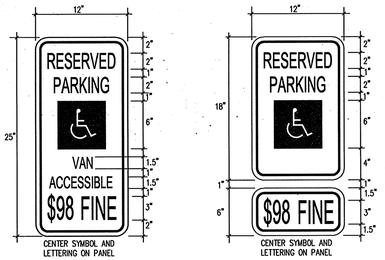
CENTRE 9500 PARCEL-C, Ph. 1

AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 /16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	4 OF 25

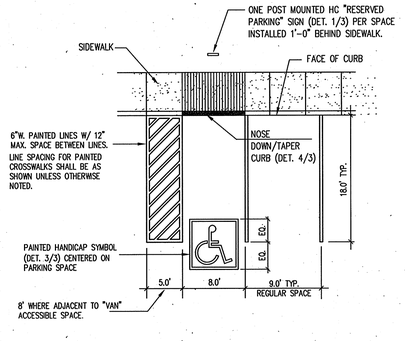
SDP-03-138



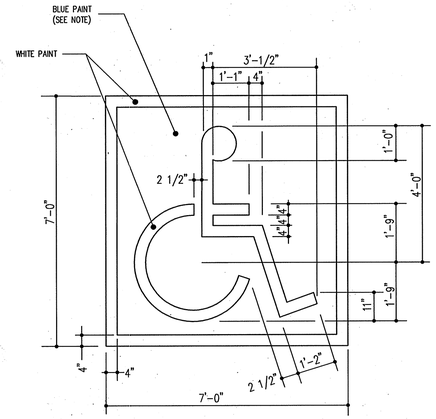
GENERAL NOTES:

1. SIGNS SHALL MEET DESIGN STANDARDS OF THE FEDERAL HIGHWAY ADMINISTRATION AND CONFORM TO THE STATE OF MARYLAND STANDARD HIGHWAY SIGN BOOKLET DETAIL R7-8.
2. ONE SIGN IS REQUIRED PER SPACE PLACED AS SHOWN ON SITE PLAN.
3. SPACES INDICATED ON SITE PLAN AS "VAN" ACCESSIBLE SHALL BE SIGNED ACCORDINGLY.
4. SIGNS SHALL BE POLE MOUNTED WITH HOT DIPPED GALVANIZED COUNTY APPROVED PERFORATED CHANNEL POSTS W/ THE TOP OF THE SIGN 9'-1" ABOVE FINISHED GRADE OR AS INDICATED ON SITE DRAWINGS.
5. SIGN SHALL BE ATTACHED TO FLANGED SIDE OF POST. POST SHALL EXTEND INTO GROUND 2'-6" MIN.
6. COLORS: LEGEND AND BORDER – GREEN
   SYMBOL – WHITE ON BLUE BACKGROUND
   BACKGROUND – WHITE

1 HANDICAP PARKING SIGNS DETAIL NO SCALE

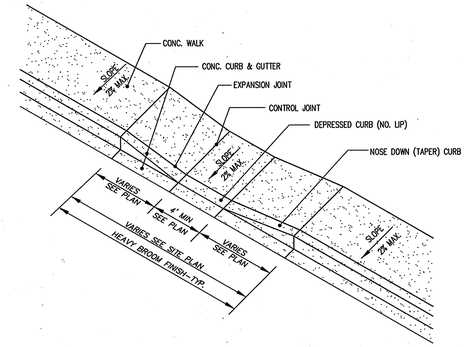


2 PARKING SPACE LAYOUT NO SCALE

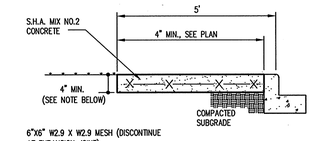


NOTE: SYMBOL IS REQUIRED TO CONTRAST WITH BACKGROUND (WHITE ON BLUE, COLOR NO. 105090 IN FED. STANDARD 595a-DOUBLE COAT TYP.)

3 HANDICAP SPACE STENCIL LAYOUT NO SCALE



4 TYPE-A HANDICAP RAMP DETAIL NO SCALE

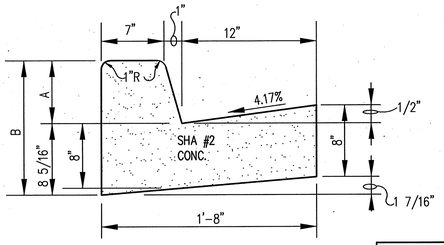


6"X6" W2.9 X W2.9 MESH (DISCONTINUE AT EXPANSION JOINT).

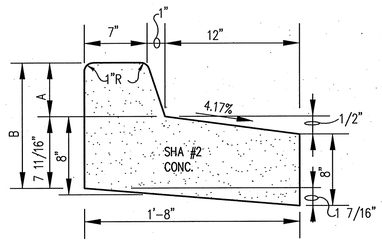
NOTE:

1. UNLESS SHOWN OTHERWISE, INSTALL EXPANSION JOINTS AT MAX. 20'-0" O.C. AND SCORING JOINTS AT MAX. 5'-0" O.C.
2. CONCRETE THICKNESS SHALL BE 7" AT DRIVEWAY LOCATIONS.
3. PROVIDE 1/2" PREFORMED BITUMINOUS EXPANSION JOINT WHERE SIDEWALK ABUTS AGAINST CURB AND SET SIDEWALK 1/4" ABOVE CURB PER HO. CO. DET. R-3.05.

5 TYPICAL SIDEWALK SECTION NO SCALE



STANDARD COMBINATION CURB AND GUTTER



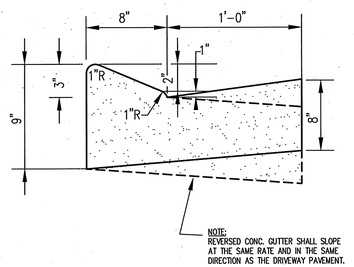
REVERSE COMBINATION CURB AND GUTTER

CURB HEIGHT	A	B
6"	6"	1'-2 5/16"
7"	7 3/16"	1'-3 1/2"

NOTES:

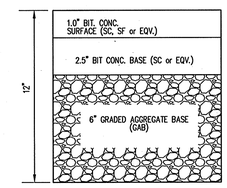
1. 50' MAX. BETWEEN EXPANSION JOINTS & 10' MAX. BETWEEN CONTROL JOINTS.
2. ALL ON-SITE CURB & GUTTER SHALL BE 6" HIGH. CURB & GUTTER IN MARSHALEE DRIVE R.O.W. SHALL BE 7" HIGH.
3. STANDARD CURB & GUTTER SHALL BE USED WHERE THE DRIVEWAY SLOPES TOWARDS THE CURB & GUTTER. REVERSE CURB & GUTTER SHALL BE USED WHERE THE DRIVEWAY SLOPES AWAY FROM THE CURB & GUTTER.

6 TYPE-A CONCRETE CURB AND GUTTER (STANDARD AND REVERSE) NO SCALE



NOTE:
REVERSED CONC. GUTTER SHALL SLOPE AT THE SAME RATE AND IN THE SAME DIRECTION AS THE DRIVEWAY PAVEMENT.

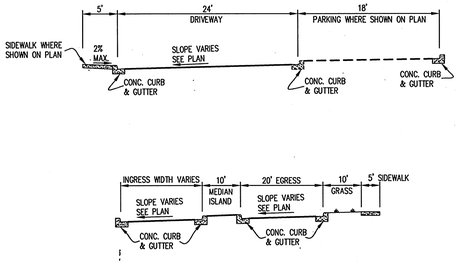
7 TYPE 'C' COMBINATION CURB AND GUTTER NO SCALE



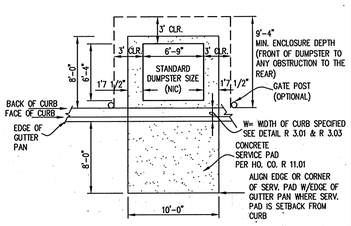
NOTE:

GRADED AGGREGATE BASE (GAB) SHALL BE PLACED AND COMPACTED IN 6 INCH MAXIMUM COMPACTED THICKNESS LAYERS.

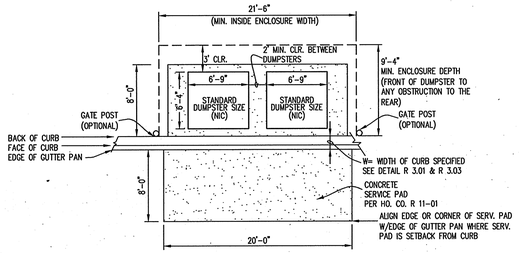
8 BITUMINOUS PAVING SECTION NO SCALE



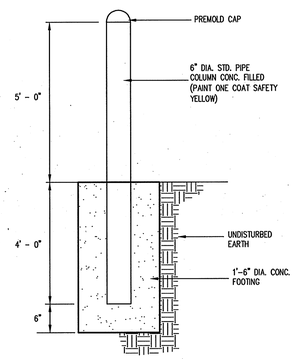
9 TYPICAL PRIVATE ROAD SECTIONS NO SCALE



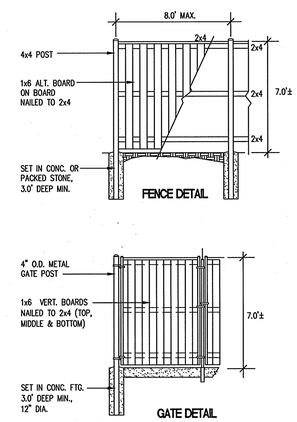
10 SOLID WASTE CONTAINER ENCLOSURE (SINGLE) NO SCALE



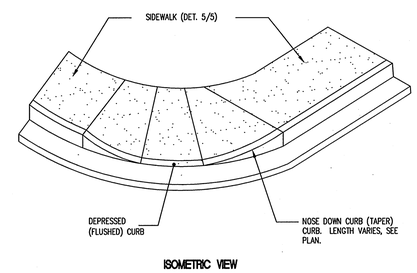
11 SOLID WASTE DOUBLE CONTAINER ENCLOSURE NO SCALE



12 BOLLARD DETAIL NO SCALE



13 DUMPSTER ENCLOSURE DETAIL NO SCALE



14 TYPICAL CURB/NOSE DOWN TAPER AT INTERSECTION NO SCALE

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR	Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director	Date 6/1/04
Chief, Division of Land Development	Date 6/1/04
Chief, Development Engineering Division	Date 3/30/04

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP-DET.dwg | DES. MBT | DRN. KJP | CHK. MBT

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

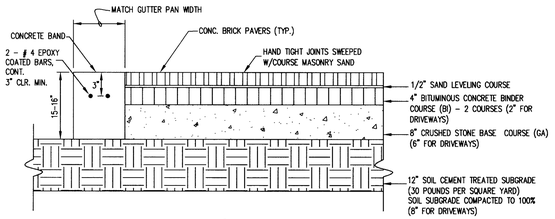
SITE DETAILS

CENTRE 9500 PARCEL-C, Ph.1
AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 /16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

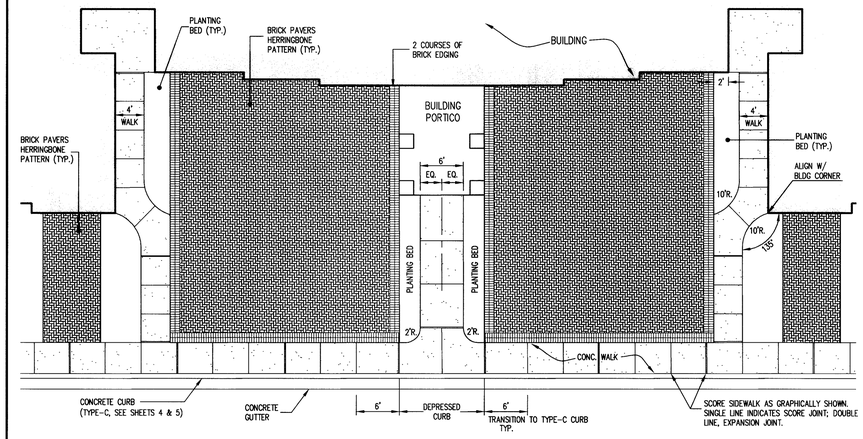
SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	5 OF 25

SDP-03-138

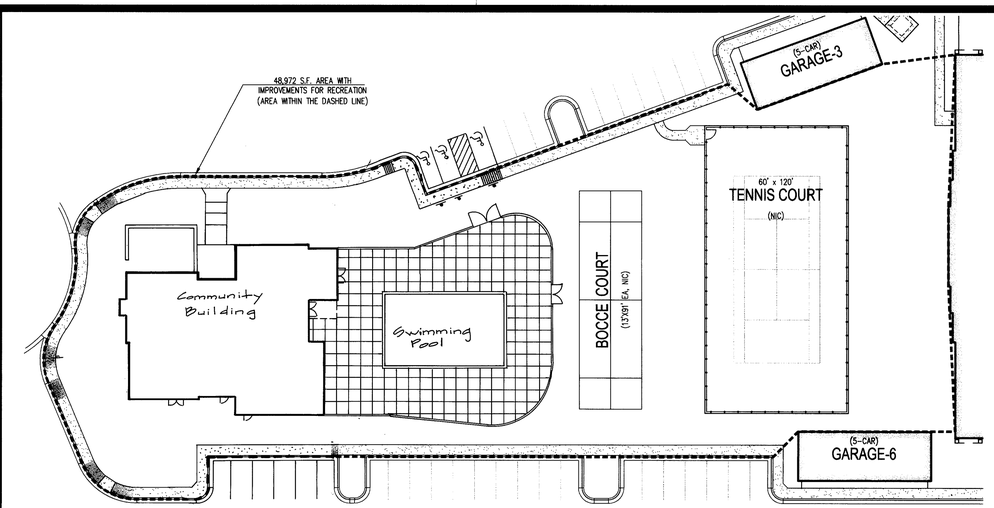


NOTE:
GEOTECH ENGINEER TO CONFIRM DETAIL PRIOR TO INSTALLATION

1 **BRICK PAVER SECTION DETAIL** NO SCALE

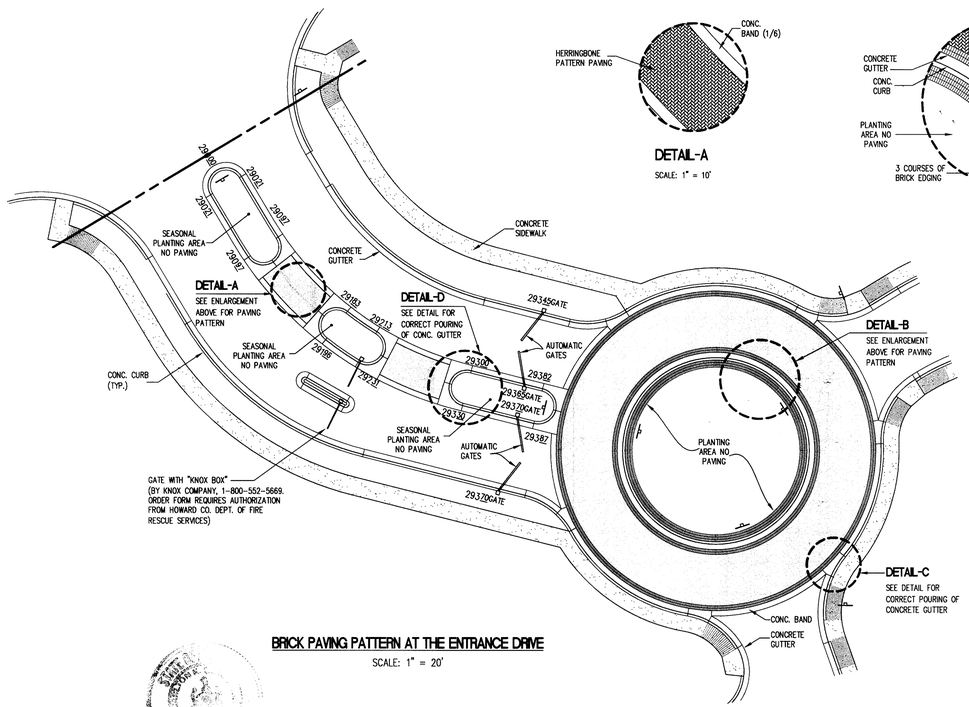


2 **TYPICAL FRONT ENTRY AREA and DRIVEWAY BRICK PAVING PATTERN** SCALE: 1" = 10'



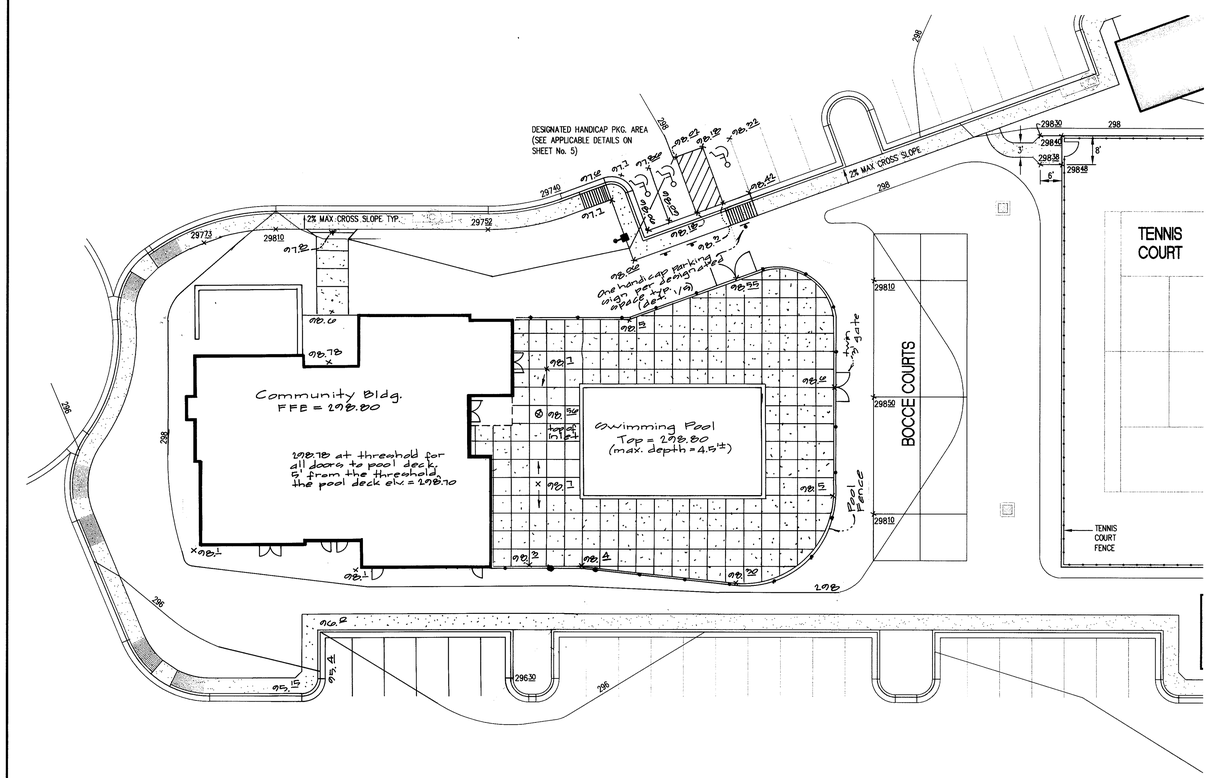
AREA OF AMENITY PACKAGE FOR RECREATION

SCALE: 1" = 30'



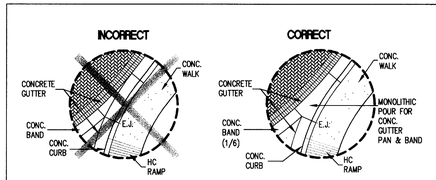
BRICK PAVING PATTERN AT THE ENTRANCE DRIVE

SCALE: 1" = 20'



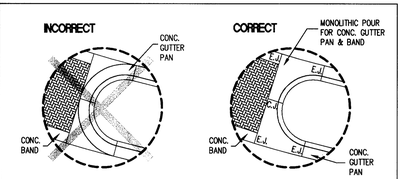
HANDICAP ACCESSIBILITY ROUTE TO THE COMMUNITY BUILDING AND RECREATIONAL ACTIVITIES

SCALE: 1" = 20'



DETAIL-C. TYPICAL INTERSECTION OF GUTTER PAN and CONCRETE BAND DETAIL

SCALE: 1" = 10'



DETAIL-D. TYPICAL TREATMENT WHERE MEDIAN ISLAND ABUTS BRICK PAVING

SCALE: 1" = 10'

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director Date 6/1/04

Chief, Division of Land Development Date 6/1/04

Chief, Development Engineering Division Date 3/30/04

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP-DET.dwg | DES. | DRN. MP | CHK.

DATE	REVISION	BY	APP'R.
6-6-05	Update details w/Comm. Bldg.		
12-30-04	Update details w/Comm. Bldg.		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SITE DETAILS

CENTRE 9500 PARCEL-C, Ph. 1

AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 /16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	6 OF 25

SDP-03-138

COMMUNITY CENTER
FRONT ELEVATION

SCALE: 1" = 20'

COMMUNITY CENTER
REAR ELEVATION

SCALE: 1" = 20'

COMMUNITY CENTER
LEFT ELEVATION

SCALE: 1" = 20'

COMMUNITY CENTER
RIGHT ELEVATION

SCALE: 1" = 20'

REAR ELEVATION

SCALE: 1" = 20'

LEFT ELEVATION

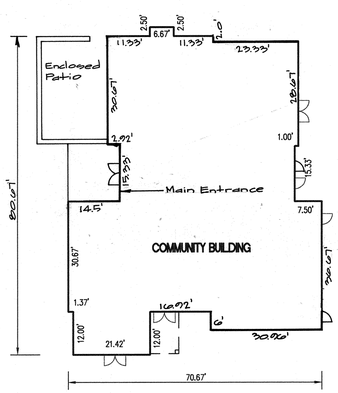
SCALE: 1" = 20'

FRONT ELEVATION

SCALE: 1" = 20'

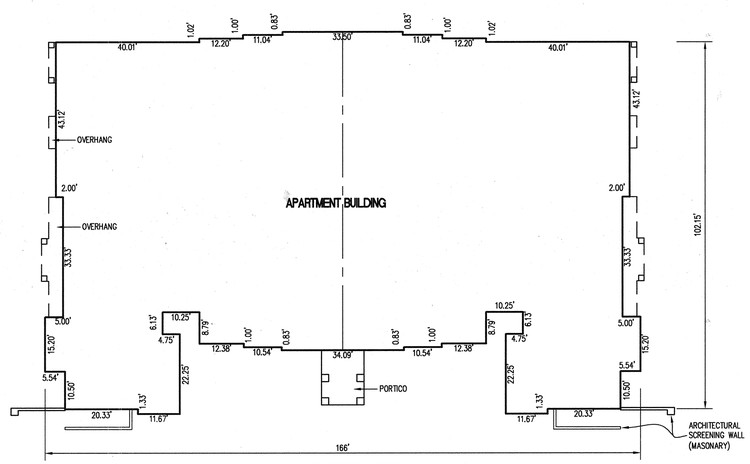
RIGHT ELEVATION

SCALE: 1" = 20'



COMMUNITY BUILDING
PLAN VIEW

SCALE: 1" = 20'

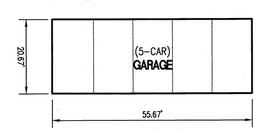


APARTMENT BUILDING
PLAN VIEW

SCALE: 1" = 20'

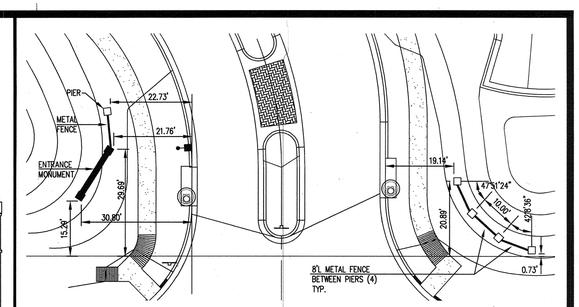
GARAGE ELEVATION

SCALE: 1" = 20'



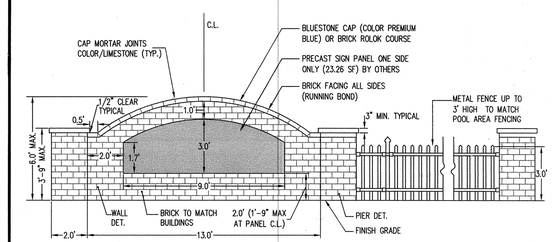
GARAGE BUILDING
PLAN VIEW

SCALE: 1" = 20'



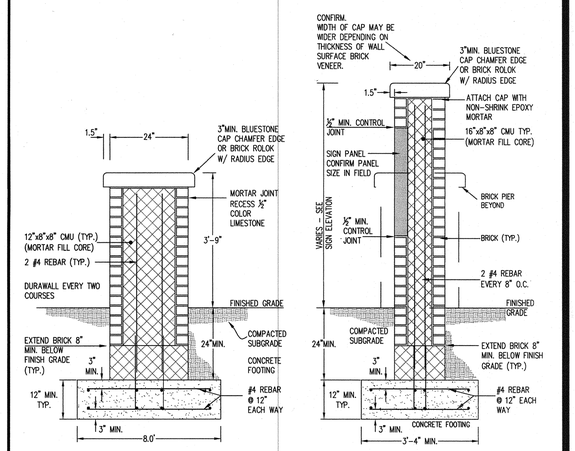
ENTRANCE FEATURE ELEVATION

SCALE: 1"=20'



ENTRANCE FEATURE ELEVATION

1/4" = 1'-0"



ENTRANCE FEATURE PIER DETAIL

ENTRANCE FEATURE WALL DETAIL

ENTRANCE FEATURE NOTES

1. ENTRANCE FEATURE BRICK VENEER SHALL MATCH BUILDING BRICK COLOR.
2. ENTRANCE METAL FENCE STYLE SHALL MATCH COMMUNITY POOL AREA FENCE STYLE.

ENTRANCE FEATURE: WALL and PIER DETAILS

1/4" = 1'-0"

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — Date 6/1/04

Chief, Division of Land Development — Date 6/1/04

Chief, Development Engineering Division — Date 3/30/04

STATE OF MARYLAND — CARLTON K. GUTSCHICK — No. 17297 — PROFESSIONAL ENGINEER

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP-DET.dwg | DES. | DRN. KIP | CHK.

DATE	REVISION	BY	APP'R.
9-12-05	Add entrance feat. elev. details & entrance feature wall & pier details		
6-6-05	Rev. Community Bldg. Plan View Detail		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SITE DETAILS

CENTRE 9500 PARCEL-C, Ph. 1

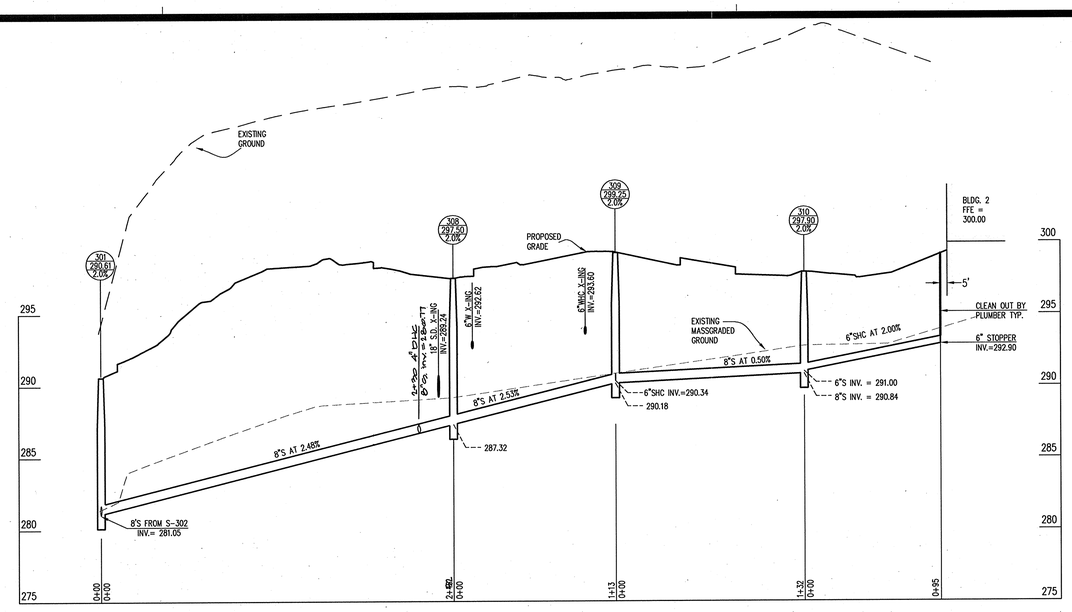
AGE-RESTRICTED ADULT HOUSING

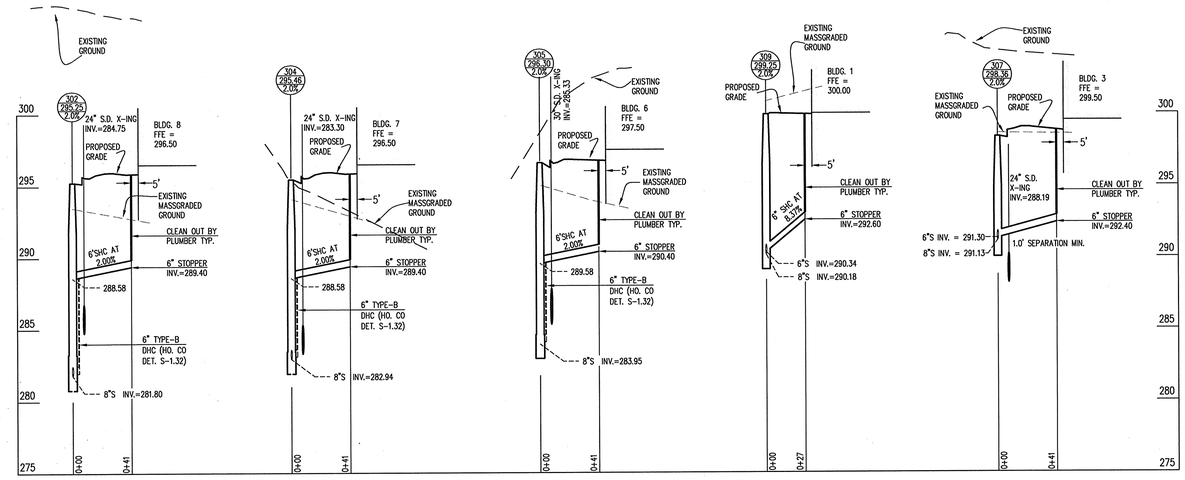
PLAT No. 14213 / 16515

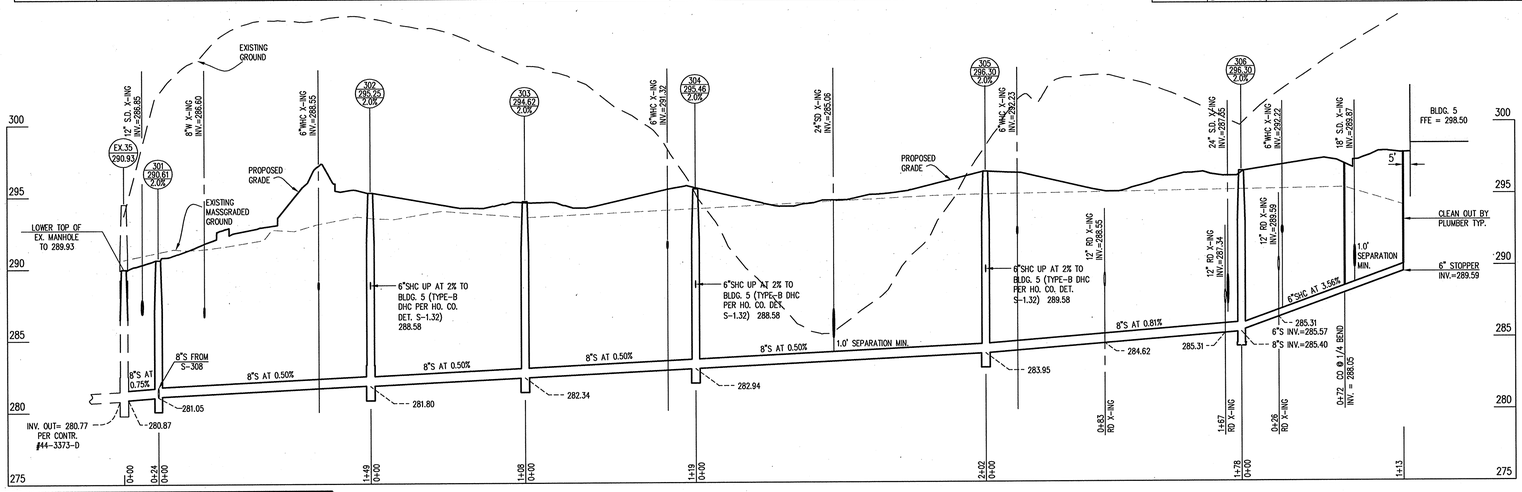
ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

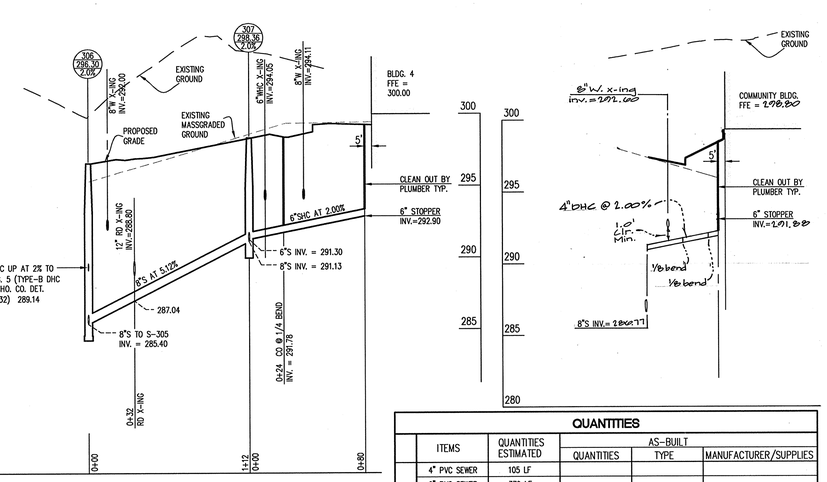
SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	7 OF 25

SDP-03-138







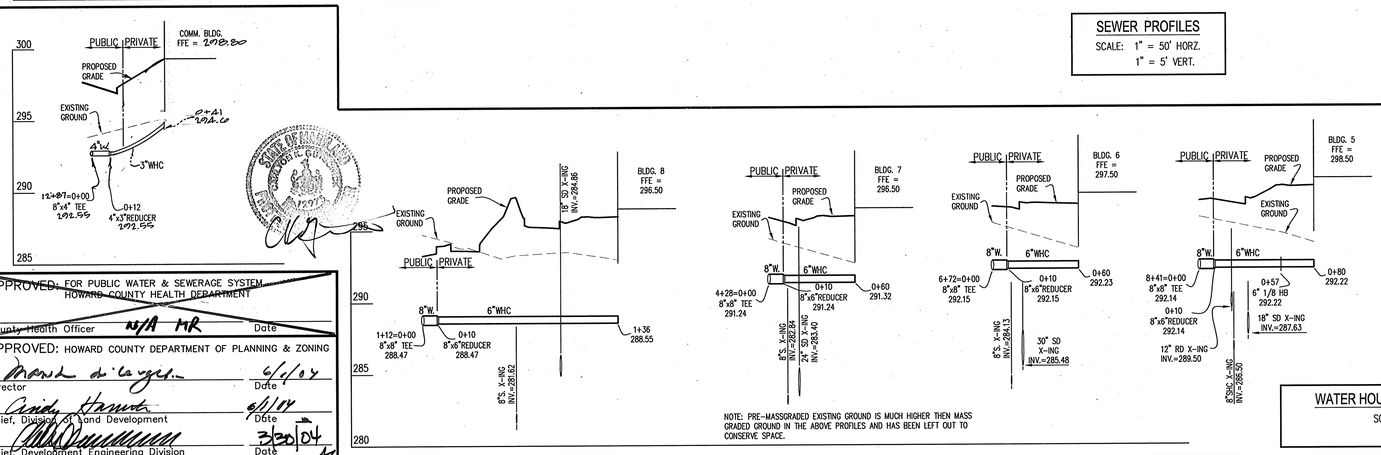


SEWER PROFILES

SCALE: 1" = 50' HORZ.
1" = 5' VERT.

QUANTITIES

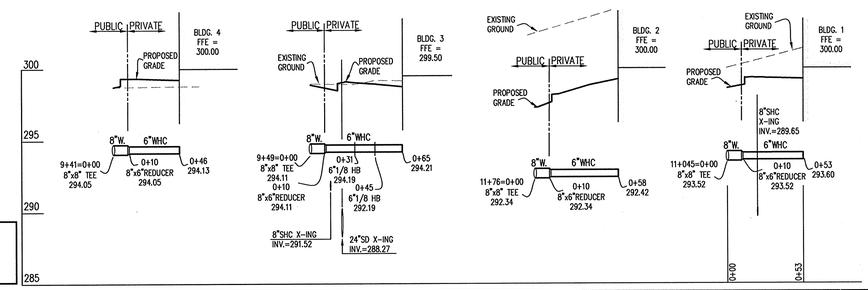
	ITEMS	QUANTITIES ESTIMATED	AS-BUILT QUANTITIES	AS-BUILT TYPE	AS-BUILT MANUFACTURER/SUPPLIES
PRIVATE	4" PVC SEWER	105 LF			
	6" PVC SEWER	379 LF			
	8" PVC SEWER	1384 LF			
	SEWER MH	10			
	6" PVC DROP CONN. (TYPE-B)	3			
	4" DHC	1			
	6" WATER	478 LF			
	3" WATER	29 LF			
	8"x8" REDUCER	8			
	4"x3" REDUCER	1			



NOTE: PRE-MASSGRADED EXISTING GROUND IS MUCH HIGHER THEN MASS GRADED GROUND IN THE ABOVE PROFILES AND HAS BEEN LEFT OUT TO CONSERVE SPACE.

WATER HOUSE CONNECTION PROFILES

SCALE: 1" = 50' HORZ.
1" = 5' VERT.



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer — N/A MR — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — Date 6/1/04
Chief, Division of Land Development — Date 6/1/04
Chief, Development Engineering Division — Date 3/30/04

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\UTILITY-PROFILES.dwg | DES. mbt | DRN. kP | CHK.

DATE	REVISION	BY	APP'R.
12-20-06	Rev. Community Bldg. WHC and SHC		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

WATER AND SEWER PROFILES

CENTRE 9500 PARCEL-C, Ph. 1

AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 / 16515

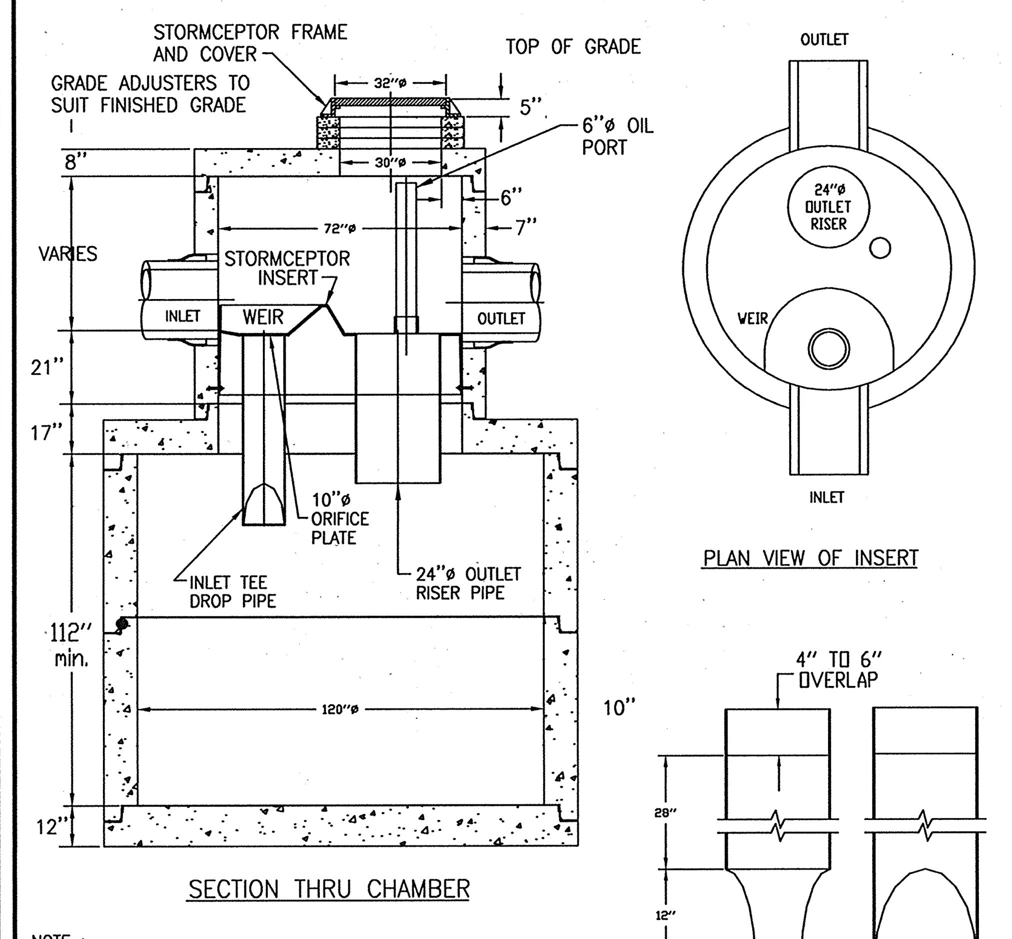
ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	8 OF 25

SDP-03-138

CSR | **Hydro Conduit**
STC 6000 Precast Concrete Stormceptor (6000 US Gallon Capacity)
PROJECT:
LOCATION:

DR. BY: N. BALDWIN
CK. BY:
DATE: SEPT. 19, 2000
SCALE: N.T.S.
DWG.#



NOTE :
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE 24"ø OUTLER RISER PIPE AND THE 6"ø OIL PORT.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.

REV.	DESCRIPTION	BY:	DATE

PROCEDURE TO SEAL LIFT HOLES

1. LIFT HOLES IN THE TANK SECTION ARE TO BE PLUGGED WITH A TAPERED FLEXIBLE PLUG AND KNOCKED INTO THE HOLE WITH A HAMMER. (PLUG MAY BE PLACED IN THE INSIDE OR OUTSIDE OF THE TANK)
2. ONCE THE PLUG IS SET IN PLACE, THE INSIDE AND OUTSIDE OF THE LIFT HOLES MUST BE COVERED WITH CEMENT GROUT.
3. CEMENT GROUT SEAL SHOULD EXTEND FOR 2 TO 3 INCHES BEYOND THE LIFT HOLE OPENING.
4. LIFT HOLES WHICH ARE NOT PART OF THE TANK SECTION NEED ONLY BE SEALED WITH THE FLEXIBLE PLUG KNOCKED INTO PLACE.

CONSTRUCTION NOTES

1. SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STORMCEPTOR UNTIL THE CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED. SILT MAY BE ALLOWED TO ENTER STORMCEPTOR IF IT IS BEING USED AS A FINAL SEDIMENT CONTROL FILTERING DEVICE.
2. ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
3. THE STORMCEPTOR MUSR BE PUMPED OUT AND CLEANED AT THE END OF THE CONSTRUCTION OF THE PROJECT.

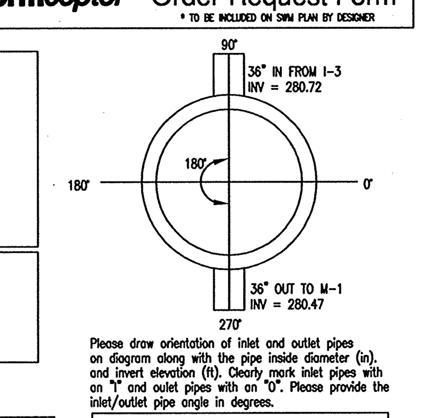
SEQUENCE OF CONSTRUCTION AND INSPECTOR'S CHECK-OFF LIST FOR STORMWATER MANAGEMENT STORMCEPTOR

STAGE	DEVELOPER'S ENGINEER'S APPROVAL	DEP INSPECTOR APPROVAL
	INITIALS/DATE	INITIALS/DATE
1. PRE-CONSTRUCTION MEETING*		
2. INSTALLATION OF STORMCEPTOR* & ASSOCIATED STORM DRAINAGE: a. OBTAIN APPROVAL OF SUBGRADE		
b. INSTALLATION OF PRECAST BASE & LOWER TANK*		
c. INSTALLATION OF PRECAST MIDDLE SECTION WITH STORMCEPTOR INSERTS*		
d. INSTALLATION OF PRECAST TOP SLAB*		
E. INSTALLATION OF ADJUSTMENT RINGS AND FRAME AND COVER*		
3. BACKFILLING OPERATION AND COMPACTION		
4. SITE IS PERMANENTLY STABILIZED. SEDIMENT CONTROL MEASURES REMOVED AND ALL DEBRIS REMOVED FROM STORMCEPTOR*		
5. FINAL INSPECTION*		

Precast Concrete Stormceptor® Order Request Form
* TO BE INCLUDED ON SWM PLAN BY DESIGNER

CONTRACTOR INFORMATION
Name
Address
City
State
Zip Code
Contact
Phone
Fax

OWNER INFORMATION
Name BEAZER HOMES, INC.
Phone 410-720-5021
Fax JEREMY HUGHES



Please draw orientation of inlet and outlet pipes on diagram along with the pipe inside diameter (in). and invert elevation (ft). Clearly mark inlet pipes with an "I" and oulet pipes with an "O". Please provide the inlet/outlet pipe angle in degrees.

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

Stormceptor® Model STC			
900	☐	3600	☐
1200	☐	4800	☐
1800	☐	6000	■
2400	☐	7200	☐

Insert Size	
DISC	☐
22"	☐
32"	☐
44"	■
CUSTOM	

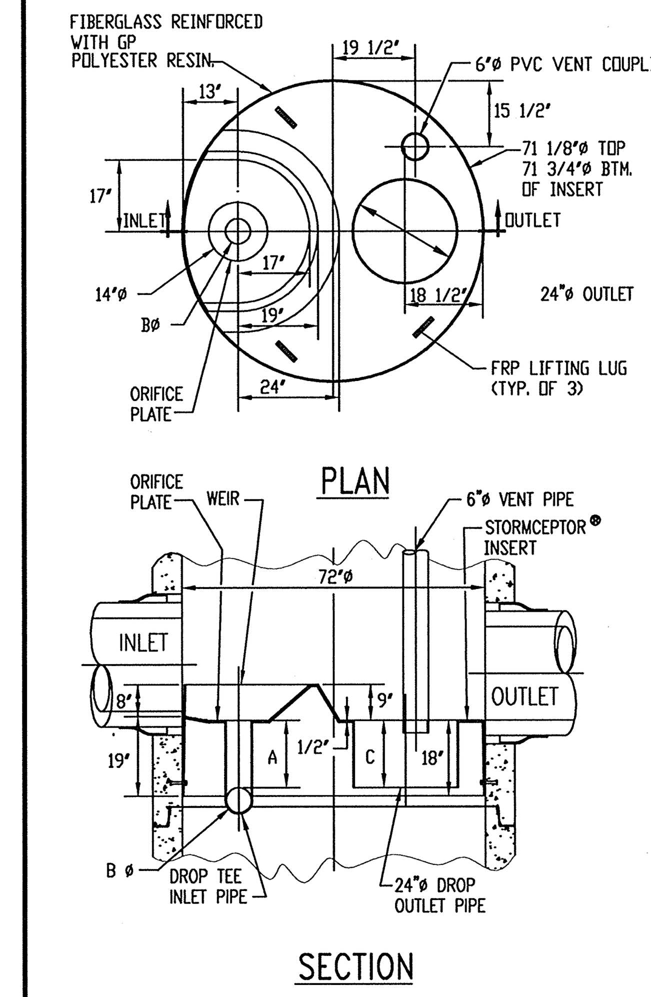
Manhole Number	WQ-2
Top Elevation (ft)	294.60
Inlet Pipe Invert (ft)	280.72
Outlet Pipe Invert (ft)	280.47
Pipe Type	HDPE
Inlet Pipe Inside Diameter (ID)	36"
Inlet Pipe Outside Diameter (OD)	46"
Outlet Pipe Inside Diameter (ID)	36"
Outlet Pipe Outside Diameter (OD)	46"

Project Name CENTRE 9500 PARCEL C - LYNWOOD
Approximate time frame of delivery (weeks)
Delivery Address: Street
City: State: Zip Code
Designer Company GUTSCHICK LITTLE AND WEBER PA
Designer Contact BRIAN MAGUIRE Phone 301-421-4024 Fax 301-421-4186

PLEASE FILL OUT COMPLETELY AND FAX TO: CSR Hydro Conduit
ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)971-1900
FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)971-1900

CSR | **Hydro Conduit**
6800 Loisdale Road, Springfield, VA 22150 (703) 971-1900
STORMCEPTOR DISK TYPE
FIBERGLASS INSERT DETAIL

DR. BY: EPOM
CK. BY: RCH
DATE: 1-16-97
SCALE: 3/8" = 1'-0"
DWG.# CA-0225-01

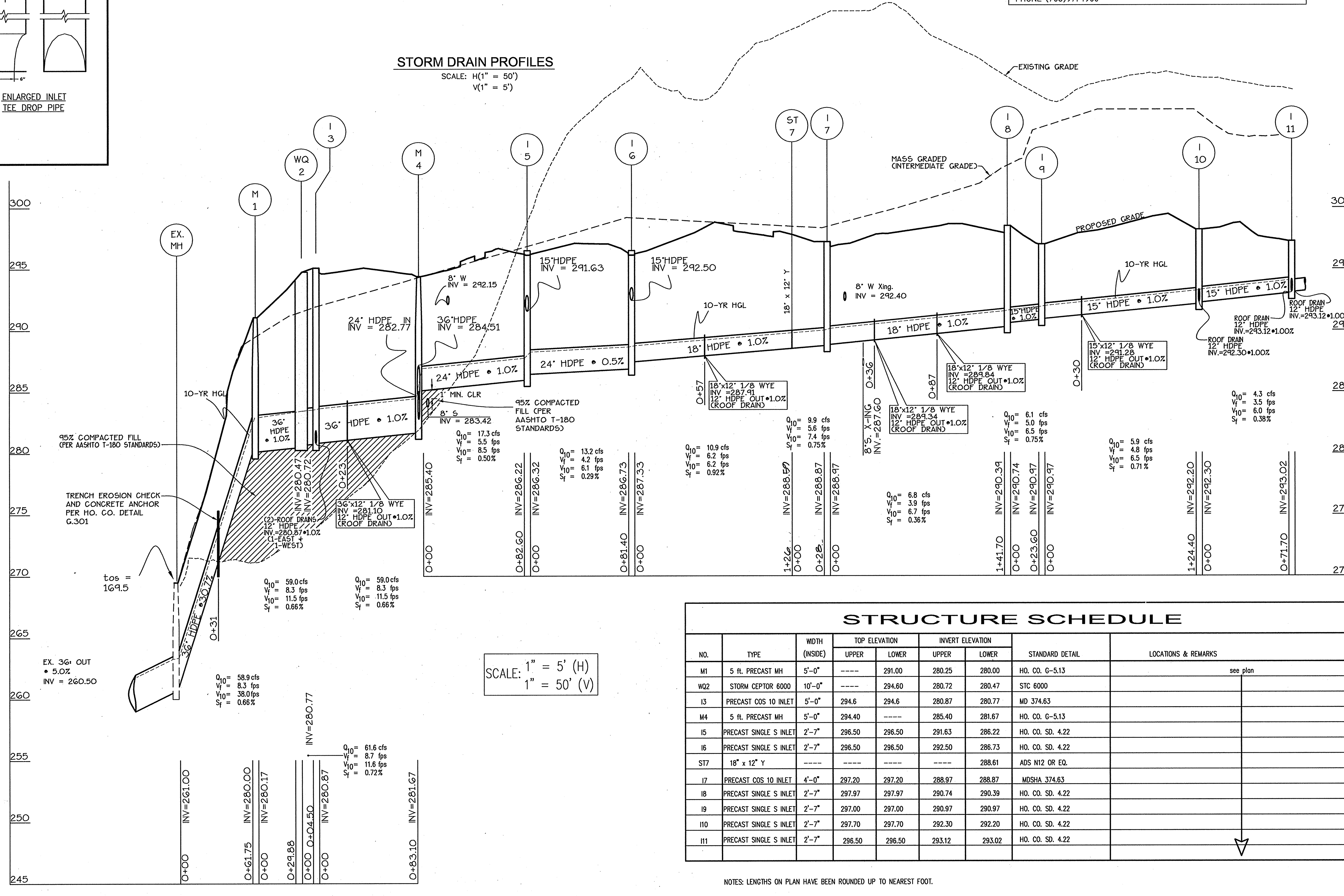


GENERAL NOTES:
1. CSR HYDRO CONDUIT RECOMMENDS THE USE OF FLEXIBLE PIPE CONNECTORS AT THE INLET PIPE AND OUTLET PIPE WHERE APPLICABLE.
2. STORMCEPTOR FRAME AND COVER TO BE POSITIONED OVER OUTLET DROP PIPE.
3. INSERT TO BE INSTALLED WITH SIX 1/2" DROP-IN ANCHORS AND BOLTS.
4. INSERT TO BE SEALED AROUND CIRCUMFERENCE WITH CHEMREX 948.

UNIT	A (in.)	Bø (in.)	C (in.)
STC 900	16	6	16
STC 1200	16	6	16
STC 1800	16	6	16
STC 2400	44	8	44
STC 3600	44	8	44
STC 4800	44	10	44
STC 6000	44	10	44
STC 7200	44	12	44

REV.	DESCRIPTION	BY:	DATE

STORM DRAIN PROFILES
SCALE: H(1" = 50')
V(1" = 5')



SCALE: 1" = 5' (H)
1" = 50' (V)

STRUCTURE SCHEDULE

NO.	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STANDARD DETAIL	LOCATIONS & REMARKS
M1	5 ft. PRECAST MH	5'-0"	----	291.00	280.25	280.00	HO. CO. G-5.13	see plan
WQ2	STORM CEPTOR 6000	10'-0"	----	294.60	280.72	280.47	STC 6000	
I3	PRECAST COS 10 INLET	5'-0"	294.6	294.6	280.87	280.77	MD 374.63	
M4	5 ft. PRECAST MH	5'-0"	294.40	----	285.40	281.67	HO. CO. G-5.13	
I5	PRECAST SINGLE S INLET	2'-7"	296.50	296.50	291.63	286.22	HO. CO. SD. 4.22	
I6	PRECAST SINGLE S INLET	2'-7"	296.50	296.50	292.50	286.73	HO. CO. SD. 4.22	
ST7	18" x 12" Y	----	----	----	----	288.61	ADS N12 OR EQ.	
I7	PRECAST COS 10 INLET	4'-0"	297.20	297.20	288.97	288.87	MDSHA 374.63	
I8	PRECAST SINGLE S INLET	2'-7"	297.97	297.97	290.74	290.39	HO. CO. SD. 4.22	
I9	PRECAST SINGLE S INLET	2'-7"	297.00	297.00	290.97	290.97	HO. CO. SD. 4.22	
I10	PRECAST SINGLE S INLET	2'-7"	297.70	297.70	292.30	292.20	HO. CO. SD. 4.22	
I11	PRECAST SINGLE S INLET	2'-7"	296.50	296.50	293.12	293.02	HO. CO. SD. 4.22	

NOTES: LENGTHS ON PLAN HAVE BEEN ROUNDED UP TO NEAREST FOOT.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELLY OWNED AND MAINTAINED STORMCEPTOR WATER QUALITY DEVICE

1. THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM , UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE 6 OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.

2. THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.

3. THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.

4. THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.

5. THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE THE HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

Pipe Summary Table

Size (in)	Type (-)	Quantity (LF)	Remarks (-)
12.0	HDPE	1470	ADS N12 or equiv.
15.0	HDPE	1113	ADS N12 or equiv.
18.0	HDPE	540	ADS N12 or equiv.
24.0	HDPE	794	ADS N12 or equiv.
30.0	HDPE	272	ADS N12 or equiv.
36.0	HDPE	171	ADS N12 or equiv.

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

3/19/04
DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP
SIGNATURE OF DEVELOPER/BUILDER 3/19/04
DATE

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

John R Robertson 3/25/04
HOWARD S.C.D. DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

Jim Myers 3/25/04
NATURAL RESOURCES CONSERVATION SERVICE DATE

~~APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM HOWARD COUNTY HEALTH DEPARTMENT~~
~~County Health Officer~~ N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director 6/1/04 Date
Chief, Division of Land Development 6/1/04 Date
Chief, Development Engineering Division 3/30/04 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP9-12.dwg | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.
12-30-04	Rev. ST-7		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

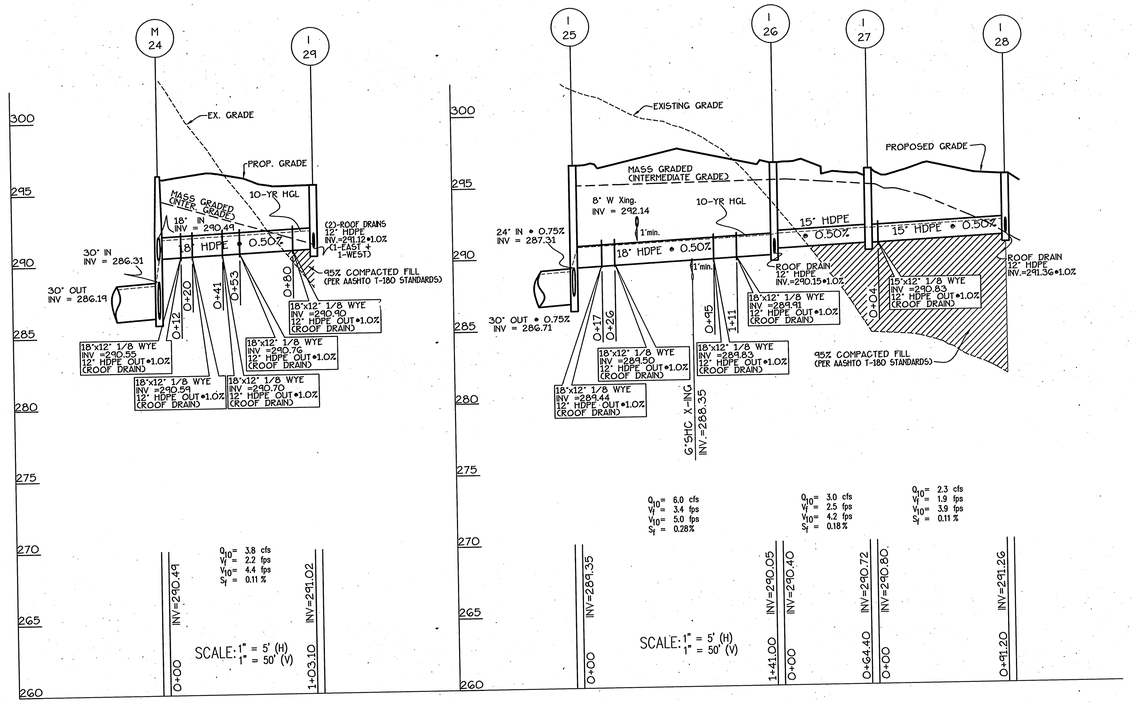
OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUTIE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

STORM DRAIN PROFILES
CENTRE 9500 PARCEL-C, Ph. 1
AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 / 16515

ELECTION DISTRICT No. 1
HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	9 OF 25

SDP-03-138



STRUCTURE SCHEDULE

NO.	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STANDARD DETAIL	LOCATIONS & REMARKS
M4	5 ft. Precast Manhole	5'-0"	----	294.4	285.40	281.67	HO. CO. G-5.13	see plan
I23	Precast COS 10 INLET	4'-0"	295.0	295.0	288.50	285.92	MD-SHA 374.63	
M24	5 ft. Precast Manhole	5'-0"	----	296.35	290.49	286.19	HO. CO. G-5.13	
I25	Precast COS 10 INLET	4'-0"	296.0	296.0	289.35	286.74	MD-SHA 374.63	
I39	Precast COS 10 INLET	3'-0"	297.15	297.15	288.91	288.83	MD-SHA 374.63	
M40	4 ft. Precast Manhole	4'-0"	----	297.20	291.48	289.07	HO. CO. G-5.12	
I41	Single 'S' INLET	2'-7"	297.72	297.72	291.22	291.12	HO. CO. SD-4.22	
I43	Single 'S' INLET	2'-7"	298.10	298.10	terminal	290.36	HO. CO. SD-4.22	
I42	Precast COS 10 INLET	3'-0"	296.20	296.20	292.57	292.47	MD-SHA 374.63	
I29	Single 'S' INLET	2'-7"	295.0	295.0	291.12	291.02	HO. CO. SD-4.22	
I26	Precast COS 10 INLET	3'-0"	296.0	296.0	290.40	290.05	MD-SHA 374.63	
I27	Single 'S' INLET	2'-7"	295.5	295.5	290.80	290.72	HO. CO. SD-4.22	
I28	Single 'S' INLET	2'-7"	295.0	295.0	291.36	291.26	HO. CO. SD-4.22	

NOTE: ALL STRUCTURES TO BE PRECAST.

NOTE: ALL ROOF LEADER STUBS TO BE CAPPED WITH PREMANUFACTURED ENDCAP.
BUILDER PLUMBER/CONTRACTOR TO CONNECT ROOF DRAIN DOWNSPOUTS TO STUBS

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

DATE 3/19/04

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.
SIGNATURE OF DEVELOPER/BUILDER DATE 3/19/04

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

HOWARD S.C.D. DATE 3/25/04

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

NATURAL RESOURCES CONSERVATION SERVICE DATE 3/25/04

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director Date 6/1/04

Chief, Division of Land Development Date 6/1/04

Chief, Development Engineering Division Date 3/30/04

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

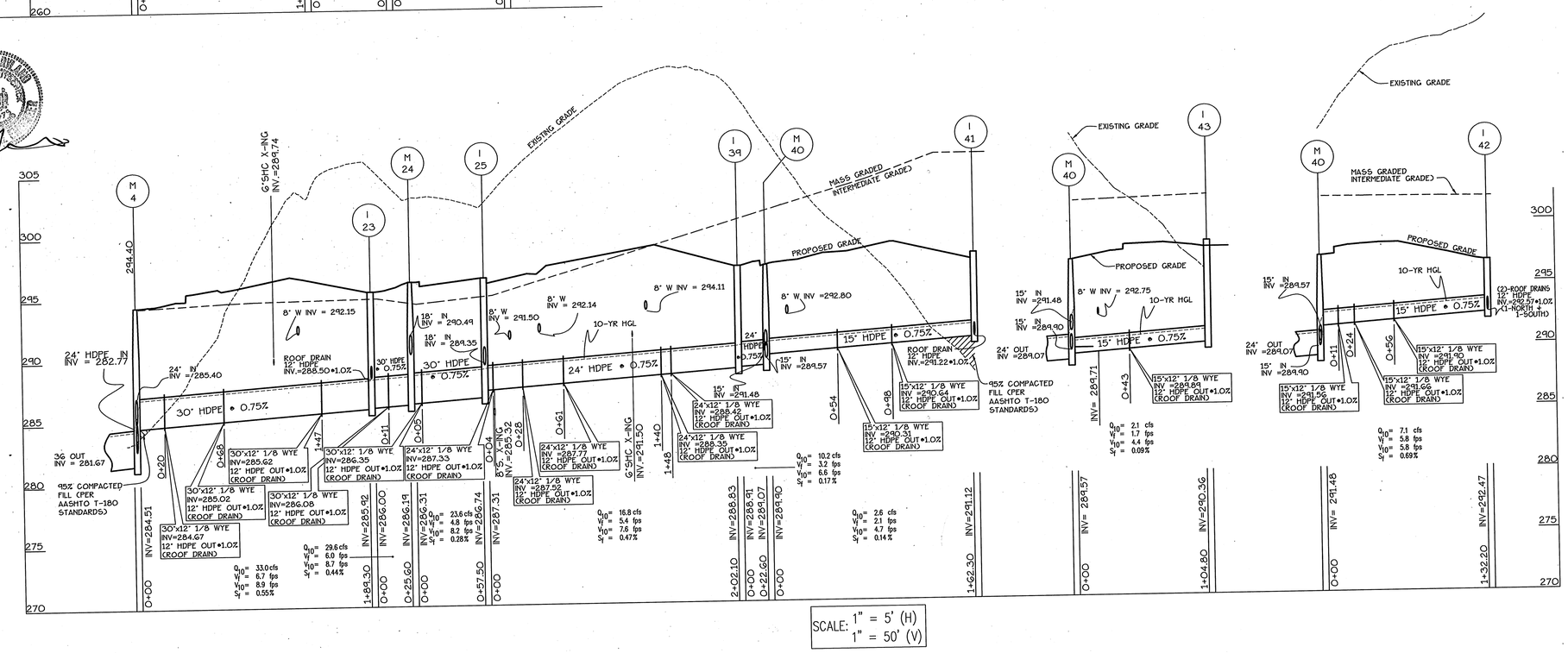
CADD\DRAWINGS\02018\SDP's\SDP9-12.dwg | DES. | DRN. BM | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK



STORM DRAIN PROFILES

CENTRE 9500 PARCEL-C, Ph. I

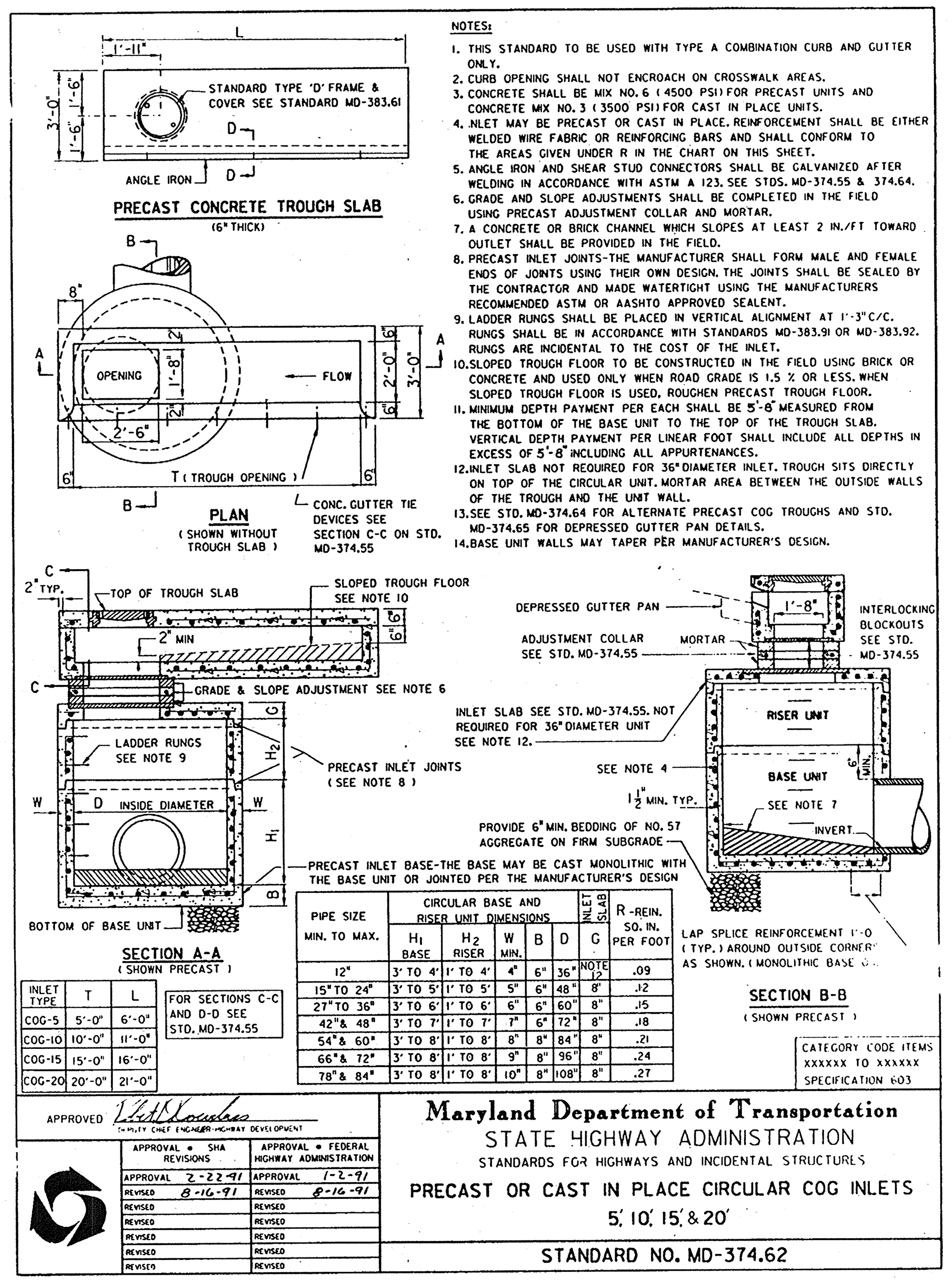
AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 / 16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	10 OF 25

SDP-03-138



NOTES:
1. THIS STANDARD TO BE USED WITH TYPE A COMBINATION CURB AND GUTTER ONLY.
2. CURB OPENING SHALL NOT ENCROACH ON CROSSWALK AREAS.
3. CONCRETE SHALL BE MIX NO. 6 (4500 PSI) FOR PRECAST UNITS AND CONCRETE MIX NO. 3 (3500 PSI) FOR CAST IN PLACE UNITS.
4. INLET MAY BE PRECAST OR CAST IN PLACE. REINFORCEMENT SHALL BE EITHER WELDED WIRE FABRIC OR REINFORCING BARS AND SHALL CONFORM TO THE AREAS GIVEN UNDER R IN THE CHART ON THIS SHEET.
5. ANGLE IRON AND SHEAR STUD CONNECTORS SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH ASTM A 123. SEE STDS. MD-374.55 & 374.64.
6. GRADE AND SLOPE ADJUSTMENTS SHALL BE COMPLETED IN THE FIELD USING PRECAST ADJUSTMENT COLLAR AND MORTAR.
7. A CONCRETE OR BRICK CHANNEL WHICH SLOPES AT LEAST 2 IN./FT TOWARD OUTLET SHALL BE PROVIDED IN THE FIELD.
8. PRECAST INLET JOINTS-THE MANUFACTURER SHALL FORM MALE AND FEMALE ENDS OF JOINTS USING THEIR OWN DESIGN. THE JOINTS SHALL BE SEALED BY THE CONTRACTOR AND MADE WATERTIGHT USING THE MANUFACTURERS RECOMMENDED ASTM OR AASHTO APPROVED SEALENT.
9. LADDER RUNGS SHALL BE PLACED IN VERTICAL ALIGNMENT AT 1'-3" C/C. RUNGS SHALL BE IN ACCORDANCE WITH STANDARDS MD-383.91 OR MD-383.92. RUNGS ARE INCIDENTAL TO THE COST OF THE INLET.
10. SLOPED TROUGH FLOOR TO BE CONSTRUCTED IN THE FIELD USING BRICK OR CONCRETE AND USED ONLY WHEN ROAD GRADE IS 1.5 % OR LESS. WHEN SLOPED TROUGH FLOOR IS USED, ROUGHEN PRECAST TROUGH FLOOR.
11. MINIMUM DEPTH PAYMENT PER EACH SHALL BE 5'-8" MEASURED FROM THE BOTTOM OF THE BASE UNIT TO THE TOP OF THE TROUGH SLAB. VERTICAL DEPTH PAYMENT PER LINEAR FOOT SHALL INCLUDE ALL DEPTHS IN EXCESS OF 5'-8" INCLUDING ALL APPURTENANCES.
12. INLET SLAB NOT REQUIRED FOR 36" DIAMETER INLET. TROUGH SITS DIRECTLY ON TOP OF THE CIRCULAR UNIT. MORTAR AREA BETWEEN THE OUTSIDE WALLS OF THE TROUGH AND THE UNIT WALL.
13. SEE STD. MD-374.64 FOR ALTERNATE PRECAST COG TROUGHS AND STD. MD-374.65 FOR DEPRESSED GUTTER PAN DETAILS.
14. BASE UNIT WALLS MAY TAPER PER MANUFACTURER'S DESIGN.

INLET TYPE	T	L
COG-5	5'-0"	6'-0"
COG-10	10'-0"	11'-0"
COG-15	15'-0"	16'-0"
COG-20	20'-0"	21'-0"

FOR SECTIONS C-C AND D-D SEE STD. MD-374.55

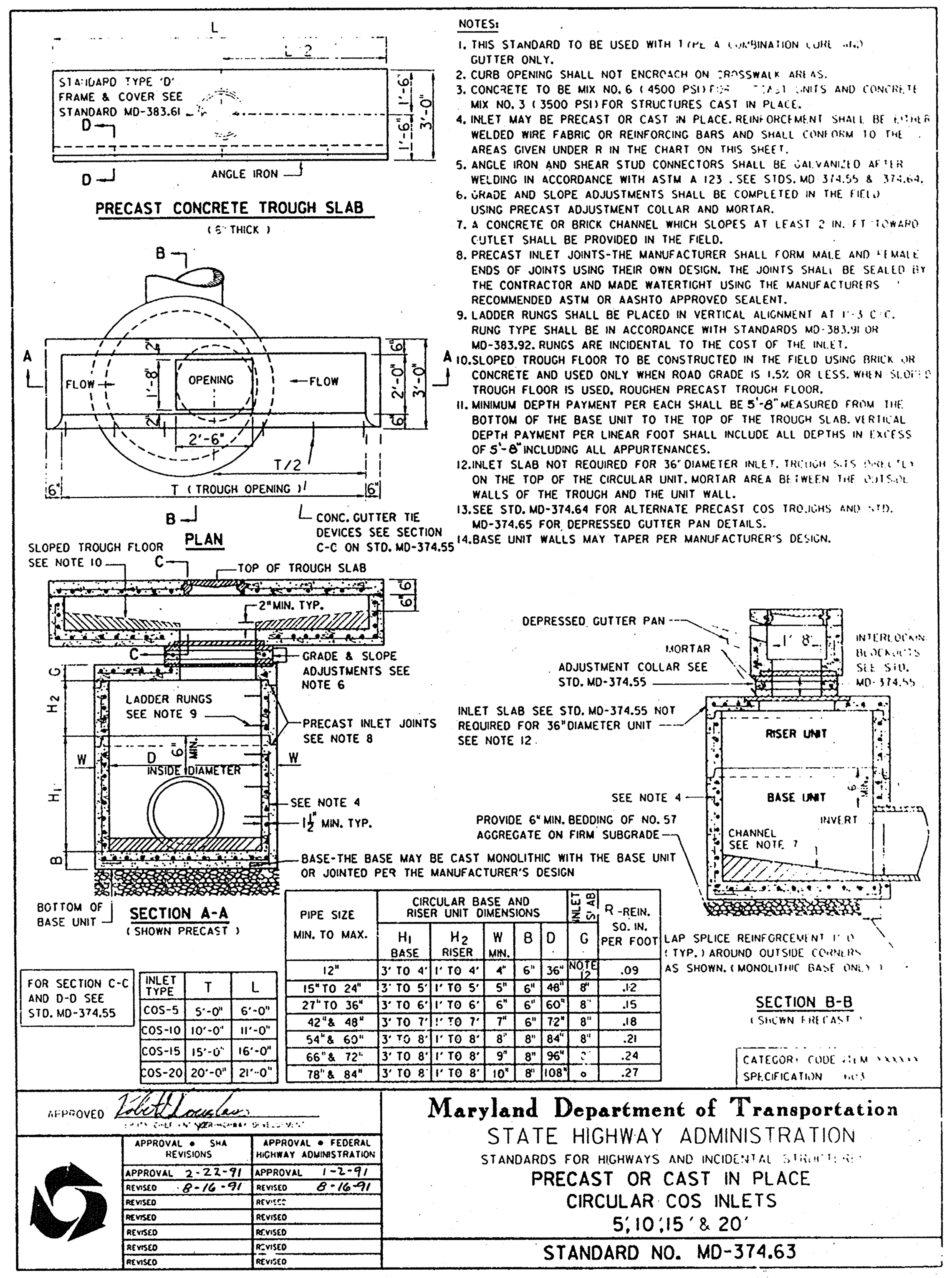
PIPE SIZE MIN. TO MAX.	H_1 BASE	H_2 RISER	W MIN.	B	D	G (INLET SLAB)	R -REIN. SQ. IN. PER FOOT
12"	3' TO 4'	1' TO 4'	4"	6"	36"	NOTE 12	.09
15" TO 24"	3' TO 5'	1' TO 5'	5"	6"	48"	8"	.12
27" TO 36"	3' TO 6'	1' TO 6'	6"	6"	60"	8"	.15
42" & 48"	3' TO 7'	1' TO 7'	7"	6"	72"	8"	.18
54" & 60"	3' TO 8'	1' TO 8'	8"	8"	84"	8"	.21
66" & 72"	3' TO 8'	1' TO 8'	9"	8"	96"	8"	.24
78" & 84"	3' TO 8'	1' TO 8'	10"	8"	108"	8"	.27

CATEGORY CODE ITEMS XXXXXX TO XXXXXX SPECIFICATION 603

APPROVED [signature] DEPUTY CHIEF ENGINEER-HIGHWAY DEVELOPMENT

APPROVAL • SHA REVISIONS		APPROVAL • FEDERAL HIGHWAY ADMINISTRATION	
APPROVAL	2-22-91	APPROVAL	1-2-91
REVISED	8-16-91	REVISED	8-16-91
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
PRECAST OR CAST IN PLACE CIRCULAR COG INLETS
5', 10', 15', & 20'
STANDARD NO. MD-374.62



NOTES:
1. THIS STANDARD TO BE USED WITH TYPE A COMBINATION CURB AND GUTTER ONLY.
2. CURB OPENING SHALL NOT ENCROACH ON CROSSWALK AREAS.
3. CONCRETE TO BE MIX NO. 6 (4500 PSI) FOR PRECAST UNITS AND CONCRETE MIX NO. 3 (3500 PSI) FOR STRUCTURES CAST IN PLACE.
4. INLET MAY BE PRECAST OR CAST IN PLACE. REINFORCEMENT SHALL BE EITHER WELDED WIRE FABRIC OR REINFORCING BARS AND SHALL CONFORM TO THE AREAS GIVEN UNDER R IN THE CHART ON THIS SHEET.
5. ANGLE IRON AND SHEAR STUD CONNECTORS SHALL BE GALVANIZED AFTER WELDING IN ACCORDANCE WITH ASTM A 123. SEE STDS. MD 374.55 & 374.64.
6. GRADE AND SLOPE ADJUSTMENTS SHALL BE COMPLETED IN THE FIELD USING PRECAST ADJUSTMENT COLLAR AND MORTAR.
7. A CONCRETE OR BRICK CHANNEL WHICH SLOPES AT LEAST 2 IN./FT TOWARD OUTLET SHALL BE PROVIDED IN THE FIELD.
8. PRECAST INLET JOINTS-THE MANUFACTURER SHALL FORM MALE AND FEMALE ENDS OF JOINTS USING THEIR OWN DESIGN. THE JOINTS SHALL BE SEALED BY THE CONTRACTOR AND MADE WATERTIGHT USING THE MANUFACTURERS RECOMMENDED ASTM OR AASHTO APPROVED SEALENT.
9. LADDER RUNGS SHALL BE PLACED IN VERTICAL ALIGNMENT AT 1'-3" C/C. RUNG TYPE SHALL BE IN ACCORDANCE WITH STANDARDS MD-383.91 OR MD-383.92. RUNGS ARE INCIDENTAL TO THE COST OF THE INLET.
10. SLOPED TROUGH FLOOR TO BE CONSTRUCTED IN THE FIELD USING BRICK OR CONCRETE AND USED ONLY WHEN ROAD GRADE IS 1.5% OR LESS. WHEN SLOPED TROUGH FLOOR IS USED, ROUGHEN PRECAST TROUGH FLOOR.
11. MINIMUM DEPTH PAYMENT PER EACH SHALL BE 5'-8" MEASURED FROM THE BOTTOM OF THE BASE UNIT TO THE TOP OF THE TROUGH SLAB. VERTICAL DEPTH PAYMENT PER LINEAR FOOT SHALL INCLUDE ALL DEPTHS IN EXCESS OF 5'-8" INCLUDING ALL APPURTENANCES.
12. INLET SLAB NOT REQUIRED FOR 36" DIAMETER INLET. TROUGH SITS DIRECTLY ON THE TOP OF THE CIRCULAR UNIT. MORTAR AREA BETWEEN THE OUTSIDE WALLS OF THE TROUGH AND THE UNIT WALL.
13. SEE STD. MD-374.64 FOR ALTERNATE PRECAST COS TROUGHS AND STD. MD-374.65 FOR DEPRESSED GUTTER PAN DETAILS.
14. BASE UNIT WALLS MAY TAPER PER MANUFACTURER'S DESIGN.

INLET TYPE	T	L
COS-5	5'-0"	6'-0"
COS-10	10'-0"	11'-0"
COS-15	15'-0"	16'-0"
COS-20	20'-0"	21'-0"

FOR SECTION C-C AND D-D SEE STD. MD-374.55

PIPE SIZE MIN. TO MAX.	H_1 BASE	H_2 RISER	W MIN.	B	D	G (INLET SLAB)	R -REIN. SQ. IN. PER FOOT
12"	3' TO 4'	1' TO 4'	4"	6"	36"	NOTE 12	.09
15" TO 24"	3' TO 5'	1' TO 5'	5"	6"	48"	8"	.12
27" TO 36"	3' TO 6'	1' TO 6'	6"	6"	60"	8"	.15
42" & 48"	3' TO 7'	1' TO 7'	7"	6"	72"	8"	.18
54" & 60"	3' TO 8'	1' TO 8'	8"	8"	84"	8"	.21
66" & 72"	3' TO 8'	1' TO 8'	9"	8"	96"	[illegible]	.24
78" & 84"	3' TO 8'	1' TO 8'	10"	8"	108"	[illegible]	.27

CATEGORY CODE ITEM XXXXXX SPECIFICATION 603

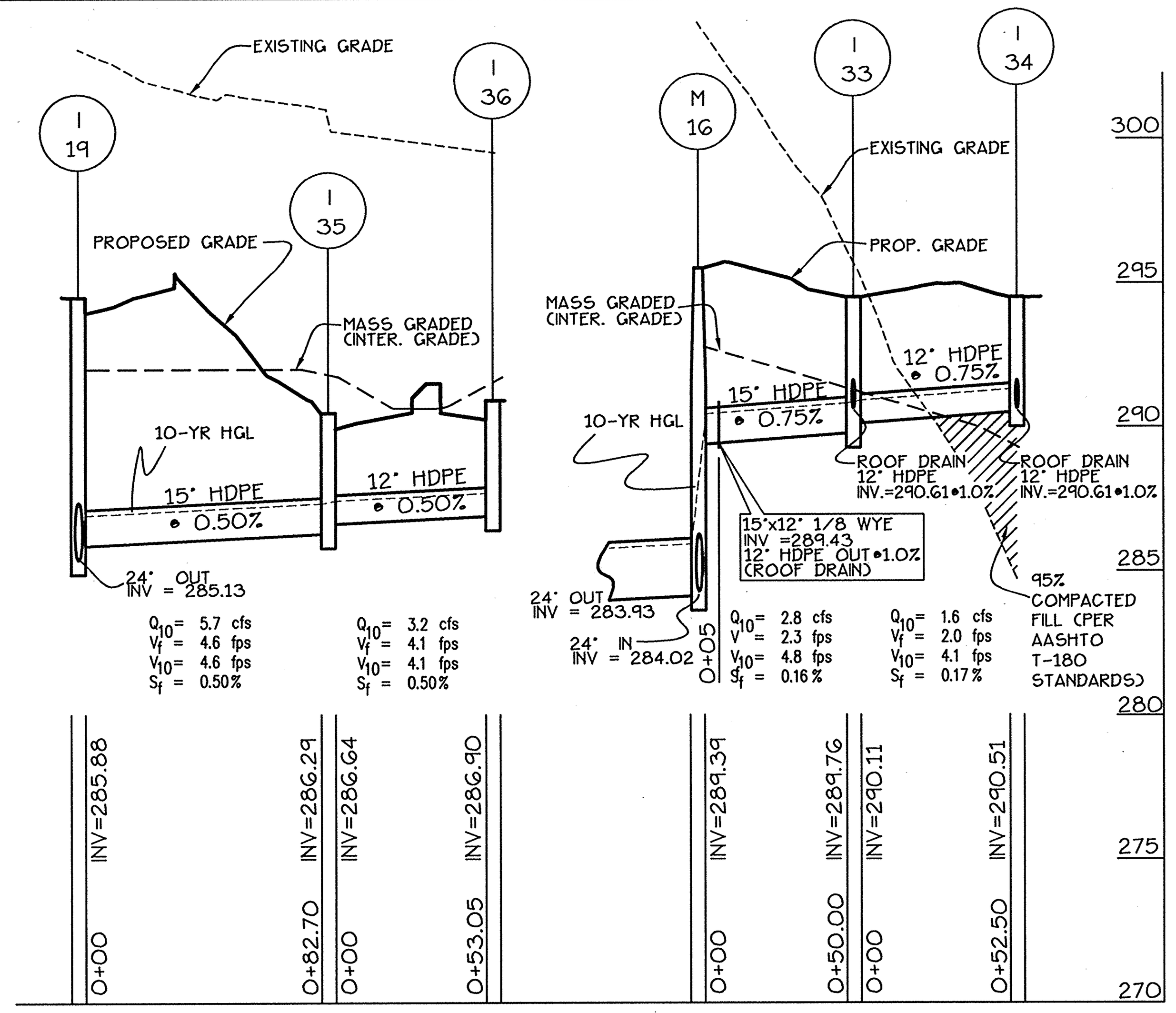
APPROVED [signature]

APPROVAL • SHA REVISIONS		APPROVAL • FEDERAL HIGHWAY ADMINISTRATION	
APPROVAL	2-22-91	APPROVAL	1-2-91
REVISED	8-16-91	REVISED	8-16-91
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	
REVISED		REVISED	

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
PRECAST OR CAST IN PLACE
CIRCULAR COS INLETS
5', 10', 15' & 20'
STANDARD NO. MD-374.63

STRUCTURE SCHEDULE

NO.	TYPE	WIDTH (INSIDE)	TOP ELEVATION UPPER	TOP ELEVATION LOWER	INVERT ELEVATION UPPER	INVERT ELEVATION LOWER	STANDARD DETAIL	LOCATIONS & REMARKS
M4	5 ft. PRECAST MH	5'-0"	----	294.40	285.01	281.67	HO. CO. G-5.13	see plan
I14	PRECAST COS 10 INLET	4'-0"	294.00	294.00	283.01	282.91	MDSHA 374.63	
I15	PRECAST COS 10 INLET	4'-0"	294.00	294.00	283.78	283.68	MDSHA 374.63	
M16	4 ft. PRECAST MH	4'-0"	----	295.50	284.02	283.93	HO. CO. G-5.12	
I17	PRECAST COS 10 INLET	4'-0"	294.00	294.00	284.42	284.32	MDSHA 374.63	
I19	PRECAST COS 10 INLET	4'-0"	294.00	294.00	289.02	285.17	MDSHA 374.63	
M20	4 ft. PRECAST MH	4'-0"	----	295.00	289.30	289.20	HO. CO. G-5.12	
I21	PRECAST SINGLE S	2'-7"	294.00	294.00	289.85	289.65	HO. CO. SD. 4.22	
I22	PRECAST SINGLE S	2'-7"	293.9	293.9	terminal	290.36	HO. CO. SD. 4.22	
I5	PRECAST SINGLE S	2'-7"	296.50	296.50	291.63	285.83	HO. CO. SD. 4.22	
I37	PRECAST SINGLE S	2'-7"	297.30	297.30	282.58	292.48	HO. CO. SD. 4.22	
I38	PRECAST SINGLE S	2'-7"	297.30	297.30	terminal	293.01	HO. CO. SD. 4.22	
I6	PRECAST SINGLE S	2'-7"	296.50	296.50	292.50	286.73	HO. CO. SD. 4.22	
I12	PRECAST COG 10 INLET	3'-0"	297.07	296.74	terminal	293.05	MDSHA 374.62	
I13	24" DRAIN BASIN	2'-0"	----	298.56	terminal	294.84	24" Nyloplast (or equivalent)	
ST7	18" x 12" Y	----	----	----	-----	288.59	HO. CO. G-5.12	
I36	PRECAST COG 10 INLET	3'-0"	290.90	290.57	terminal	286.90	MDSHA 374.62	
I35	PRECAST COG 10 INLET	4'-0"	290.80	290.47	289.64	286.29	MDSHA 374.62	
I33	PRECAST SINGLE S	2'-7"	294.00	294.00	290.61	289.76	HO. CO. SD. 4.22	
I34	PRECAST SINGLE S	2'-7"	294.00	294.00	290.61	290.51	HO. CO. SD. 4.22	



ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

[signature] 3/19/04
DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.
[signature] 3/19/04
SIGNATURE OF DEVELOPER/BUILDER DATE

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

[signature] 3/25/04
HOWARD S.C.D. DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

[signature] 3/25/04
NATURAL RESOURCES CONSERVATION SERVICE DATE

~~APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM HOWARD COUNTY HEALTH DEPARTMENT~~

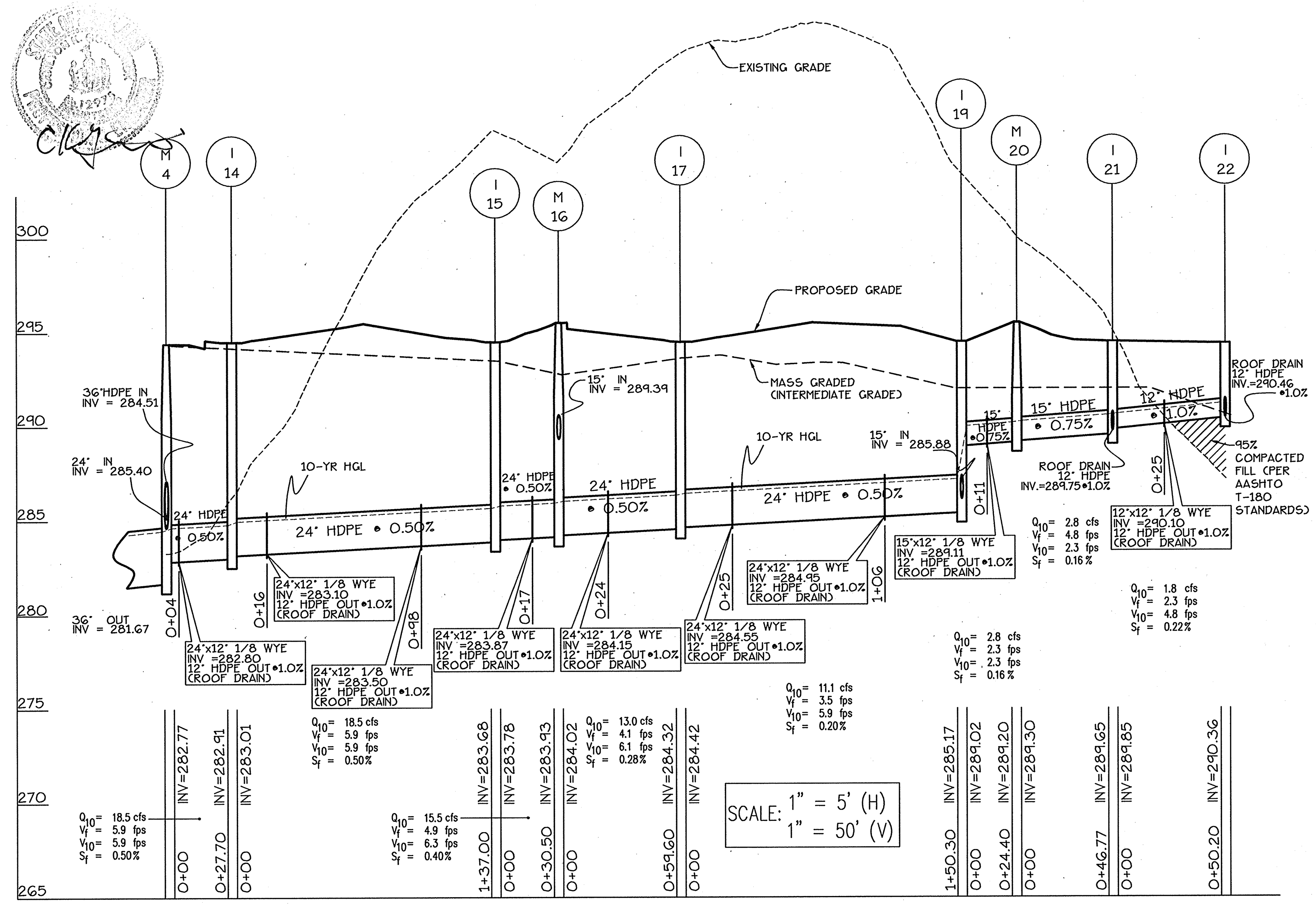
~~County Health Officer~~ N/A MR Date

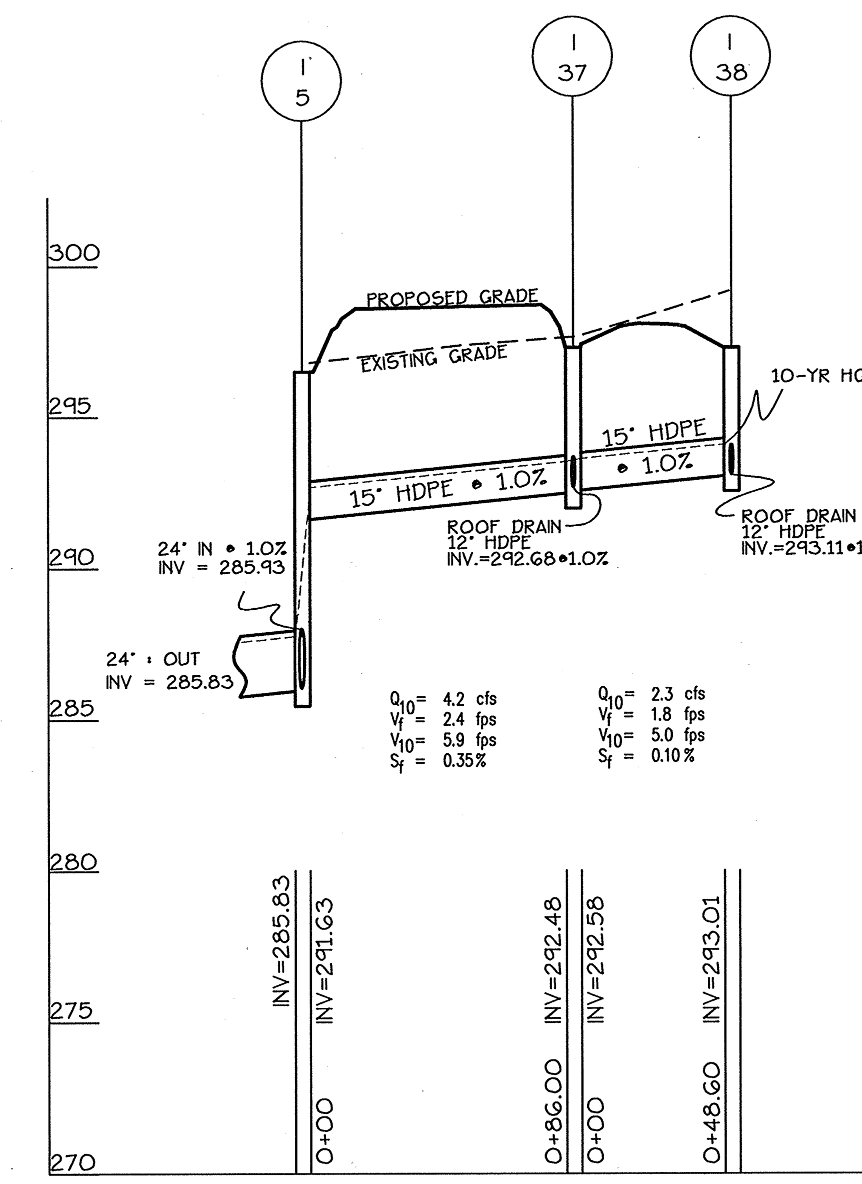
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

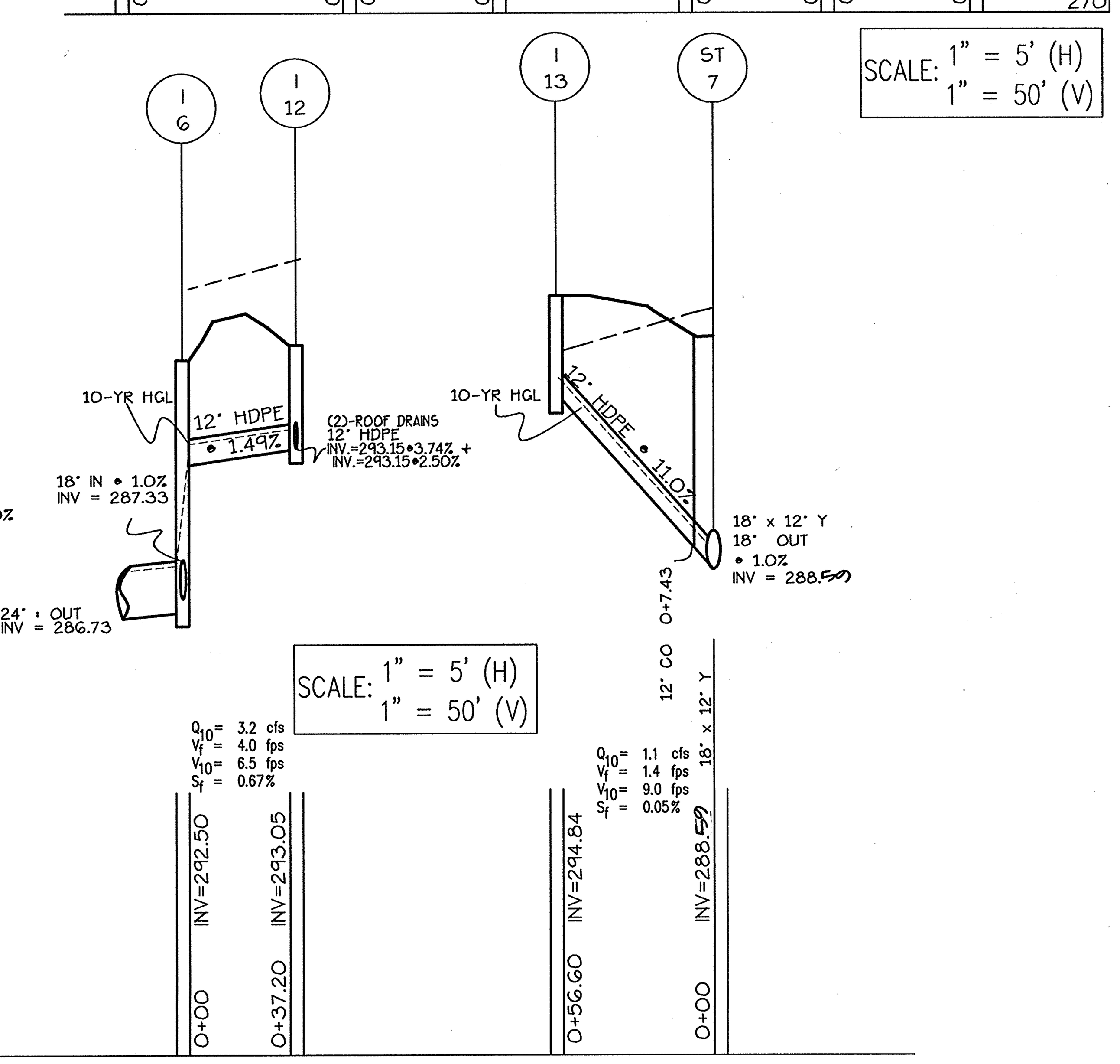
[signature] 6/1/04
Director Date

[signature] 6/1/04
Chief, Division of Land Development Date

[signature] 3/30/04
Chief, Development Engineering Division Date







GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP9-12.dwg | DES. | DRN. BM | CHK.

DATE	REVISION	BY	APP'R.
12-30-04	Rev. ST-7 to I-13		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUTIE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

STORM DRAIN PROFILES
CENTRE 9500 PARCEL-C, Ph. I
AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 / 16515
ELECTION DISTRICT No. 1 HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	11 OF 25

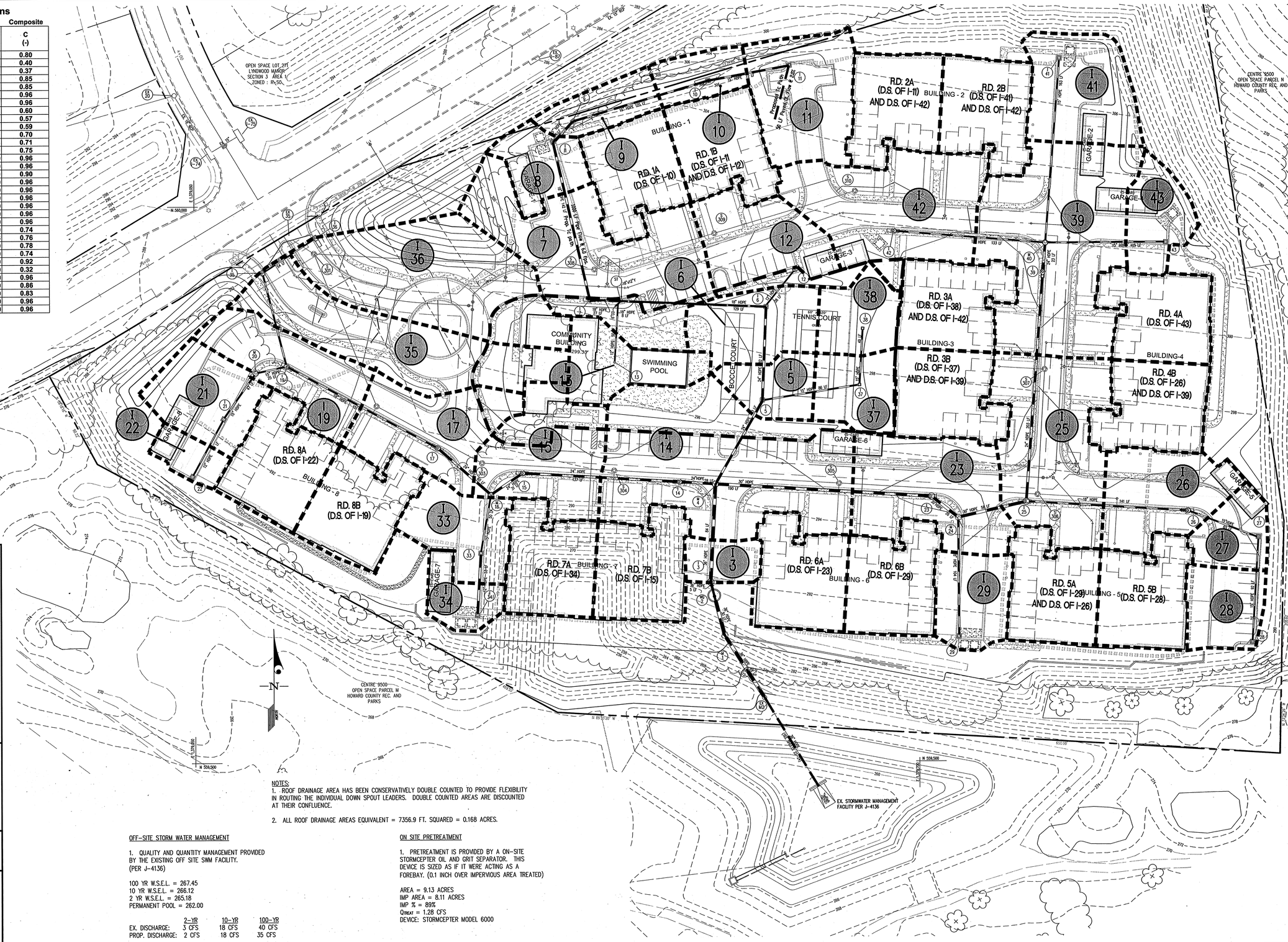
SDP-03-138

D.A. Tabulation & C' Factor Computations

From No.	Total Area (sq-ft)	Total Area (Ac)	Impervious Area (sq-ft)	Impervious C (-)	Impervious X (-)	Grass Area (sq-ft)	Grass C (-)	ΣAC (-)	Composite C (-)
I-11	10000	0.23	7500	0.96	7200	2500	0.32	800.0	0.80
I-10	3400	0.08	400	0.96	384	3000	0.32	960.0	0.40
I-9	4100	0.09	350	0.96	336	3750	0.32	1200.0	0.37
I-8	4600	0.11	3800	0.96	3648	800	0.32	256.0	0.85
I-7	20300	0.47	16800	0.96	16128	3500	0.32	1120.0	0.85
I-13	6000	0.14	6000	0.96	5760	0	0.32	0.0	0.96
I-12	9600	0.22	9600	0.96	9216	0	0.32	0.0	0.96
I-6	6900	0.16	3000	0.96	2880	3900	0.32	1248.0	0.60
I-38	4700	0.11	1800	0.96	1728	2900	0.32	928.0	0.57
I-37	4900	0.11	2100	0.96	2016	2800	0.32	896.0	0.59
I-5	3700	0.08	2200	0.96	2112	1500	0.32	480.0	0.70
I-41	8800	0.20	5382	0.96	5167	3418	0.32	1093.8	0.71
I-43	4900	0.11	3300	0.96	3168	1600	0.32	512.0	0.75
I-42	15600	0.36	15600	0.96	14976	0	0.32	0.0	0.96
I-39	22000	0.51	22000	0.96	21120	0	0.32	0.0	0.96
I-28	5200	0.12	4722	0.96	4533	478	0.32	153.0	0.90
I-27	4000	0.09	4000	0.96	3840	0	0.32	0.0	0.96
I-26	9000	0.21	9000	0.96	8640	0	0.32	0.0	0.96
I-25	15700	0.36	15700	0.96	15072	0	0.32	0.0	0.96
I-29	5650	0.13	5650	0.96	5424	0	0.32	0.0	0.96
I-23	12700	0.29	12700	0.96	12192	0	0.32	0.0	0.96
I-22	2350	0.05	2350	0.96	2256	0	0.32	0.0	0.96
I-21	7320	0.17	4820	0.96	4627	2500	0.32	800.0	0.74
I-36	23000	0.53	15760	0.96	15130	7240	0.32	2316.8	0.76
I-35	18000	0.41	13000	0.96	12480	5000	0.32	1600.0	0.78
I-19	10000	0.23	6500	0.96	6240	3500	0.32	1120.0	0.74
I-17	12500	0.29	11800	0.96	11328	700	0.32	224.0	0.92
I-34	3328	0.08	0.0	0.96	0	3328	0.32	1065.0	0.32
I-33	6500	0.15	6500	0.96	6240	0	0.32	0.0	0.96
I-15	11000	0.25	9200	0.96	8832	1800	0.32	576.0	0.86
I-14	2500	0.06	2000	0.96	1920	500	0.32	160.0	0.83
I-3	2600	0.06	2600	0.96	2496	0	0.32	0.0	0.96
ALL RD	117710	2.70	117710	0.96	113002	0	0.32	0.0	0.96

Total Area Entering System = 9.15 acres
Total Impervious Area = 7.89 acres
Total Impervious Percent = 86 %

NOTE: THE EXISTING SOILS HAVE BEEN MASS GRADED. ALL SOILS HAVE CONSERVATIVELY BEEN APPROXIMATED AS SCS HYDROLOGIC GROUP 'C' SOILS.



ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

DATE 3/19/04

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.
SIGNATURE OF DEVELOPER/BUILDER DATE 3/19/04

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

HOWARD S.C.D. DATE 3/25/04

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT
NATURAL RESOURCES CONSERVATION SERVICE DATE 3/25/04
County Health Officer Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director Date 6/1/04
Chief, Division of Land Development Date 6/1/04
Chief, Development Engineering Division Date 3/30/04

NOTES:
1. ROOF DRAINAGE AREA HAS BEEN CONSERVATIVELY DOUBLE COUNTED TO PROVIDE FLEXIBILITY IN ROUTING THE INDIVIDUAL DOWN SPOUT LEADERS. DOUBLE COUNTED AREAS ARE DISCOUNTED AT THEIR CONFLUENCE.

2. ALL ROOF DRAINAGE AREAS EQUIVALENT = 7356.9 FT. SQUARED = 0.168 ACRES.

OFF-SITE STORM WATER MANAGEMENT

1. QUALITY AND QUANTITY MANAGEMENT PROVIDED BY THE EXISTING OFF SITE SWM FACILITY. (PER J-4136)

100 YR W.S.E.L. = 267.45
10 YR W.S.E.L. = 266.12
2 YR W.S.E.L. = 265.18
PERMANENT POOL = 262.00

	2-YR	10-YR	100-YR
EX. DISCHARGE:	3 CFS	18 CFS	40 CFS
PROP. DISCHARGE:	2 CFS	18 CFS	35 CFS

ON SITE PRETREATMENT

1. PRETREATMENT IS PROVIDED BY A ON-SITE STORMCEPTER OIL AND GRIT SEPARATOR. THIS DEVICE IS SIZED AS IF IT WERE ACTING AS A FOREBAY. (0.1 INCH OVER IMPERVIOUS AREA TREATED)

AREA = 9.13 ACRES
IMP AREA = 8.11 ACRES
IMP % = 89%
Q_{TREAT} = 1.28 CFS
DEVICE: STORMCEPTER MODEL 6000

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SDP9-12.dwg | DES. | DRN. BM | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUTIE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

STORM DRAIN DRAINAGE AREA MAP

CENTRE 9500 PARCEL-C, Ph. I

AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 / 10515

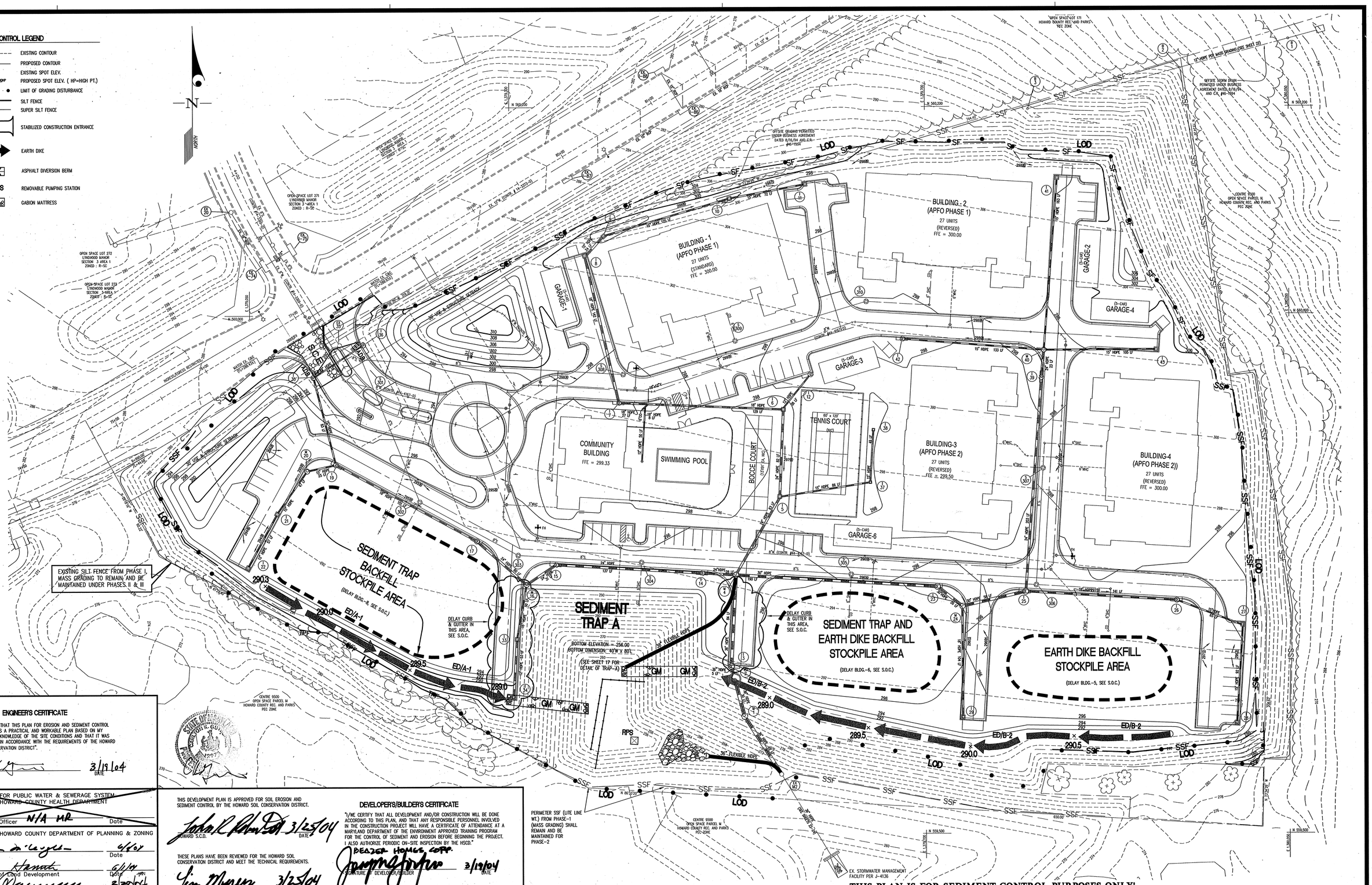
ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 40'	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	12 OF 25

SDP-03-138

SEDIMENT CONTROL LEGEND

600	EXISTING CONTOUR
600	PROPOSED CONTOUR
+ 388.00XX	EXISTING SPOT ELEV.
+ 388.00 + 388.00HP	PROPOSED SPOT ELEV. (HP=HIGH PT.)
	LIMIT OF GRADING DISTURBANCE
SF	SILT FENCE
SSF	SUPER SILT FENCE
SCE	STABILIZED CONSTRUCTION ENTRANCE
ED A1	EARTH DIKE
ADB	ASPHALT DIVERSION BERM
RPS	REMOVABLE PUMPING STATION
GM	GABION MATTRESS



THIS PLAN IS FOR SEDIMENT CONTROL PURPOSES ONLY!

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

3/19/04
DATE

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer — N/A MR — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — Date 4/8/04
Chief, Division of Land Development — Date 4/1/04
Chief, Development Engineering Division — Date 3/30/04

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

HOWARD S.C.D. — DATE 3/25/04

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

NATURAL RESOURCES CONSERVATION SERVICE — DATE 3/25/04

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES, CORP.
SIGNATURE OF DEVELOPER/BUILDER — DATE 3/19/04

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SNE2.dwg | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SEDIMENT CONTROL PLAN (PHASE 2)

CENTRE 9500 PARCEL-C, Ph. I

AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 / 16515

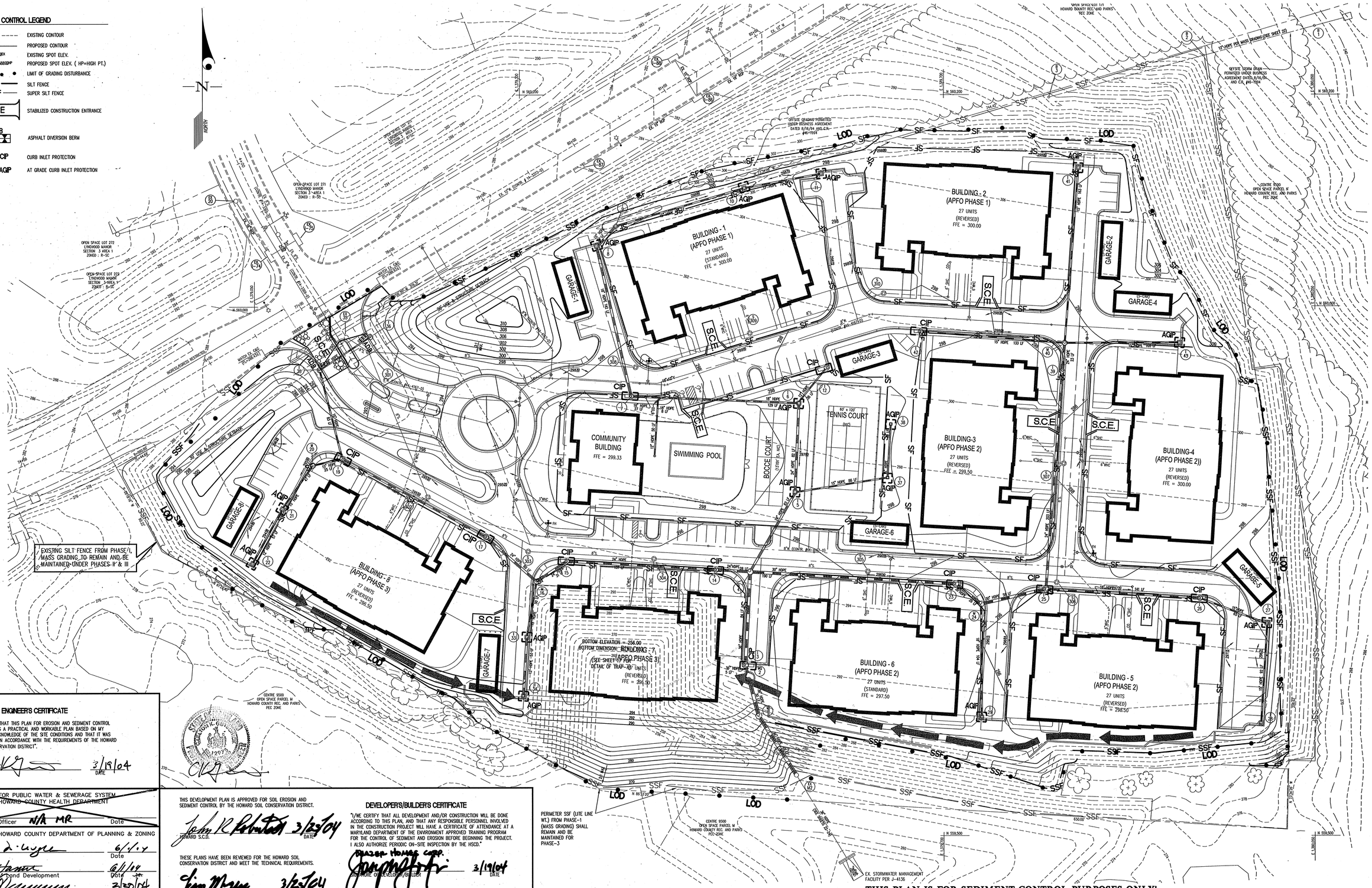
ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 40'	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	13 OF 25

SDP-03-138

SEDIMENT CONTROL LEGEND

600	EXISTING CONTOUR
600	PROPOSED CONTOUR
+ 386000EX	EXISTING SPOT ELEV.
+ 38800 + 3880HP	PROPOSED SPOT ELEV. (HP=HIGH PT.)
• • • •	LIMIT OF GRADING DISTURBANCE
SF	SILT FENCE
SSF	SUPER SILT FENCE
SCE	STABILIZED CONSTRUCTION ENTRANCE
ADB	ASPHALT DIVERSION BERM
CIP	CURB INLET PROTECTION
AGIP	AT GRADE CURB INLET PROTECTION



THIS PLAN IS FOR SEDIMENT CONTROL PURPOSES ONLY!

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT".

3/19/04
DATE

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director Date 6/1/04

Chief, Division of Land Development Date 6/1/04

Chief, Development Engineering Division Date 3/30/04

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

HOWARD S.C.D. 3/25/04 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

NATURAL RESOURCES CONSERVATION SERVICE 3/25/04 DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.
NAME OF DEVELOPER/BUILDER 3/19/04 DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SNE2.dwg	DES.	DRN.	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNIEK

SEDIMENT CONTROL PLAN (PHASE 3)

CENTRE 9500 PARCEL-C, Ph. I

AGE-RESTRICTED ADULT HOUSING

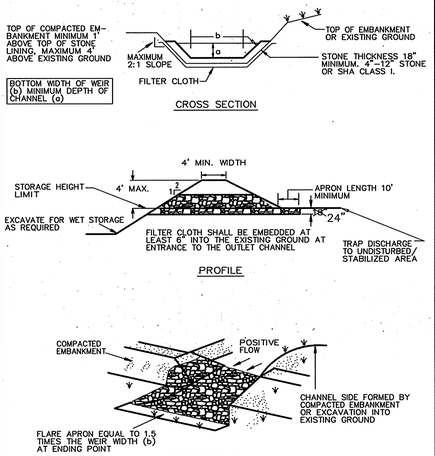
PLAT No. 14213 / 10515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 40'	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	14 OF 25

SDP-03-138

DETAIL 10 - RIP-RAP OUTLET SEDIMENT TRAP - ST III

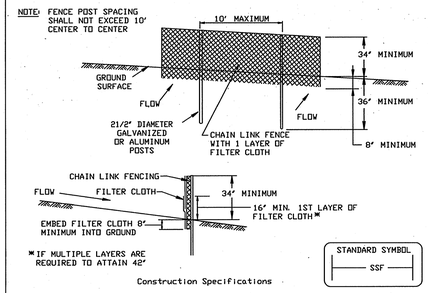


NOTE: MAXIMUM DRAINAGE AREA= 10 ac.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 9 - 13	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE

NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER



Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

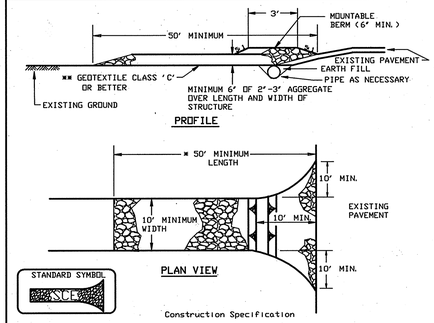
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H - 26 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (Filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 19 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARD AND SPECIFICATIONS FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

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.

CONDITIONS WHERE PRACTICE APPLIES

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPE 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 SUPPLIED 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.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT 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 RESPECTIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

A. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY A AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.

B. TOPSOIL MUST BE FREE OF PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

C. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE IF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

A. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS (OR SEE SEEDING NOTES).

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

A. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

1. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATES A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
2. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT.

3. TOPSOIL HAVING SOLUBLE SALT GREATER THAN 500 PARTS PER MILL SHALL NOT BE USED.
4. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHOTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.

B. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 2.0 VEGETATIVE STABILIZATION - SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS (OR SEE SEEDING NOTES).

V. TOPSOIL APPLICATION

A. WHEN TOPSOILLING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSION, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.
B. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4"-8" HIGHER IN ELEVATION.

C. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL 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 TOPSOILLING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER

D. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS 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.

VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

A. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

1. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.

2. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.

3. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.

B. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT A RATE OF 4LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.

SEDIMENT CONTROL NOTES

1. A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION. (410) 313-1855

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES AND PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOD, TEMPORARY SEEDINGS AND MULCHING (SEC. G). TEMPORARY STABILIZATION, WITH MULCH ALONE, CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

TOTAL AREA OF SITE	:	12.38± ACRES
AREA DISTURBED	:	10.9 ± ACRES
AREA TO BE ROOFED OR PAVED	:	8.1 ± ACRES
AREA TO BE VEGETATIVELY STABILIZED	:	2.8 ± ACRES
TOTAL CUT	:	28,000± CU. YDS.
TOTAL FILL	:	28,000± CU. YDS.
OFF-SITE WASTE/BORROW AREA LOCATION	:	NONE

8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.

10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO 3 PIPE LENGTHS OR THAT WHICH SHALL BE BACKFILLED AND STABILIZED WITHIN 1 WORKING DAY, WHICHEVER IS SHORTER.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREA NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES

1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FEET) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREA-FORM FERTILIZER (9 LBS/1000 SQ FT).

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ FT) AND 1000 LBS PER ACRE OF 10-10-10 FERTILIZER (23 LBS/1000 SQ FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR THE PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

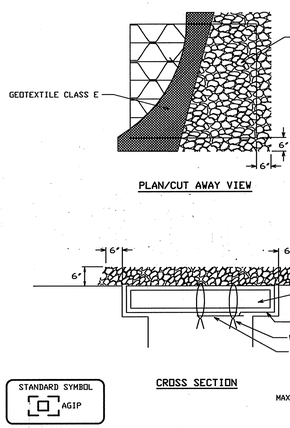
SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING (UNLESS PREVIOUSLY LOOSENED).

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15, SEED WITH 2-1/2 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./1000 SQ.FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING LOVEGRASS (.07 LBS/1000 SQ FT). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED, WEED-FREE, SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

DETAIL 23B - AT GRADE INLET PROTECTION



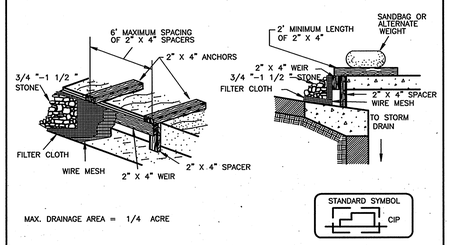
Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.

2. Place 3/4" to 11/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23C - CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.

2. Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.

3. Securely nail the 2" X 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4' apart).

4. Place the assembly against the inlet throat and nail (minimum 2' lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.

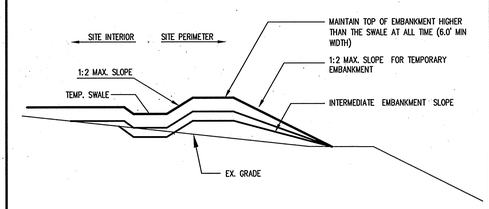
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.

6. Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.

7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

8. Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5B	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



TYPICAL EMBANKMENT FILL SECTION THROUGH AN EARTH DIKE OR TEMPORARY SWALE

NOT TO SCALE

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer — Date N/A

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director — Date 6/1/04

Chief, Division of Land Development — Date 6/1/04

Chief, Development Engineering Division — Date 3/30/04

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

NATURAL RESOURCES CONSERVATION SERVICE — DATE 3/25/04

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

HOWARD S.C.D. — DATE 3/25/04

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

DATE 3/19/04

STATE OF MARYLAND — CLAYTON K. GUTSCHICK — No. 7273

DEVELOPERS/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.

SIGNATURE OF DEVELOPER/BUILDER — DATE 3/19/04

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8865 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SNE-DET.dwg | DES. | DRN. HP | CHK.

DATE	REVISION	BY	APP'R.

SEDIMENT CONTROL NOTES & DETAILS

CENTRE 9500 PARCEL-C, Ph. I

AGE-RESTRICTED ADULT HOUSING

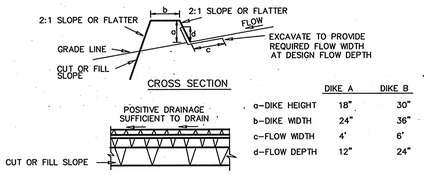
PLAT No. 14213 / 10515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	15 OF 25

SDP-03-138

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

STANDARD SYMBOL
A-2 B-3

FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.

3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.

4. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.

5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

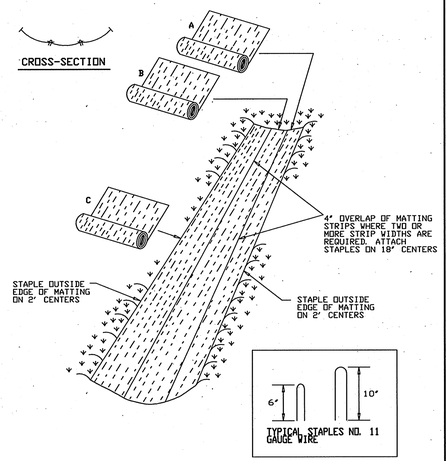
6. Fill shall be compacted by earth moving equipment.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

EROSION CONTROL MATTING

Construction Specifications

1. Key-in the matting by placing the top ends of the matting in a narrow trench, 6' in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4' down slope from the trench. Spacing between staples is 6'.

2. Staple the 4' overlap in the channel center using an 18' spacing between staples.

3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.

4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.

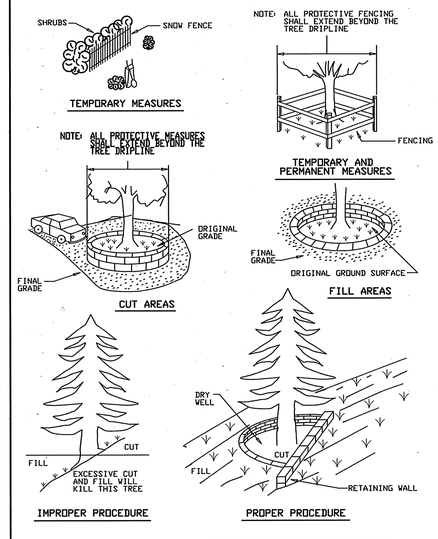
5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4', shiplap fashion. Reinforce the overlap with a double row of staples spaced 6' apart in a staggered pattern on either side.

6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed-in.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 31 - TREE PROTECTION



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 20 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

Dust Control

Definition

Controlling dust blowing and movement on construction sites and roads.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces, reduce on and off-site damage, health hazards, and improve traffic safety.

Conditions Where Practice Applies

This practice is applicable to areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications

Temporary Methods

1. Mulches - See standards for vegetative stabilization with mulches only. much should be crimped or tacked to prevent blowing.

2. Vegetative Cover - See standards for temporary vegetative cover.

3. Tillage - To roughen surface and bring clods to the surface. This is an emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12" apart, spring-toothed harrows, and similar plows are examples of equipment which may produce the desired effect.

4. Irrigation - This is generally done as an emergency treatment. Site is sprinkled with water until the surface is moist. Repeat as needed At no time should the site be irrigated to the point that runoff begins to flow.

5. Barriers - Solid board fences, silt fences, snow fences, straw bales, and similar material can be used to control air currents and soil blowing. Barriers placed at right angle to prevailing currents at intervals at about ten times their height are effective in controlling soil blowing.

6. Calcium Chloride - Apply at rates that will keep surface moist. May need treatment.

Permanent Methods

1. Permanent Vegetation - See standards for permanent vegetative cover, and permanent stabilization with sod. Existing trees or large shrubs may afford valuable protection if left in place.

2. Topsoiling - Covering with less erosive soil material. See standards for top soil.

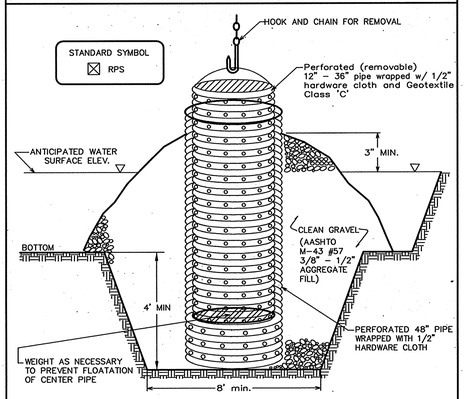
3. Stone - Cover surface with crushed stone or gravel.

References

1. Agriculture Handbook 346. Wind Erosion Forces in the United States and Their Use in Predicting Soil Loss.

2. Agriculture Information Bulletin 354. How to Control Wind Erosion, USDA_ARS.

DETAIL 20A - REMOVABLE PUMPING STATION



Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.

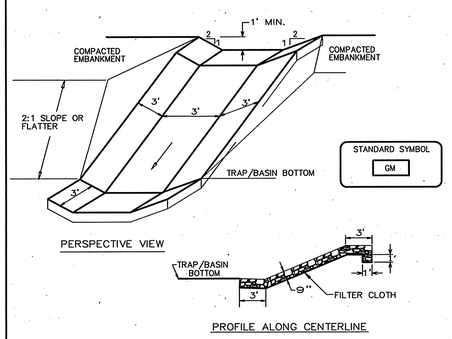
2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.

3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class C.

4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE D - 12 - 5	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 6 - GABION INFLOW PROTECTION



Construction Specifications

1. Gabion inflow protection shall be constructed of 9' x 3' x 9" gabion baskets forming a trapezoidal cross section 1' deep, with 2:1 side slopes, and a 3' bottom width.

2. Geotextile Class C shall be installed under all gabion baskets.

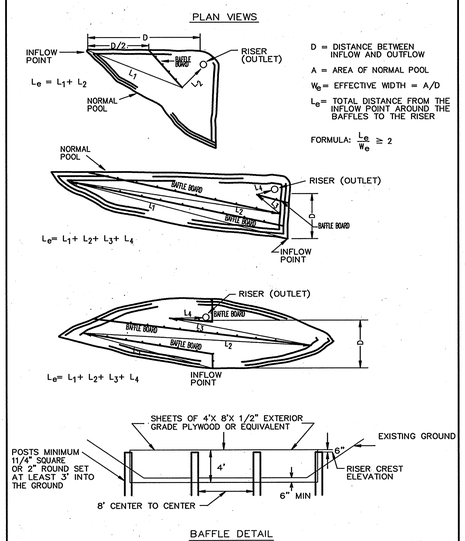
3. The stone used to fill the gabion baskets shall be 4" - 7".

4. Gabions shall be installed in accordance with manufacturers recommendations.

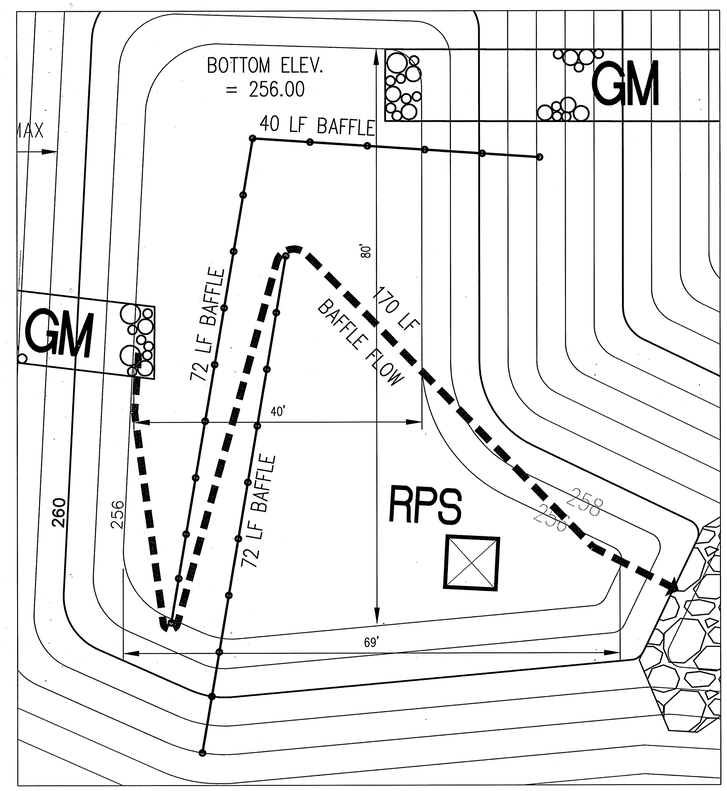
5. Gabion Inflow Protection shall be used where concentrated flow is present on slopes steeper than 4:1.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 7 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 18 - SEDIMENT BASIN BAFFLES



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE C - 10 - 28	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



D = 83 ft
A = 7050 sq-ft.
We = A/D = 85 ft.
Le = 2We = 170 ft.

SEDIMENT TRAP BAFFLE PLAN
SCALE: 1" = 10'

APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director 6/1/04 Date

Chief, Division of Land Development 6/1/04 Date

Chief, Development Engineering Division 3/30/04 Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

NATURAL RESOURCES CONSERVATION SERVICE 3/25/04 DATE

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

HOWARD S.C.D. 3/25/04 DATE

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

3/19/04 DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.

SIGNATURE OF DEVELOPER/BUILDER 3/19/04 DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SNE-DET.dwg	DES.	DRN. MP	CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SEDIMENT CONTROL NOTES & DETAILS

CENTRE 9500 PARCEL-C, Ph. I

AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 / 10515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	16 OF 25

SDP-03-138

PHASE-2 SEQUENCE OF CONSTRUCTION

(SEE SHEETS 22-24 FOR PHASE-1 MASS GRADING CONSTRUCTION SEQUENCE)

1. CHECK AND VERIFY THE MASS GRADED CONDITION.

2. STAKE OUT THE L.O.D. FOR PHASE-2 AND ENLARGE THE STABILIZED CONSTRUCTION ENTRANCE (SCE) TO THE SIZE SHOWN FOR PHASE-2. (1-2 DAYS)

3. RELOCATE (OR INSTALL NEW) SUPER SILT FENCE (SSF) AND TREE PROTECTION FENCE (TPF) AT THE NEW LOCATION FOR PHASE-2. FOR SILT FENCE ALONG THE PHASE-2 LOD, INSTALL NEW ONES. (2-3 DAYS)

4. CHECK THE CONDITION OF TRAP-A LEFT FROM THE PHASE-1 MASS GRADING OPERATION AND REPAIR/CLEANOUT THE TRAP AS NECESSARY SO IT MEETS THE DESIGN PARAMETERS SHOWN ON THIS SHEET (1-DAY).

5.. CHECK THE CONDITION OF THE EARTH DIKES LEFT FROM THE PHASE-1 MASS GRADING OPERATION AND MAKE REPAIRS TO THE E.D's AS NECESSARY (1-DAY).

6. OBTAIN PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR (SCI) TO BEGIN THE GRADING OPERATION FOR PHASE-2.

7. OBTAIN PERMISSION FROM THE SCI TO REMOVE THE UPPER PORTION OF THE E.D's USED IN PHASE-1 BUT NO LONGER NECESSARY IN PHASE-2. RAISE THE EARTH DIKE (FROM S.O.C. #6) PER THE DETAIL ON SHEET 15 ("TYPICAL EMBANKMENT FILL SECTION THROUGH AN EARTH DIKE...") AS THE GRADE IN SOUTHERN PORTION OF THE SITE IS BROUGHT HIGHER. STABILIZED THE TWO BERMS ALONG MARSHALEE DRIVE WITH PERMANENT SEEDING AND MATTING ONCE THEY ARE BROUGHT TO FINAL GRADE. (APPROX. 2 WKS.)

8. COORDINATE UTILITY INSTALLATION WITH THE GRADING OPERATION. FOR THE STORM DRAIN SYSTEM, BEGIN AT INLET #4 WITH A TEMPORARY 36" PIPE INTO TRAP-A THEN WORK UP FROM THERE. DELAY THE INSTALLATION OF THE STORM DRAIN BETWEEN EX M-2 AND M-4. (APPROX. 3 WKS.)

9. INSTALL CONCRETE CURB/GUTTER AND THE BASE PAVING BUT DELAY THE PORTION BETWEEN BUILDINGS 6/7 AND 7/8 (ON BOTH SIDES OF THE DRIVE) TO FACILITATE THE FUTURE BACKFILLING OF THE SEDIMENT TRAP. INSTALL THE TEMPORARY ASPHALT DIVERSION BERM (A.D.B.) AT INLETS #35 AND #36. (APPROX. 3 WKS.)

10 ONCE ALL THE CURB/GUTTER AND BASE PAVING (EXCEPT THOSE DELAYED IN S.O.C. #9) ARE INSTALLED, OBTAIN PERMISSION FROM THE SCI TO BACKFILL THE EARTH DIKES AND IMMEDIATELY STABILIZE BUILDING PADS 5 & 6 WITH SEEDING. (1-2 DAYS)

11. OBTAIN PERMISSION FROM THE SCI TO BACKFILL TRAP-A. SEQUENCE THE BACKFILLING OPERATION DURING A FIVE (5) CONSECUTIVE DAYS OF CLEAR WEATHER BY NWS.

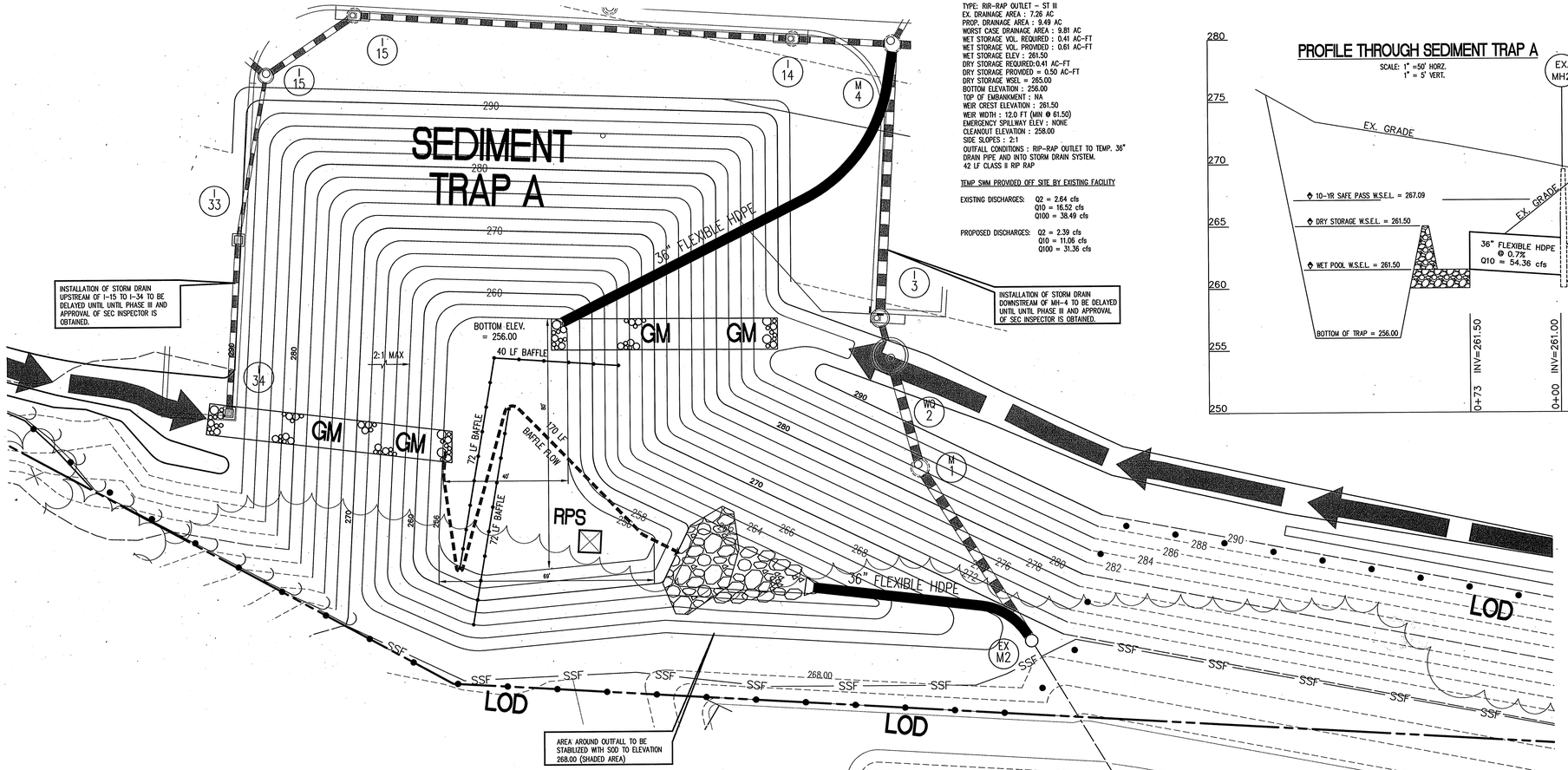
(A) FLUSH THE STORM DRAIN SYSTEM OF ANY ACCUMULATED SEDIMENTS AND DRAIN THE TRAP.
(B) MAKE SURE THE S.S.F. BEHIND FUTURE BUILDINGS 6-7 ARE IN GOOD WORKING ORDER. FIX AND REPAIR AS NECESSARY.
(C) INSTALL INLET PROTECTION AT AT ALL INLETS.
(D) INSTALL SILT FENCE ALONG THE CURB & GUTTER IN THE VICINITY OF BUILDINGS 6-8.
(E) REMOVE THE TEMP. 36" HDPE FROM M-4 (INTO TRAP-A) AND THE TEMP. 36" HDPE IN EX-M2 THEN COMPLETE THE STORM DRAIN BETWEEN EX-M2 AND M-4.
(F) BACKFILL TRAP-A AND COMPLETE THE MISSING CURB AND PAVING BETWEEN BUILDINGS 6/7 & 7/8.

12. INITIATE BUILDING CONSTRUCTION (WHICH CAN BE CONCURRENT WITH S.O.C. #9; HOWEVER, BUILDINGS 5-8 SHALL BE DELAYED WHILE THE TRAP AND THE EARTH DIKES ARE STILL IN USE). START WITH THE COMMUNITY BUILDING (INCLUDING THE POOL, TENNIS COURT, ETC.) AND APT. BUILDING #1 (AND ITS FREE STANDING GARAGE #1) THEN PROCEED TO THE NEXT BUILDING IN NUMERICAL ORDER. INSTALL A S.C.E. AND SILT FENCE ALONG THE CURB/GUTTER FOR EACH APT. BUILDING THAT ARE UNDERGOING CONSTRUCTION. COORDINATE THE CONSTRUCTION OF EACH RETAINING WALL WITH ITS CORRESPONDING APT. BUILDING. THE RETAINING WALL CAN ALSO BE DONE IN S.O.C. #10 DURING THE E.D's BACKFILLING OPERATION. (APPROX. 18-24 MONTHS/APT.)

13. AS EACH BUILDING IS COMPLETED, STABILIZE THE AREA SURROUNDING THE BUILDING THAT IS NOT OTHERWISE PAVED (SIDEWALKS & DRIVEWAYS) WITH LANDSCAPE PLANTING AND PERMANENT SEEDING (PLUS MATTING ON ALL HILL SIDES) OR SOD (1-2 DAYS).

14. OBTAIN PERMISSION FROM THE SCI TO REMOVE ANY REMAINING SEDIMENT CONTROL ITEMS THAT ARE NO LONGER NEEDED (1-2 DAYS).

15. INSTALL TOP PAVING COURSE (1-2 DAYS).



PLAN VIEW - ENLARGEMENT SEDIMENT TRAP A

SCALE: 1" =20' HORZ.

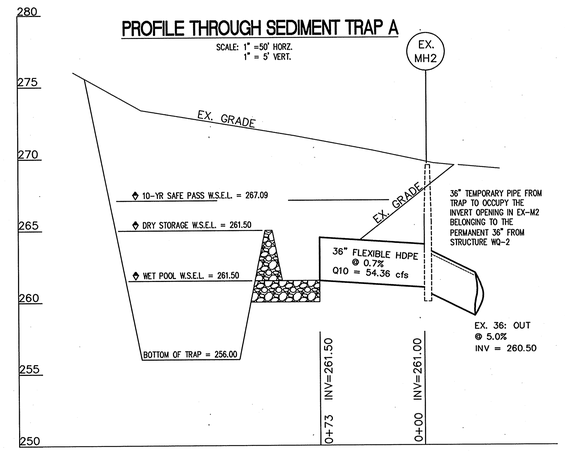
SEDIMENT TRAP DATA (ST-III)

TYPE: RIR-RAP OUTLET - ST III
EX. DRAINAGE AREA : 7.26 AC
PROP. DRAINAGE AREA : 9.49 AC
WORST CASE DRAINAGE AREA : 9.81 AC
WET STORAGE VOL. REQUIRED : 0.41 AC-FT
WET STORAGE VOL. PROVIDED : 0.61 AC-FT
WET STORAGE ELEV : 261.50
DRY STORAGE REQUIRED:0.41 AC-FT
DRY STORAGE PROVIDED = 0.50 AC-FT
DRY STORAGE WSEL = 265.00
BOTTOM ELEVATION : 256.00
TOP OF EMBANKMENT : NA
WEIR CREST ELEVATION : 261.50
WEIR WIDTH : 12.0 FT (MIN @ 61.50)
EMERGENCY SPILLWAY ELEV : NONE
CLEANOUT ELEVATION : 258.00
SIDE SLOPES : 2:1
OUTFALL CONDITIONS : RIP-RAP OUTLET TO TEMP. 36" DRAIN PIPE AND INTO STORM DRAIN SYSTEM.
42 LF CLASS II RIP RAP

TEMP SWM PROVIDED OFF SITE BY EXISTING FACILITY

EXISTING DISCHARGES: Q2 = 2.84 cfs
Q10 = 16.52 cfs
Q100 = 38.49 cfs

PROPOSED DISCHARGES: Q2 = 2.39 cfs
Q10 = 11.06 cfs
Q100 = 31.36 cfs



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director 6/4/04 Date

Chief, Division of Land Development 6/1/04 Date

Chief, Development Engineering Division 3/30/04 Date

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS.

NATURAL RESOURCES CONSERVATION SERVICE 3/23/04 DATE

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

HOWARD S.C.D. 3/23/04 DATE

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

3/19/04 DATE

STATE OF MARYLAND CHARLES R. GUTSCHICK No. 12071

DEVELOPERS/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP.

SIGNATURE OF DEVELOPER/BUILDER 3/19/04 DATE

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\SNE-DET.dwg | DES. | DRN. MP | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

SEDIMENT CONTROL NOTES & DETAILS

CENTRE 9500 PARCEL-C, Ph. I

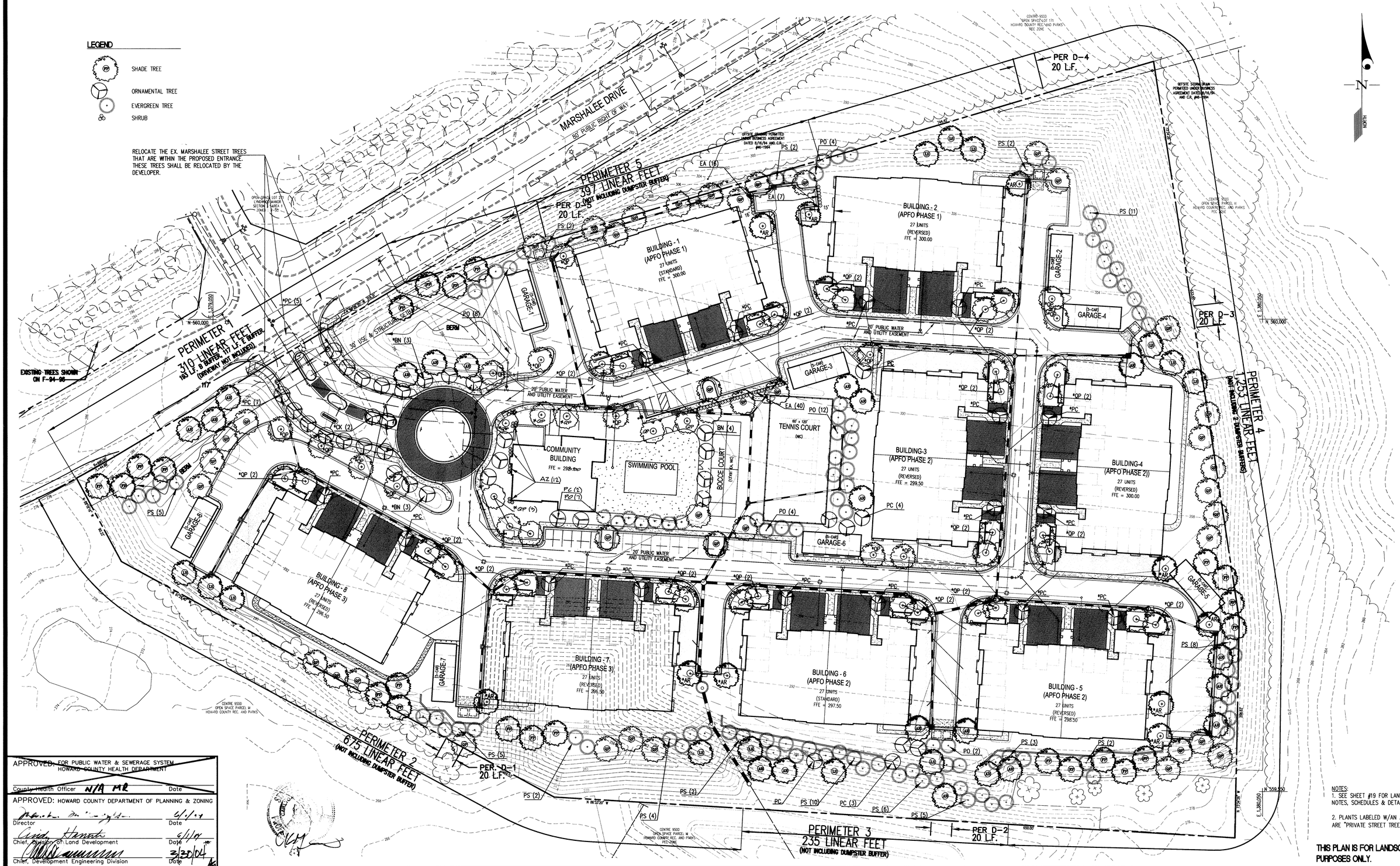
AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 / 16515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	17 OF 25

SDP-03-138



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director Date 6/1/04

Chief, Division of Land Development Date 6/1/04

Chief, Development Engineering Division Date 3/30/04

NOTES:
1. SEE SHEET #19 FOR LANDSCAPE NOTES, SCHEDULES & DETAILS.
2. PLANTS LABELED W/AN ASTERISK (*) ARE "PRIVATE STREET TREES".

THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\LS.dwg | DES. | DRN. | CHK.

DATE	REVISION	BY	APP'R.
6-6-05	Rev Community Bldg. and rev. plants accordingly		
11-30-04	Update Community Bldg. & Pool Area		

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUITE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

LANDSCAPE PLAN

CENTRE 9500 PARCEL-C, Ph. 1

AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 / 10515

ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 40'	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	18 OF 25

SDP-03-138

LANDSCAPE NOTES

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE & THE HOWARD COUNTY LANDSCAPE MANUAL.
2. CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST (5) FIVE DAYS BEFORE STARTING WORK. ALL GENERAL NOTES, ESPECIALLY THOSE REGARDING UTILITIES, ON SHEET No.1 SHALL APPLY.
3. FIELD VERIFY UNDERGROUND UTILITY LOCATIONS AND EXISTING CONDITIONS BEFORE STARTING PLANTING WORK. CONTACT CONSTRUCTION MANAGER OR OWNER IF ANY RELOCATIONS ARE REQUIRED.
4. PLANT QUANTITIES SHOWN ON THE PLAN LIST ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. IF DISCREPANCIES EXIST BETWEEN QUANTITIES SHOWN ON THE PLAN AND THOSE SHOWN ON THE PLANT LIST, THE QUANTITIES ON THE PLAN SHALL TAKE PRECEDENCE.
5. ALL PLANT MATERIAL SHALL BE FULL, HEAVY, WELL FORMED, SYMMETRICAL, AND CONFORM TO THE A.A.N. SPECIFICATIONS. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THIS PLAN.
6. NO SUBSTITUTION SHALL BE MADE WITHOUT PRIOR APPROVAL FROM HOWARD COUNTY DPZ AND THE OWNER OR HIS REPRESENTATIVE.
7. ALL AREAS DISTURBED BY CONSTRUCTION ACTIVITIES BUT NOT OTHERWISE PLANTED, PAVED, OR MULCHED SHALL BE SODDED OR SEEDED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATION. A MINIMUM OF 4" OF TOPSOIL SHALL BE PROVIDED TO ALL PLANTING AREAS (FOR TOPSOIL SPEC. SEE SHEET 16).
8. THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING IF HE/SHE ENCOUNTERS SOIL DRAINAGE CONDITIONS THAT MAY BE DETRIMENTAL TO THE GROWTH OF THE PLANTS.
9. ALL EXPOSED EARTH WITHIN THE LIMITS OF PLANTING BEDS SHALL BE MULCHED WITH SHREDDED HARDWOOD MULCH PER THE PLANTING DETAILS.
10. DO NOT PLANT WITHIN THE PUBLIC WATER AND UTILITY EASEMENT.
11. SCHEDULES A,B,C AND D ARE PROVIDED FOR LANDSCAPE SURETY CALCULATION PURPOSES. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING POSTED WITH THE DEVELOPERS' AGREEMENT IN THE AMOUNT OF $73,200.00 WHICH IS FOR THE FOLLOWING ITEMS:

    100 STREET TREES FOR PRIVATE ROAD = $30,000.00
    136 SHADE TREES AT $300/TREE = $40,800.00
    16 EVERGREEN TREES AT $150/TREE = $ 2,400.00

FOR LANDSCAPE INSPECTION TO OBTAIN THE RELEASE OF THE SURETY, CONTACT HOWARD COUNTY DEPT. OF PLANNING & ZONING AT 410-313-2350.

SCHEDULE-A: PERIMETER LANDSCAPE EDGE

PERIMETER No.	1		2	3	4	5	D-1	D-2	D-3	D-4	D-5
USE SITUATION	PKNG ADJ. R'DWAY	APTS ADJ. R'DWAY	APTS. ADJ. OPEN SPACE	APTS ADJ. SWM	OPEN SPACE ADJ. APTS.	APTS ADJ. OPEN SPACE	DUMPSTER ADJ. ROADWAY	DUMPSTER ADJ. SWM	DUMPSTER ADJ. OPEN SPACE	DUMPSTER ADJ. OPEN SPACE	DUMPSTER ADJ. OPEN SPACE
LANDSCAPE TYPE	B	E	A	B	A	A	C	C	C	C	C
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	193'	117'	675'	235'	1,253'	397'	20'	20'	20'	20'	20'
CREDIT FOR EXISTING VEGETATION	NO	NO	NO	See Sched. D for Per. 3	NO	NO	NO	NO	NO	NO	NO
CREDIT FOR WALL, FENCE OR BERM	NO	117'L.F. OF BERM	NO		NO	NO	NO	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED SHADE TREES EVERGREEN TREES SHRUBS	 4 5 0	 3 0 0	 12 0 0		 21 0 0	 7 0 0	 1 1 0	 1 1 0	 1 1 0	 1 1 0	 1 1 0
NUMBER OF PLANTS PROVIDED SHADE TREES EVERGREEN TREES OTHER TREES (@ 2:1 substitution) SHRUBS (10:1 substitution)	 4 5 0	 3 0 0	 12 0 0		 21 0 0	 7 0 0	 1 2 0	 1 2 0	 1 2 0	 1 1 0	 1 2 0

SCHEDULE-B: PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	66 COMMON SURFACE SPACES
NUMBER OF SHADE TREES REQUIRED (1 PER 10 RES. SPACES, 1 PER 20 COMMERCIAL SPACES 1)	7 (3 @ 3 CENTRAL ISLANDS & 4 @ THE ENDS IF THE PARKING BAYS)
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	 7 0

SCHEDULE-C: RESIDENTIAL INTERNAL LANDSCAPING

NUMBER OF DWELLING UNITS	216
NUMBER OF TREES REQUIRED (1 PER SFA DU, 1 PER 3 APTS DU)	72
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	 35 82 EVERGREEN * 14 ORNAMENTAL *

* THE 82 EVERGREENS & 14 ORNAMENTALS ARE SUBSTITUTED FOR 37 SHADE TREES.

SCHEDULE-D: STORMWATER MANAGEMENT AREA LANDSCAPING

LINEAR FEET OF PERIMETER	235' (DUMPSTER BUFFER NOT INCLUDED)
NUMBER OF SHADE TREES REQUIRED FOR 'B' BUFFER	5
NUMBER OF EVERGREEN TREES REQUIRED	6
CREDIT FOR EXISTING VEGETATIONS	NO
CREDIT FOR OTHER LANDSCAPING	NO
NUMBER OF SHADE TREES PROVIDED	5
NUMBER OF EVERGREEN TREES PROVIDED	6
NUMBER OF OTHER TREES PROVIDED (AS SUB.)	0

BUFFER TYPE	SHADE TREES/LF	EVG. TREES/LF	SHRUBS/LF
A	1:60	0	0
B	1:50	1:40	0
C	1:40	1:20	0
D	1:60	1:10	0
E	1:40	0	1:4

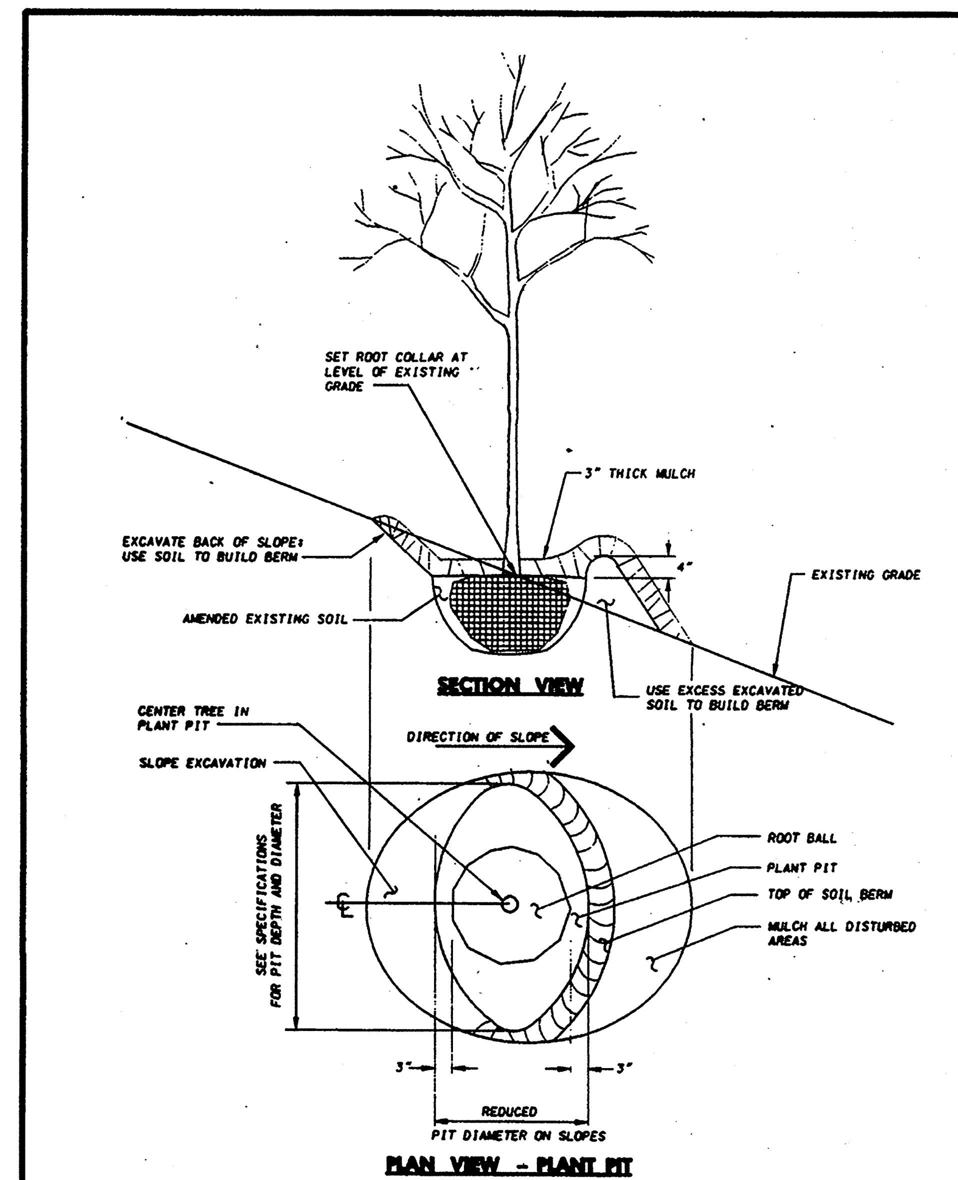
LANDSCAPE SURETY REQUIREMENT:

SURETY REQUIRED FOR SCHEDULE 'A' SHADE TREES AT $300/TREE	x	52	=	$15,600.00
SURETY REQUIRED FOR SCHEDULE 'A' EVGRN TREES AT $150/TREE	x	10	=	$ 1,500.00
SURETY REQUIRED FOR SCHEDULE 'B' SHADE TREES AT $300/TREE	x	7	=	$ 2,100.00
SURETY REQUIRED FOR SCHEDULE 'C' SHADE TREES AT $300/TREE	x	72	=	$21,600.00
SURETY REQUIRED FOR SCHEDULE 'D' SHADE TREES AT $300/TREE	x	5	=	$ 1,500.00
SURETY REQUIRED FOR SCHEDULE 'D' EVGRN TREES AT $150/TREE	x	6	=	$ 900.00
LANDSCAPE SURETY REQUIRED FOR SCHEDULES A, B, C and D:				$43,200.00
SURETY REQUIRED FOR "PRIVATE" STREET TREES AT $300/TREE	x	100	=	$30,000.00
TOTAL LANDSCAPE SURETY REQUIRED:				$73,200.00

PLANT LIST

SYMBOL	QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	ROOT/COMMENTS
SHADE TREES				
AR	30	ACER RUBRUM 'AUTUMN FLAME'/ AUTUMN FLAME MAPLE	2 2 1/2" CAL.	B&B
FP	23	FRAXINUS PENNSULVANICUM 'SUMMIT'/ GREEN ASH	2 1/2-3" CAL.	B&B
LS	13	LIQUIDAMBAR STYRACIFLUA/ SWEET GUM	2 1/2-3" CAL.	B&B
QP	94	QUERCUS PALUSTRIS/ PIN OAK	2 1/2-3" CAL.	B&B
EVERGREEN TREES				
PS	69	PINUS STROBUS/ WHITE PINE	8'-10' HT.	B&B, INTACT LEADER
PO	33	PICEA OMORIKA/ NORWAY SPRUCE	8'-10' HT.	B&B, INTACT LEADER
ORNAMENTAL TREES				
BN	13	BETULA NIGRA 'HERITAGE'/ HERITAGE RIVER BIRCH	2 - 2 1/2" CAL. 8-10' HT.	B&B
CK	2	CORNUS KOUSA/ KOUSA DOGWOOD	2 - 2 1/2" CAL. 8'-10' HT.	B&B
PC	38	PRUNUS CERASIFERA 'THUNDERCLOUD'/ PURPLELEAF FLOWERING PLUM	2 - 2 1/2" CAL. 8'-10' HT.	B&B
SHRUBS				
AZ	12	RHODODENDRON 'GLEN DALE' GLEN DALE AZALEA	24-30" HT.	B&B
EA	54	EUONYMUS ALATA 'COMPACTA' BURNING BUSH	30-36" HT.	B&B

THE ABOVE QUANTITY INCLUDES "PRIVATE ROADWAY" STREET TREES (10-AR; 51-QP; 2-CK; 9-BN AND 28-PC). ALL ORNAMENTAL TREES PLANTED AS STREET TREES SHALL BE A MINIMUM OF 2.5" CAL.
SURETY FOR THE "PRIVATE" STREET TREES @ $300/TREE x 100 = $30,000.00

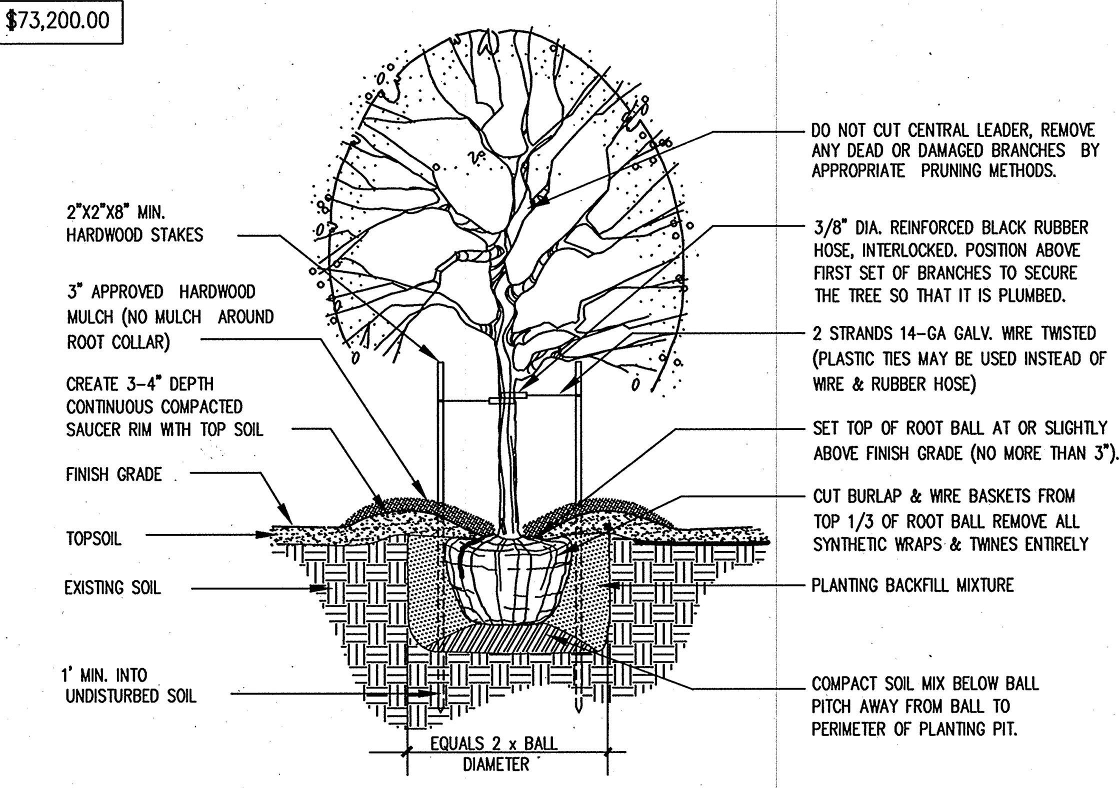


SPECIFICATION 710	CATEGORY CODE ITEMS 730020-744900
APPROVED	DEPUTY CHIEF ENGINEER-HIGHWAY DEVELOPMENT
APPROVAL - SHA REVISIONS APPROVAL 10-28-97	APPROVAL - FEDERAL HIGHWAY ADMINISTRATION APPROVAL 04-18-97

Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION
Standards for Highways, Incidental Structures and Traffic Control Applications

PLANTING TREES ON SLOPES FROM 3:1 TO 2:1

STANDARD NO. MD 710.03-14

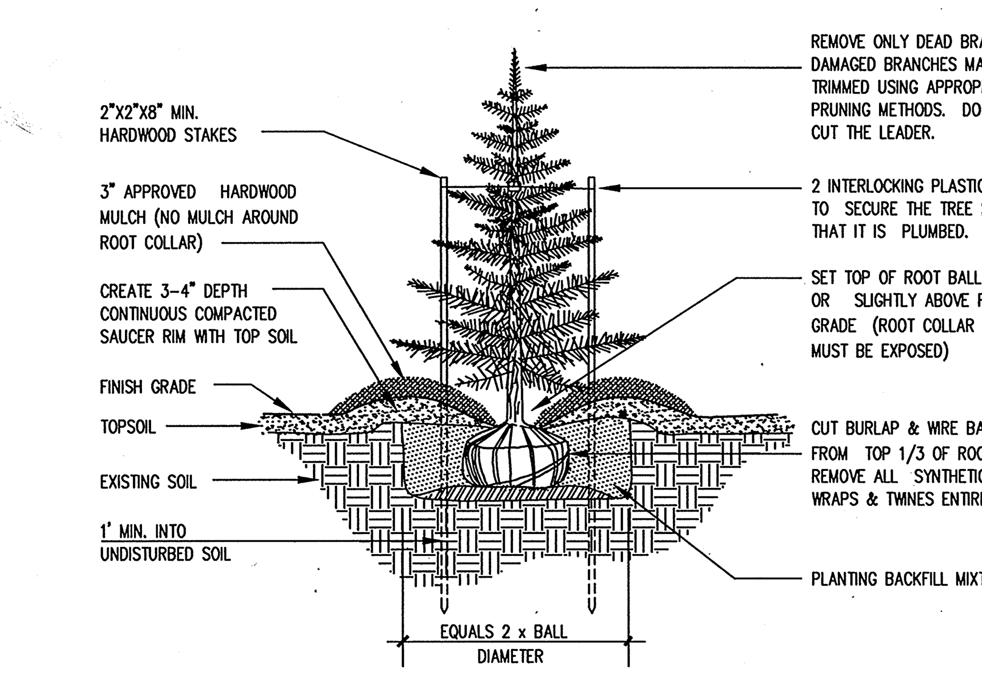


NOTE: ALL SUPPORTING DEVICES (STAKES, WIRES, ETC.) SHALL BE REMOVED AFTER 2 GROWING SEASONS.

DECIDUOUS TREE PLANTING DETAIL

FOR PLANTING MATERIAL UP TO 3 1/2" CALIPER

NTS



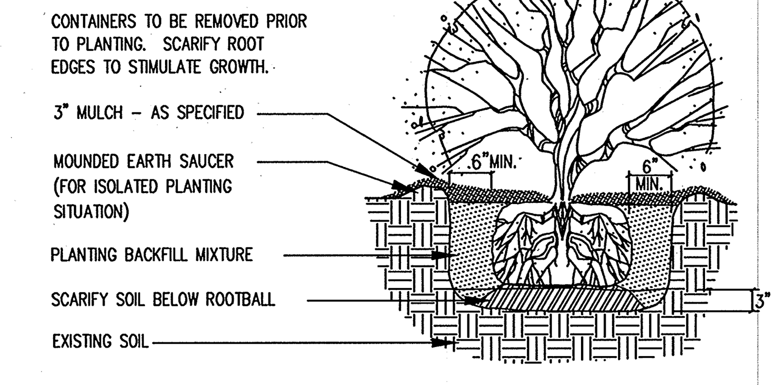
NOTE: ALL SUPPORTING DEVICES (STAKES, TIES, ETC.) SHALL BE REMOVED AFTER 2 GROWING SEASONS.

EVERGREEN TREE PLANTING DETAIL

NTS

NOTE:
SET ROOT BALL AT OR SLIGHTLY ABOVE FINISH GRADE.

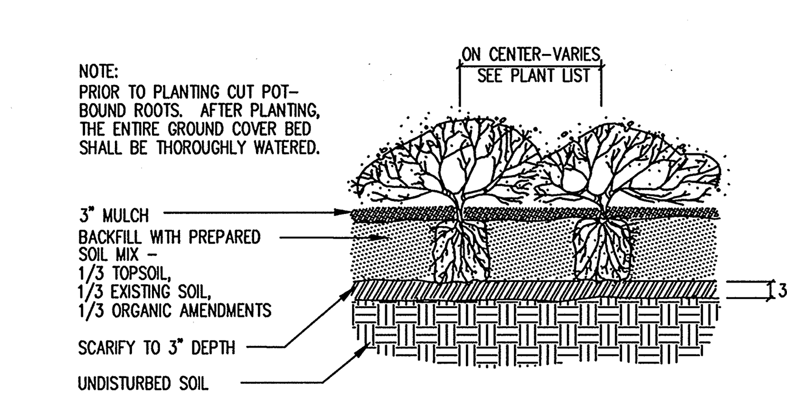
CONTAINERS TO BE REMOVED PRIOR TO PLANTING. SCARIFY ROOT EDGES TO STIMULATE GROWTH.



SHRUB PLANTING DETAIL

NTS

NOTE:
PRIOR TO PLANTING CUT POT-BOUND ROOTS. AFTER PLANTING, THE ENTIRE GROUND COVER BED SHALL BE THOROUGHLY WATERED.



GROUNDCOVER PLANTING DETAIL

NTS

DEVELOPER'S/BUILDER'S CERTIFICATE

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

BEAZER HOMES CORP. [signature] 3/19/04
NAME DATE

~~APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM HOWARD COUNTY HEALTH DEPARTMENT~~
~~County Health Officer~~ N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
[signature] 6/1/04
Director Date
[signature] 6/1/04
Chief, Division of Land Development Date
[signature] 3/30/04
Chief, Development Engineering Division Date

STATE OF MARYLAND CARLTON K. GUTSCHICK 12973

GLW GUTSCHICK LITTLE & WEBER, P.A.
CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\LS-NOTES.dwg	DES.	DRN. KP	CHK. MBT

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUTIE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

ELECTION DISTRICT No. 1

LANDSCAPE NOTES & DETAILS

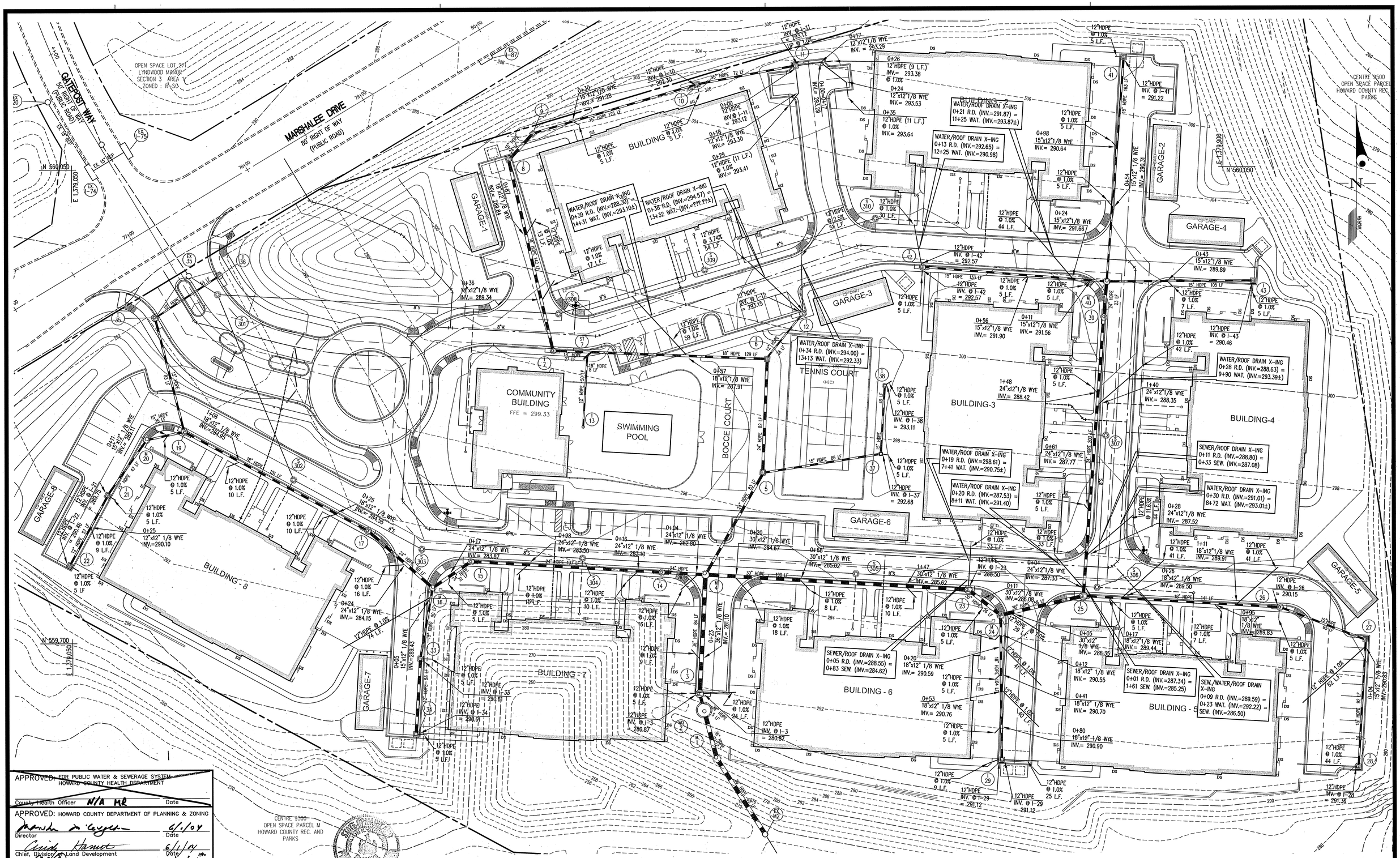
CENTRE 9500 PARCEL-C, Ph. I

AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 / 16515

HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
AS SHOWN	POR	02-018
DATE	TAX MAP - GRID	SHEET
10/MAR/04	37	19 OF 25

SDP-03-138



APPROVED: FOR PUBLIC WATER & SEWERAGE SYSTEM
HOWARD COUNTY HEALTH DEPARTMENT

County Health Officer N/A MR Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Director 6/1/04 Date

Chief, Division of Land Development 6/1/04 Date

Chief, Development Engineering Division 5/20/04 Date

GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS
3909 NATIONAL DRIVE – SUITE 250 – BURTONSVILLE OFFICE PARK
BURTONSVILLE, MARYLAND 20866
TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

CADD\DRAWINGS\02018\SDP's\ROOF-DRAIN.dwg | DES. | DRN. MP | CHK.

DATE	REVISION	BY	APP'R.

PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5071
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUTIE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

ROOF DRAIN PLAN

CENTRE 9500 PARCEL-C, Ph. I

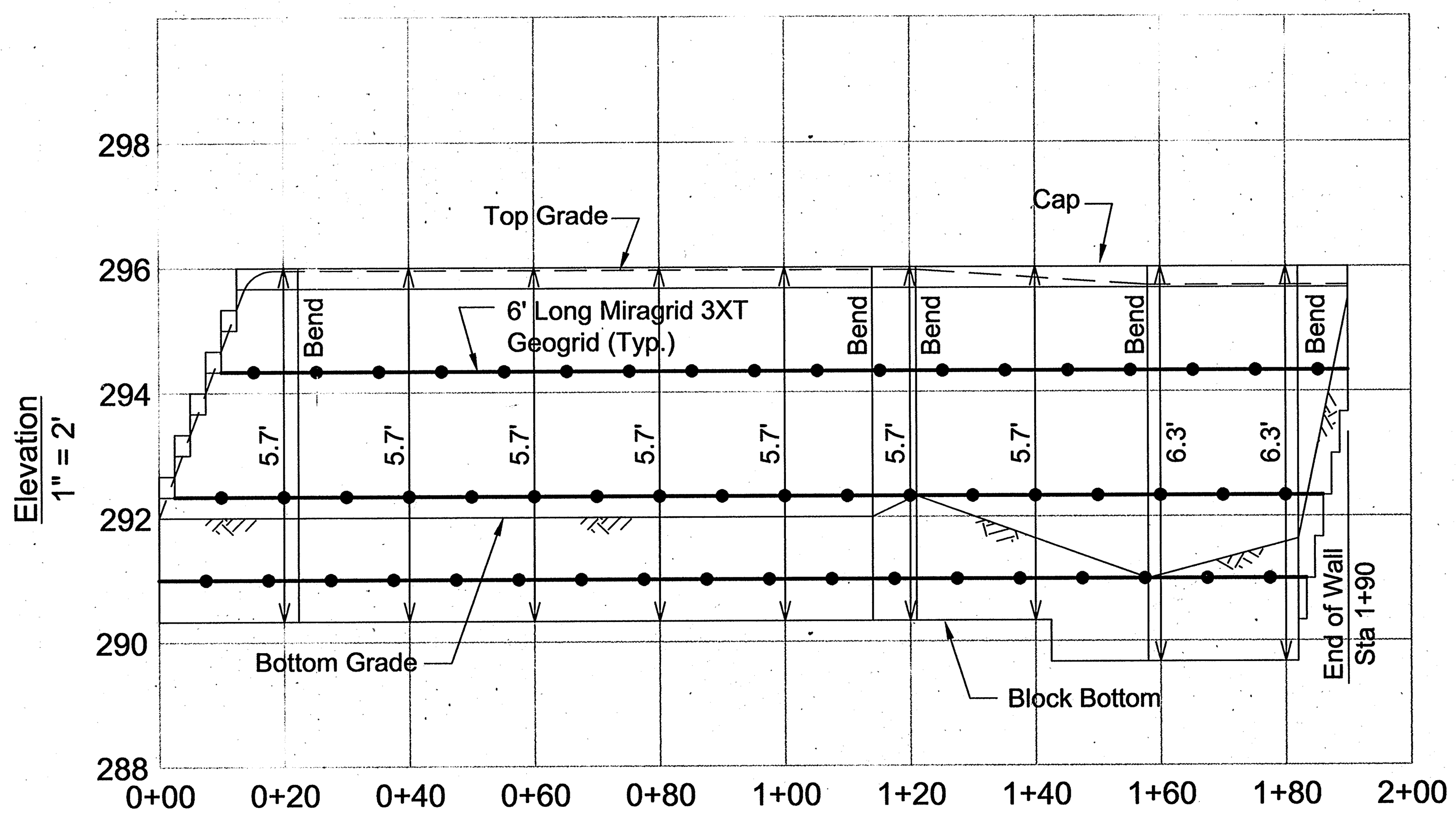
AGE-RESTRICTED ADULT HOUSING

PLAT No. 14213 / 16515

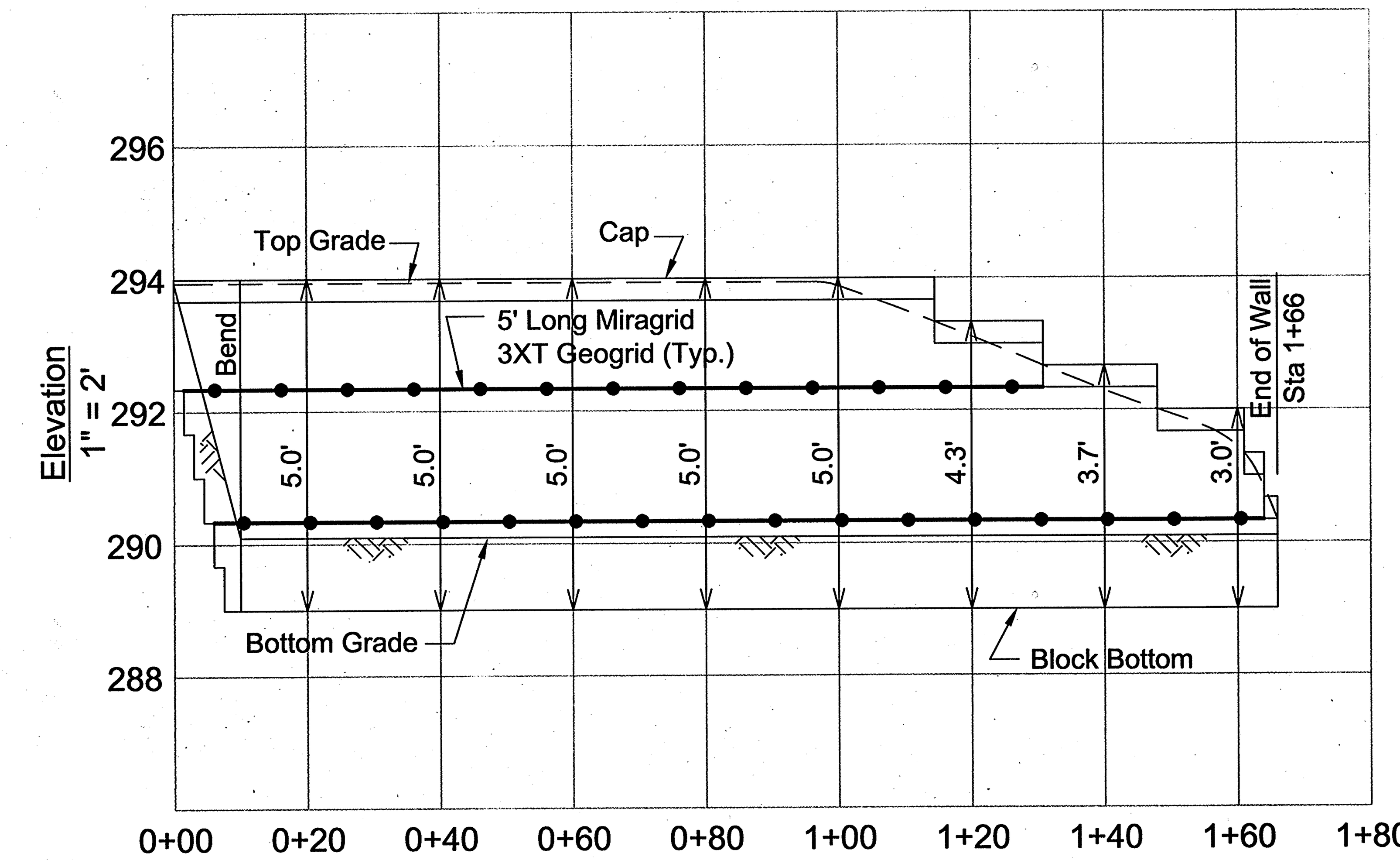
ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	G. L. W. FILE No.
1" = 30'	POR	02-018
DATE	TAX MAP – GRID	SHEET
10/MAR/04	37	20 OF 25

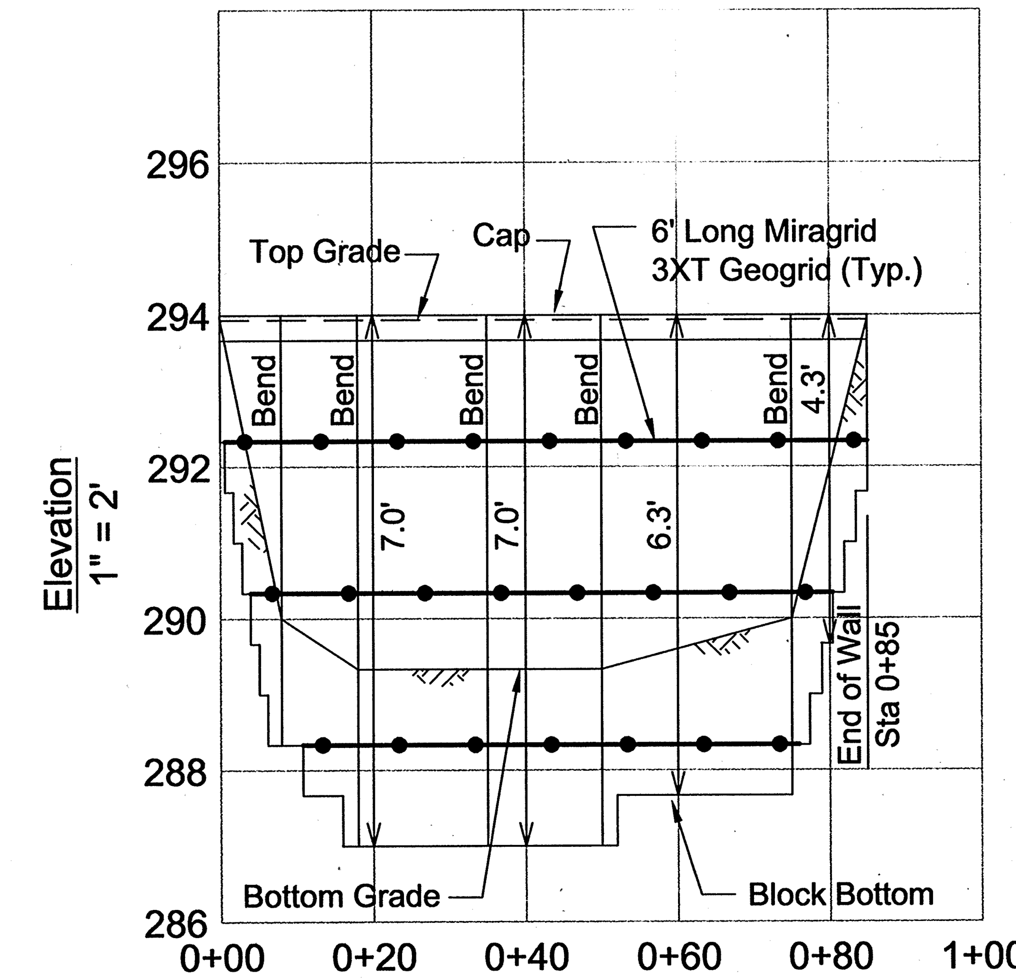
SDP-03-138



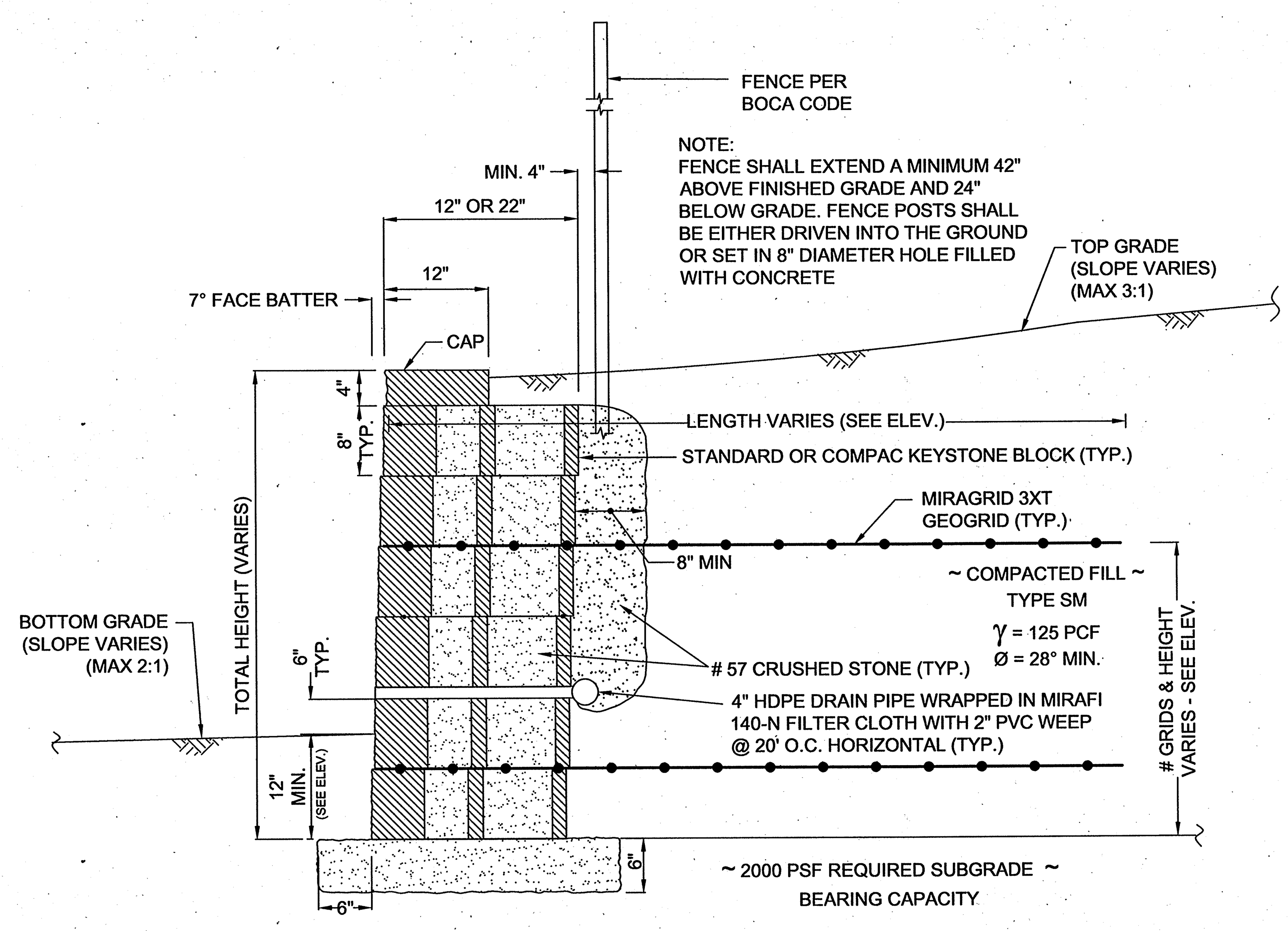
Wall #1 Station
1" = 20'



Wall #2 Station
1" = 20'



Wall #3 Station
1" = 20'



TYPICAL WALL SECTION
N.T.S.

NOTES:
1.) No trees shall be planted within 10 feet of the top of the retaining wall.
2.) Retaining walls shall only be constructed under the observation of a registered professional engineer and a (NICET, WACEL, or equiv.) certified soils technician.
3.) The required bearing pressure beneath the wall system shall be verified in the field by a certified soils technician. Testing documentation must be provided to the Howard County Inspector prior to start of construction. The required bearing test shall be the Dynamic Cone Penetrometer test ASTM STP-399.
4.) The suitability of fill material shall be confirmed by the on-site soils technician. Each 8" lift must be compacted to a minimum 95% standard proctor density and the testing report shall be made available to the Howard County Inspector upon completion of construction.
5.) One soil boring is required every one hundred feet along the length of the wall. Copies of the boring reports shall be provided to the Howard County Inspector prior to the start of the construction.

SPECIFICATIONS

KEYSTONE MODULAR CONCRETE BLOCK RETAINING WALL

PART 1: GENERAL

1.01 Description
A. Work shall consist of furnishing and construction of a KEYSTONE Retaining Wall System in accordance with these specifications and in reasonably close conformity with the lines, grades, design, and dimensions shown on the plans.
B. Work includes preparing foundation soil, furnishing and installing leveling pad, unit drainage fill and backfill to the lines and grades shown on the construction drawings.
C. Work includes furnishing and installing geogrid soil reinforcement of the type, size, location, and lengths designated on the construction drawings.

1.02 Delivery, Storage and Handling
A. Contractor shall check all materials upon delivery to assure that the proper type, grade, color, and certification has been received.
B. Contractor shall protect all materials from damage due to job site conditions and in accordance with manufacturer's recommendations. Damaged materials shall not be incorporated into the work.

PART 2: PRODUCTS

2.01 Modular Concrete Retaining Wall Units
A. Modular concrete units shall conform to the following architectural requirements:
face color - concrete gray - standard manufacturers' color may be specified by the Owner.
face finish - sculptured rock face in angular tri-planer configuration. Other face finishes will not be allowed without written approval of Owner.
bond configuration - running with bonds nominally located at midpoint vertically adjacent units, in both straight and curved alignments.
exposed surfaces of units shall be free of chips, cracks or other imperfections when viewed from a distance of 10 feet under diffused lighting.
B. Modular concrete materials shall conform to the requirements of ASTM C1372 - Standard Specifications for Segmental Retaining Wall Units.
C. Modular concrete units shall conform to the following structural and geometric requirements measured in accordance with appropriate references:
compressive strength = 3000 psi minimum;
absorption = 8 % maximum (6% in northern states) for standard weight aggregates;
dimensional tolerances = ± 1/8" from nominal unit dimensions not including rough split face, ±1/16" unit height - top and bottom planes;
unit size - 8" (H) x 18" (W) x 22" (D) minimum;
unit weight - 100 lbs/unit minimum for standard weight aggregates;
inter-unit shear strength - 1000 plf minimum at 2 psi normal pressure;
geogrid/unit peak connection strength - 1000 plf minimum at 2 psi normal force.
D. Modular concrete units shall conform to the following constructability requirements:
vertical setback = 1/8"± per course (near vertical) or 1"+ per course per the design;
alignment and grid positioning mechanism - fiberglass pins, two per unit minimum;
maximum horizontal gap between erected units shall be - 1/2 inch.

2.02 Shear Connectors
A. Shear connectors shall be 1/2 inch diameter thermoset isopthalic polyester resin-protruded fiberglass reinforcement rods or equivalent to provide connection between vertically and horizontally adjacent units. Strength of shear connectors between vertical adjacent units shall be applicable over a design temperature of 10 degrees F to + 100 degrees F.
B. Shear connectors shall be capable of holding the geogrid in the proper design position during grid pre-tensioning and backfilling.

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

2.04 Unit Drainage Fill
A. Unit drainage fill shall consist of #57crushed stone
B. One cubic foot, minimum, of drainage fill shall be used for each square foot of wall face. Drainage fill shall be placed within cores of, between, and behind units to meet this requirement.

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

Sieve Size	Percent Passing
2 inch	100-75
3/4 inch	100-75
No. 40	0-60
No. 200	0-35

Plasticity Index (PI) <15 and Liquid Limit <40 per ASTM D-4318.
B. Material can be site excavated soils where the above requirements can be met. Unsuitable soils for backfill (high plastic clays or organic soils) shall not be used in the reinforced soil mass.

2.06 Geogrid Soil Reinforcement
A. Geosynthetic reinforcement shall consist of geogrids manufactured specifically for soil reinforcement applications and shall be manufactured from high tenacity polyester yarn.

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

PART 3 EXECUTION

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

3.02 Base Leveling Pad
A. Leveling pad material shall be placed to the lines and grades shown on the construction drawings, to a minimum thickness of 6 inches and extend laterally a minimum of 6" in front and behind the modular wall unit.
B. Leveling pad shall be prepared to insure full contact to the base surface of the concrete units.

3.03 Modular Unit Installation
A. First course of units shall be placed on the leveling pad at the appropriate line and grade. Alignment and level shall be checked in all directions and insure that all units are in full contact with the base and properly seated.
B. Place the front of units side-by-side. Do not leave gaps between adjacent units. Layout of corners and curves shall be in accordance with manufacturer's recommendations.
C. Install shear/connecting devices per manufacturer's recommendations.
D. Place and compact drainage fill within and behind wall units. Place and compact backfill soil behind drainage fill. Follow wall erection and drainage fill closely with structure backfill.
E. Maximum stacked vertical height of wall units, prior to unit drainage fill and backfill placement and compaction, shall not exceed three courses.

3.04 Structural Geogrid Installation
A. Geogrid shall be oriented with the highest strength axis perpendicular to the wall alignment.
B. Geogrid reinforcement shall be placed at the strengths, lengths, and elevations shown on the construction design drawings or as directed by the Engineer.
C. The geogrid shall be laid horizontally on compacted backfill and attached to the modular wall units. Place the next course of modular concrete units over the geogrid. The geogrid shall be pulled taut, and anchored prior to backfill placement on the geogrid.
D. Geogrid reinforcements shall be continuous throughout their embedment lengths and placed side-by-side to provide 100% coverage at each level. Spliced connections between shorter pieces of geogrid or gaps between adjacent pieces of geogrid are not permitted.

3.05 Reinforced Backfill Placement
A. Reinforced backfill shall be placed, spread, and compacted in such a manner that minimizes the development of slack in the geogrid and installation damage.
B. Reinforced backfill shall be placed and compacted in lifts not to exceed 6 inches where hand compaction is used, or 8 - 10 inches where heavy compaction equipment is used. Lift thickness shall be decreased to achieve the required density as required.
C. Reinforced backfill shall be compacted to 95% of the maximum density as determined by ASTM D698. The moisture content of the backfill material prior to and during compaction shall be uniformly distributed throughout each layer and shall be + 3% to - 3% of optimum.
D. Only lightweight hand-operated equipment shall be allowed within 3 feet from the tail of the modular concrete unit.
E. Tracked construction equipment shall not be operated directly upon the geogrid reinforcement. A minimum fill thickness of 6 inches is required prior to operation of tracked vehicles over the geogrid. Tracked vehicle turning should be kept to a minimum to prevent tracks from displacing the fill and damaging the geogrid.
F. Rubber tired equipment may pass over geogrid reinforcement at slow speeds, less than 10 MPH. Sudden braking and sharp turning shall be avoided.
G. At the end of each day's operation, the Contractor shall slope the last lift of reinforced backfill away from the wall units to direct runoff away from wall face. The Contractor shall not allow surface runoff from adjacent areas to enter the wall construction site.

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

3.07 Field Quality Control
A. The Owner shall engage inspection and testing services, including independent laboratories, to provide quality assurance and testing services during construction.
B. As a minimum, quality assurance testing should include foundation soil inspection, soil and backfill testing, verification of design parameters, and observation of construction for general compliance with design drawings and specifications.

~~APPROVED: FOR PUBLIC WATER & PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT~~
~~County Health Officer~~ N/A MR — Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Director — 6/1/04 Date
Chief, Division of Land Development — 6/1/04 Date
Chief, Development Engineering Division — 3/30/04 Date

HILLIS-CARNES
ENGINEERING ASSOCIATES, INC.
12011 Guilford Road Suite 106, Annapolis Junction, Maryland 20701
Balto. (410) 880-4788 D.C. (301) 470-4239 Fax (410) 880-4098

DES.	DRN.	CHK.	DATE	REVISION	BY	APP'R.

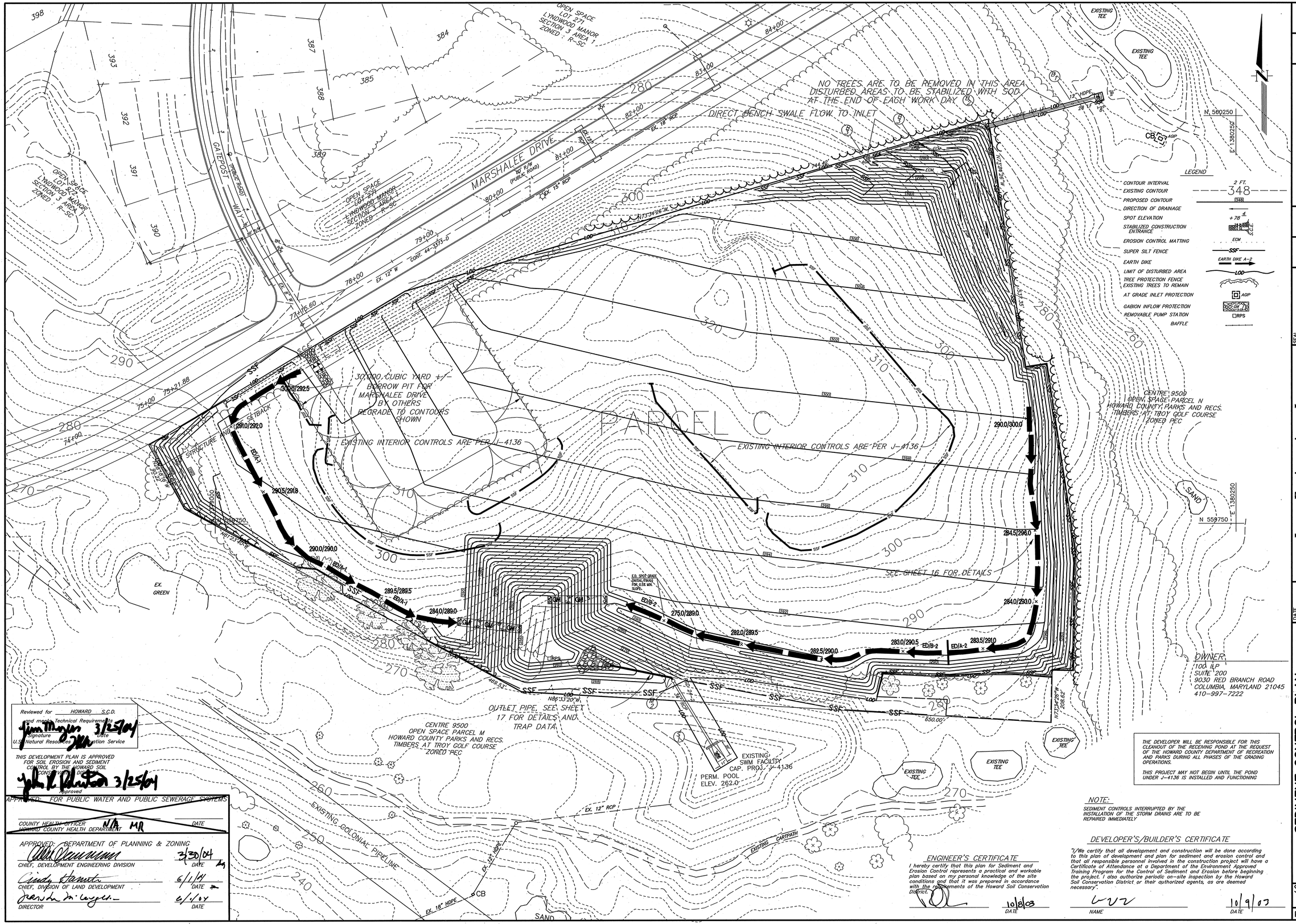
PREPARED FOR :

DEVELOPER/CONTRACT PURCHASER
BEAZER HOMES, INC.
8965 GUILFORD ROAD, SUITE 290
COLUMBIA, MARYLAND 21046
410-720-5021
attn.: JEREMY HUGHES

OWNER/SELLER
100 INVESTMENT LIMITED PARTNERSHIP
9030 RED BRANCH ROAD, SUTIE #200
COLUMBIA, MARYLAND 21045
410-997-7222
attn.: HOWARD RESNEK

RETAINING WALL ELEVATIONS AND DETAILS
CENTRE 9500 PARCEL-C, Ph. I
AGE-RESTRICTED ADULT HOUSING
PLAT No. 14213 / 16515
ELECTION DISTRICT No. 1 — HOWARD COUNTY, MARYLAND

SCALE	ZONING	HCEA FILE No.
AS NOTED	POR	03188-A
DATE	TAX MAP - GRID	SHEET
3/16/04	37	21 OF 25



OWNER
100 ILP
SUITE 200
9030 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
410-997-7222

THE DEVELOPER WILL BE RESPONSIBLE FOR THIS CLEANOUT OF THE RECEIVING POND AT THE REQUEST OF THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS DURING ALL PHASES OF THE GRADING OPERATIONS.

THIS PROJECT MAY NOT BEGIN UNTIL THE POND UNDER J-4136 IS INSTALLED AND FUNCTIONING

NOTE:
SEDIMENT CONTROLS INTERRUPTED BY THE INSTALLATION OF THE STORM DRAINS ARE TO BE REPAIRED IMMEDIATELY

Reviewed for HOWARD S.C.D.
and meets Technical Requirements
Jim Myers 3/25/04
Signature Date
U.S. Natural Resources Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John R. Robertson 3/25/04
Approved

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
COUNTY HEALTH OFFICER N/A MR DATE
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: DEPARTMENT OF PLANNING & ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION 3/30/04 DATE
Cindy Hamilton 6/1/04
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Jeremy M. Lewis 6/1/04
DIRECTOR DATE

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
10/8/03
DATE

DEVELOPER'S/BUILDER'S CERTIFICATE
"I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary".
NAME
10/9/03
DATE

No.	BY	REVISION	APPROVED	DATE
1	JEP	ADDRESS HOWARD COUNTY COMMENTS		10-8-03

SEAL
STATE OF MARYLAND RICHARD S. MORSE PROFESSIONAL ENGINEER
10/8/03 DATE

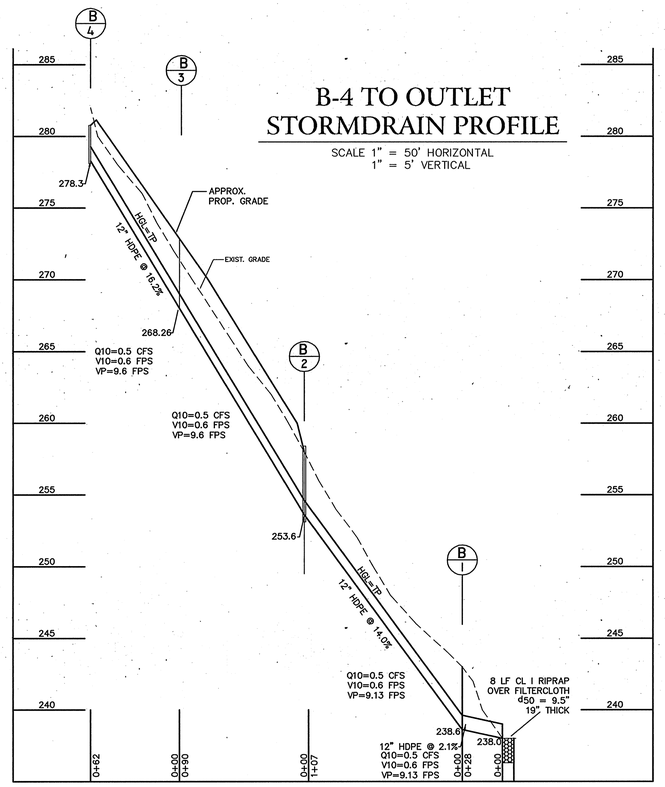
Lane Engineering, Inc.
Civil Engineers – Land Planning – Land Surveyors
E-mail: mail @ leinc.com
408 N. Washington St. Easton, MD 21601 (410) 822-8003 FAX (410) 822-2024
15 Washington St. Cambridge, MD 21613 (410) 221-0818 FAX (410) 476-9942
114B West Water St. Centreville, MD 21617 (410) 758-2095 FAX (410) 758-4422

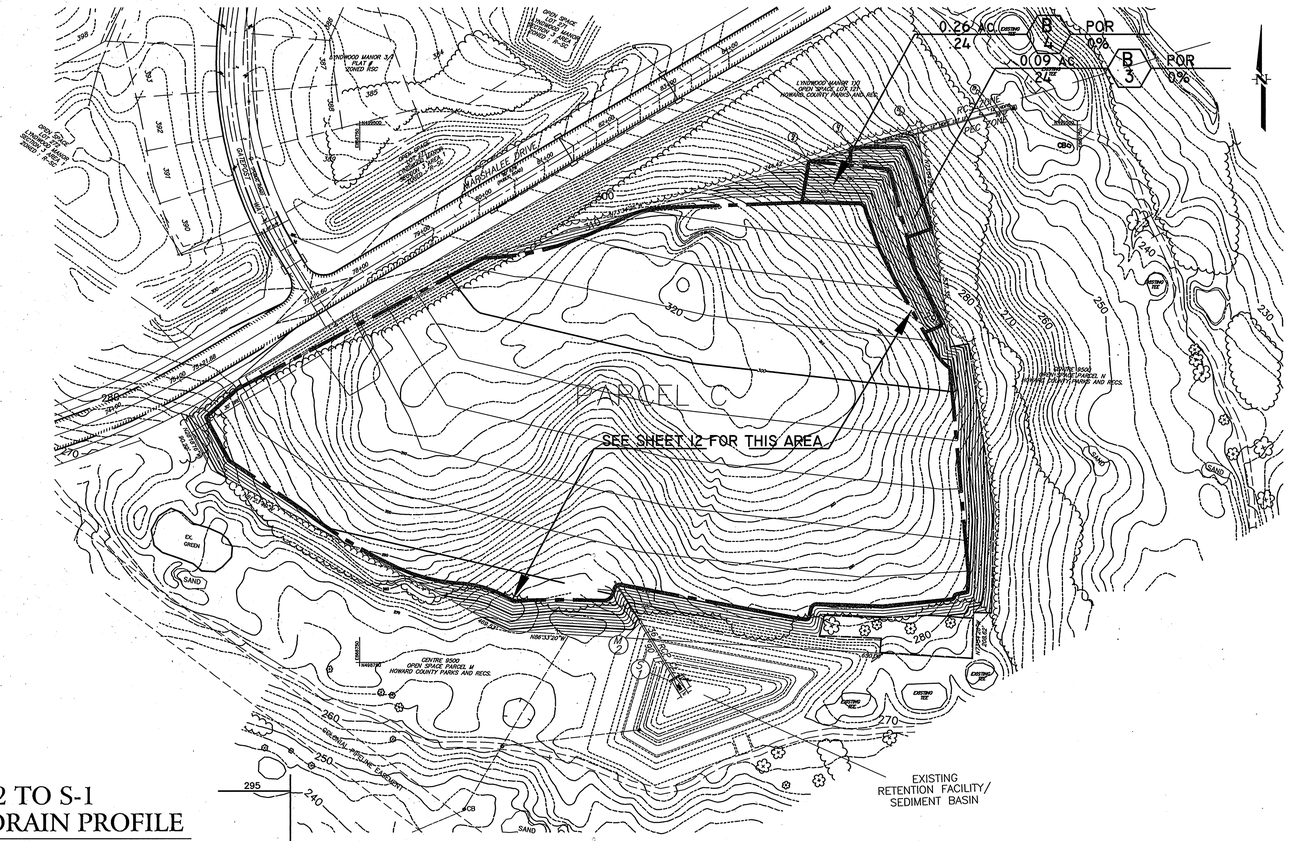
DATE 10-8-03
SCALE 1" = 50'
JOB NO. 020822
DRAWN BY T.D.
DWG. NAME 020822ESC1
APPROVED

SEDIMENT CONTROL PLAN
CENTRE 9500 PARCEL C, Ph. 1
MASS GRADING PLAN
IN THE FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TAX MAP 37 GRID 11 PLAT 14213/16515

SHEET No. 22 OF 25
FILE No. B177

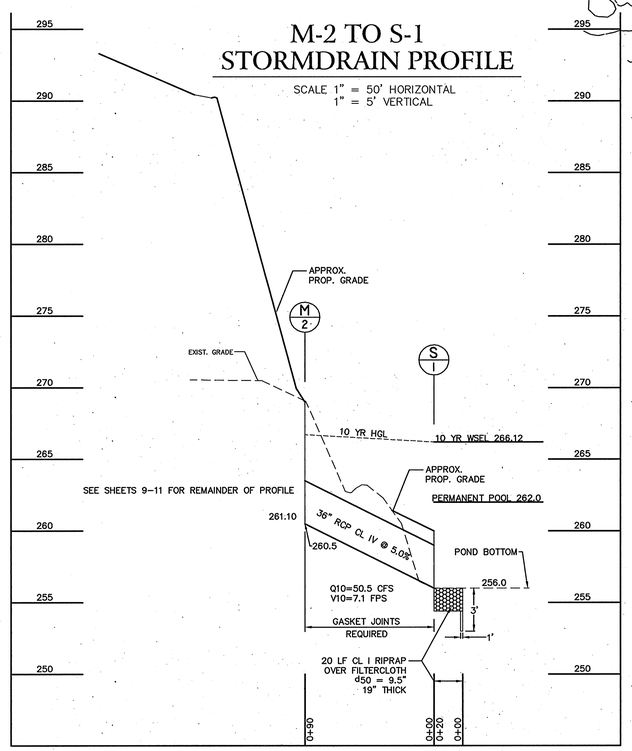
SDP-03-138





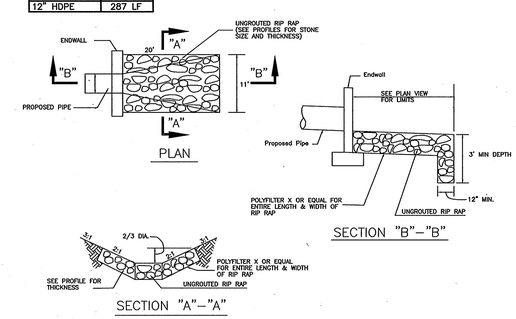
DRAINAGE AREA MAP

1"=100'



STRUCTURE SCHEDULE						
NO.	TYPE	INVERT IN	INVERT OUT	TOP ELEVATION	REMARKS	LOCATION
S-1	TYPE C ENDWALL	256.00	256.00	260.00	STD SD 5.21	N 559478.50 E 1379608.40
M-2	PRECAST MANHOLE	261.10	260.50	269.00	STD G 5.13	N 559557.26 E 1379560.86
SEE SHEETS 9-11 FOR ADDITIONAL STORM DRAIN DETAILS						
B-1	24" DRAIN BASIN	238.60	238.60	243.00	NYLOPLAST H-25 SOLID TOP	N 560267.31 E 1380049.28
B-2	24" DRAIN BASIN	253.60	253.60	258.00	NYLOPLAST H-25 SOLID TOP	N 560239.47 E 1379944.60
B-3	12" DRAIN BASIN	268.26	268.26	271.00	NYLOPLAST H-25 GRATE TOP	N 560214.85 E 1379859.15
B-4	12" DRAIN BASIN		278.30	281.00	NYLOPLAST H-25 GRATE TOP	N 560197.58 E 1379799.31

PIPE SCHEDULE	
TYPE	LENGTH
36" RCP CL IV	90 LF
12" HDPE	287 LF



UNGROUTED RIP RAP DETAIL

NO SCALE

OWNER
100 ILP
SUITE 200
9030 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
410-997-7222

~~APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS~~

COUNTY HEALTH OFFICER — DATE
~~HOWARD COUNTY HEALTH DEPARTMENT~~ N/A MR

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 3/30/04 MR

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/1/04

DIRECTOR — DATE 6/1/04

DATE	BY	REVISION	APPROVED	DATE

No.	DATE

SEAL: STATE OF MARYLAND — BRIAN D. LANE — No. 10818 — PROFESSIONAL ENGINEER — 10/8/03

Lane Engineering, Inc.
Civil Engineers – Land Planning – Land Surveyors
408 N. Washington St. Easton, MD 21601 (410) 822-8003 FAX (410) 822-2024
15 Washington St. Cambridge, MD 21613 (410) 221-0818 FAX (410) 476-9942
1148 West Water St. Centreville, MD 21617 (410) 758-2095 FAX (410) 758-4422
E-mail: mail @ leinc.com

DATE 10-8-02
SCALE AS SHOWN
JOB NO. 020822
DRAWN BY T.D.
DWG. NAME 020822EDT1
APPROVED

STORM DRAIN DETAILS
CENTRE 9500 PARCEL C, Ph. I
MASS GRADING PLAN

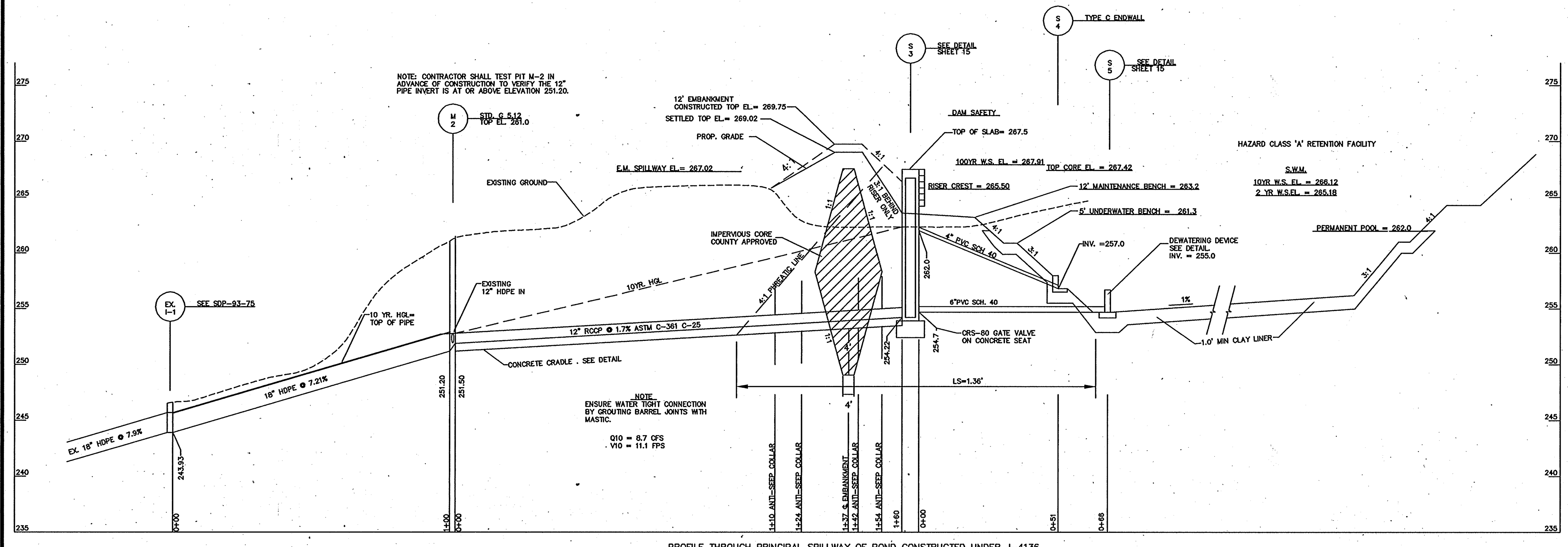
IN THE FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TAX MAP 37 GRID 11 PLAT 14213/14215

SHEET No. 23 OF 25

FILE No. B177

SDP-03-138



PROFILE THROUGH PRINCIPAL SPILLWAY OF POND CONSTRUCTED UNDER J-4136

NOT TO SCALE

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules:

1) Preferred–Apply 2 tons per acre dolomitic limestone (92 lbs/ 100 sq.ft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./ 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)

2) Acceptable–Apply 2 tons per acre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: Inspect all seeded areas and make needed repairs, replacements and reseedings.

TEMPORARY SEEDING NOTES

SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.) For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq.ft.). For the period November 1 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.

REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

SEDIMENT AND EROSION CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within:
   a) 7 calendar days for all perimeter sediment control stuctures, dikes, perimeter slopes and all slopes greater than 3:1
   b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol.1, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above, in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec G).
   Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. SITE ANALYSIS:

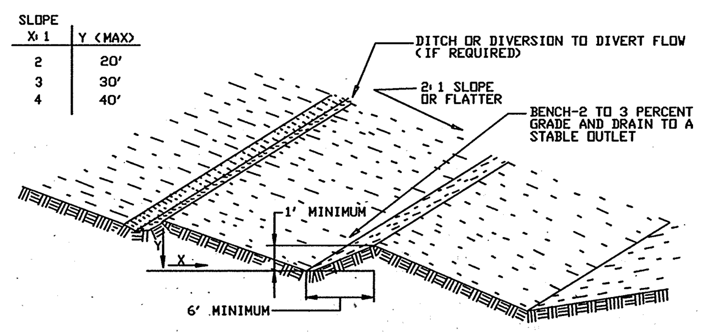
Total Area of Site:	12.318 Acres
Area Disturbed:	12.318 Acres
Area to be roofed or paved:	0.00 Acres
Area to be vegetatively stabilized:	12.318 Acres
Total Cut:	66,876 Cubic Yards
Total Fill:	66,876 Cubic Yards
Offsite Waste/Borrow Area Location:	N/A

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
12. The total amount of silt fence = 180 LF
13. The total amount of super silt fence = 1700 LF
14. The total amount of earth dike = 1500 LF

* It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

DETAIL 28 - BENCHED SLOPES

SLOPE X: 1	Y (MAX)
2	20'
3	30'
4	40'

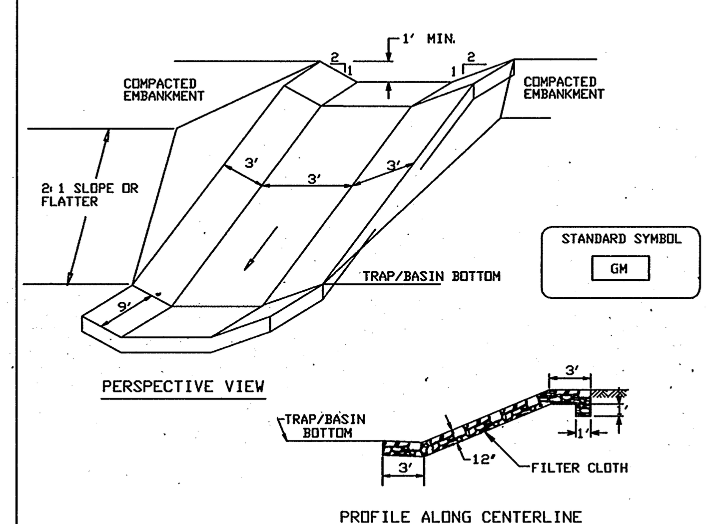


Construction Specifications

1. All fills shall be compacted as required to reduce erosion, slippage, settlement, subsidence or other related problems. Fill intended to support buildings, structures and conduits, etc., shall be compacted in accordance with local requirements or codes.
2. All fill shall be placed and compacted in layers not to exceed 8' in thickness.
3. Except for approved landfills or nonstructural fills, fill material shall be free of brush, rubbish, rocks, logs, stumps, building debris and other objectionable materials that would interfere with or prevent construction of satisfactory fills.
4. Frozen material or soft, mucky or highly compressible materials shall not be incorporated into fill slopes or structural fills. Fill shall not be placed on a frozen foundation.
5. All benches shall be kept free of sediment during all phases of development.
6. Seeps or springs encountered during construction shall be handled in accordance with the Standard and Specification for Subsurface Drain or other approved methods.
7. All graded areas shall be permanently stabilized immediately following finished grading.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 19 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 6 - GABION INFLOW PROTECTION



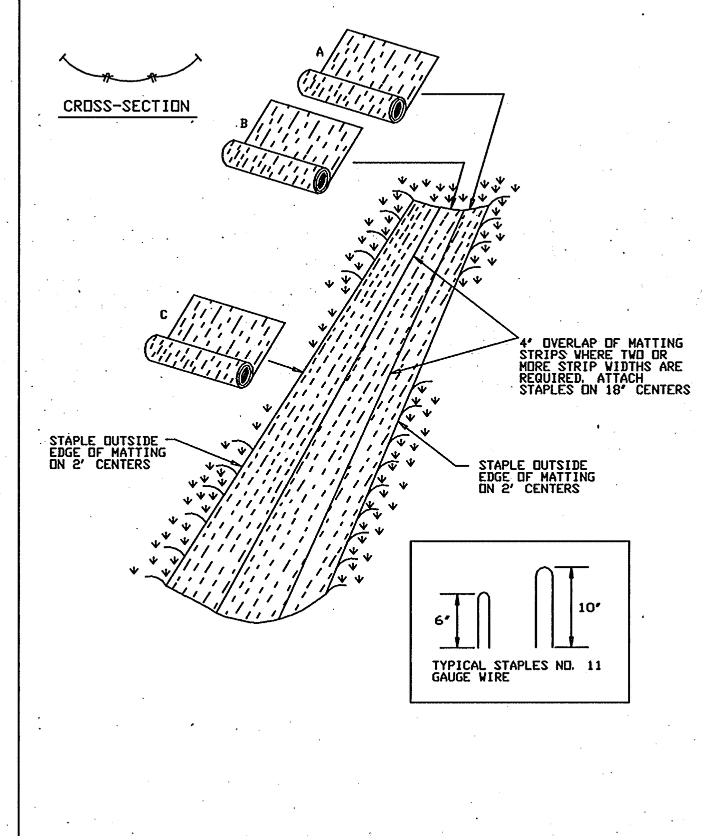
PROFILE ALONG CENTERLINE

Construction Specifications

1. Gabion inflow protection shall be constructed of 9' x 3' x 9' gabion baskets forming a trapezoidal cross section 1' deep, with 2:1 side slopes, and a 3' bottom width.
2. Geotextile Class C shall be installed under all gabion baskets.
3. The stone used to fill the gabion baskets shall be 4' - 7'.
4. Gabions shall be installed in accordance with manufacturers recommendations.
5. Gabion Inflow Protection shall be used where concentrated flow is present on slopes steeper than 4:1.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 7 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING

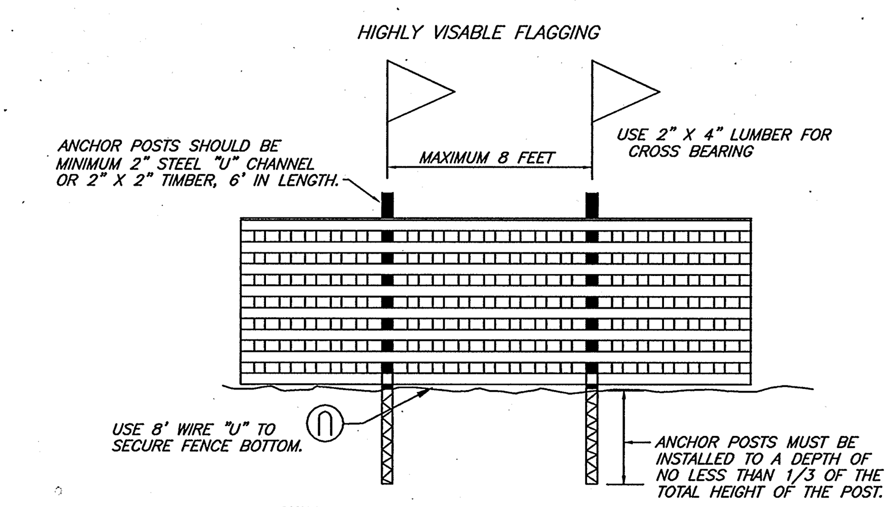


Construction Specifications

1. Key-in the matting by placing the top ends of the matting in a narrow trench, 6' in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4' down slope from the trench. Spacing between staples is 6'.
2. Staple the 4' overlap in the channel center using an 18' spacing between staples.
3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4', shiplap fashion. Reinforce the overlap with a double row of staples spaced 6' apart in a staggered pattern on either side.
6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed-in.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



NOTES:
1. Forest protection device only.
2. Retention area will be set as part of the review process.
3. Boundaries of retention area should be staked and flagged prior to installing device.
4. Root damage should be avoided.
5. Protection signage should be used.
6. Device should be maintained throughout construction.

BLAZE ORANGE PLASTIC MESH
TYPICAL TREE PROTECTION FENCE DETAIL

NO SCALE

Reviewed for HOWARD S.C.D. and meets Technical Requirements
Jim Myers 3/26/04
Signature Date
U.S. Natural Resource Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
John K. Robertson 3/25/04
Approved

OWNER
100 ILP
SUITE 200
9030 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
410-997-7222

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

I. This practice 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.

II. For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

I. Topsoil salvaged from the existing site may be used provided that 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-SCS in cooperation with Maryland Agricultural Experimental Station.

II. Topsoil Specifications – Soil to be used as topsoil must meet the following:

i. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger that 1 and 1/2" in diameter.

ii. Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.

iii. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

II. For sites having disturbed areas under 5 acres:

i. Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization – Section I – Vegetative Stabilization Methods and Materials.

iii. For sites having disturbed areas over 5 acres:
i. On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
a. pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
b. Organic content of topsoil shall be not less than 1.5 percent by weight.
c. Topsoil having soluble salt content greater than 500 parts per million shall not be used.
d. No sod or seed shall be placed on soil soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.

NOTE: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.

ii. Place topsoil (if required) and apply soil ammendments specified in 20.0 Vegetative Stabilization–Section I–Vegetative Stabilization Methods and Materials.

V. Topsoil Application

i. When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.

ii. Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.

iii. Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall 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 shall be corrected in order to prevent the formation of depressions or water pockets.

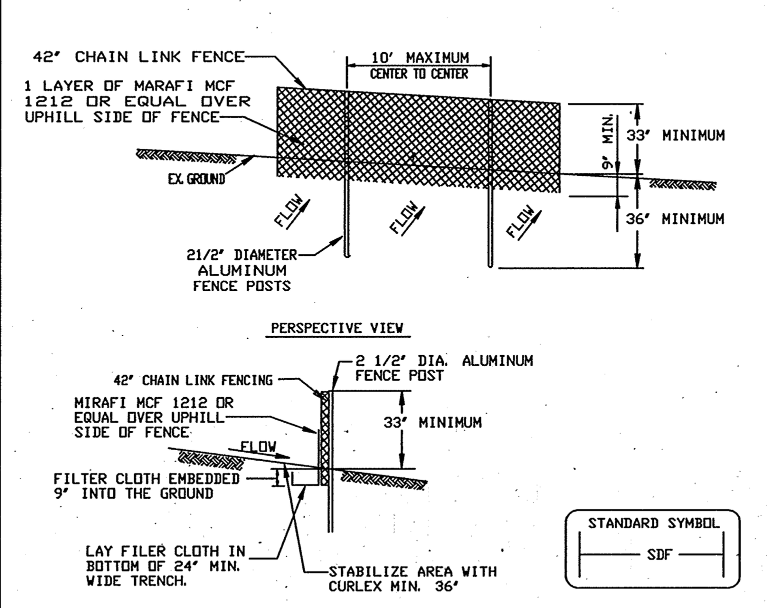
iv. Topsoil shall not be place while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

CONSTRUCTION SEQUENCE(PHASE 1):

	NO. OF DAYS
1. Obtain grading permit.	1
2. Install SCE	1
3. Stakeout limit of disturbance	3
4. Walk limit of disturbance on golf course with representatives of Department Recreation and Parks.*	1
5. Clean out pond, then drain *	2
6. Clear and grub for installation of S-1 to M-2.*	1
7. Install S-1 to M-1, and stabilize immediately.*	7
8. Install perimeter controls, traps, inlet protection on course.	14
9. Close drain valve, mass grade site. Note all conditions listed within the geotechnical report for this site.	28
10. Construct bench outfall drain.	14
11. Upon approval of the sediment control inspector, replace sediment and erosion control measures with internal measures shown on other sheets, stabilize areas not covered by new controls and remove controls shown on sheet 22 only.	14

* Contractor must coordinate work with representatives of Department of Recreation and Parks, and Timbers at Troy Golf Course.

DETAIL - SUPER DIVERSION FENCE



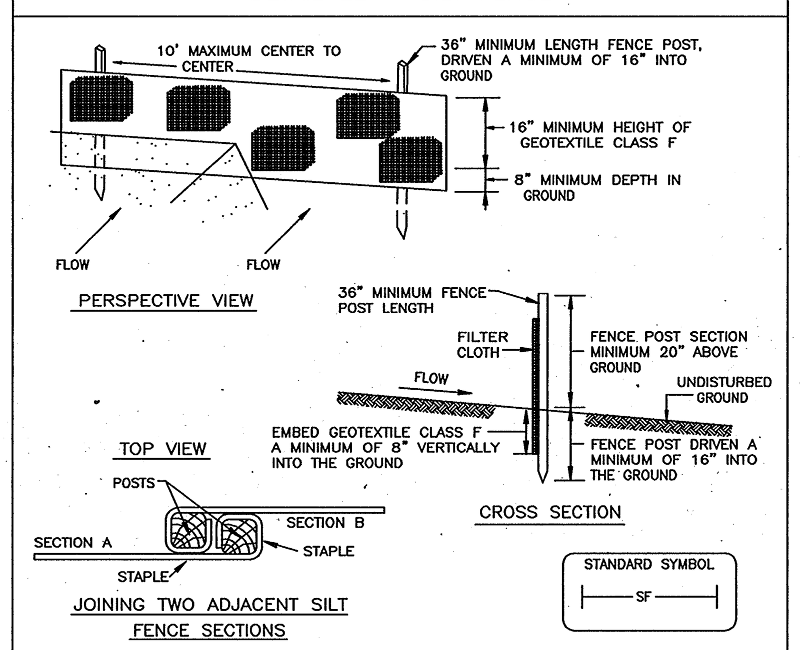
FENCING:

FENCING SHALL BE 42' HIGH CHAIN LINK FENCE CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAILS 690. 01 AND 690. 02 THE SPECIFICATIONS FOR A 6' - 0' FENCE SHALL BE USED, SUBSTITUTE 42' FABRIC & 70' POSTS. POSTS SHALL BE PLACED WITHOUT CONCRETE EMBEDMENT.

1. CHAIN LINK FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24' AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTAINENCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 22 - SILT FENCE



Construction Specifications

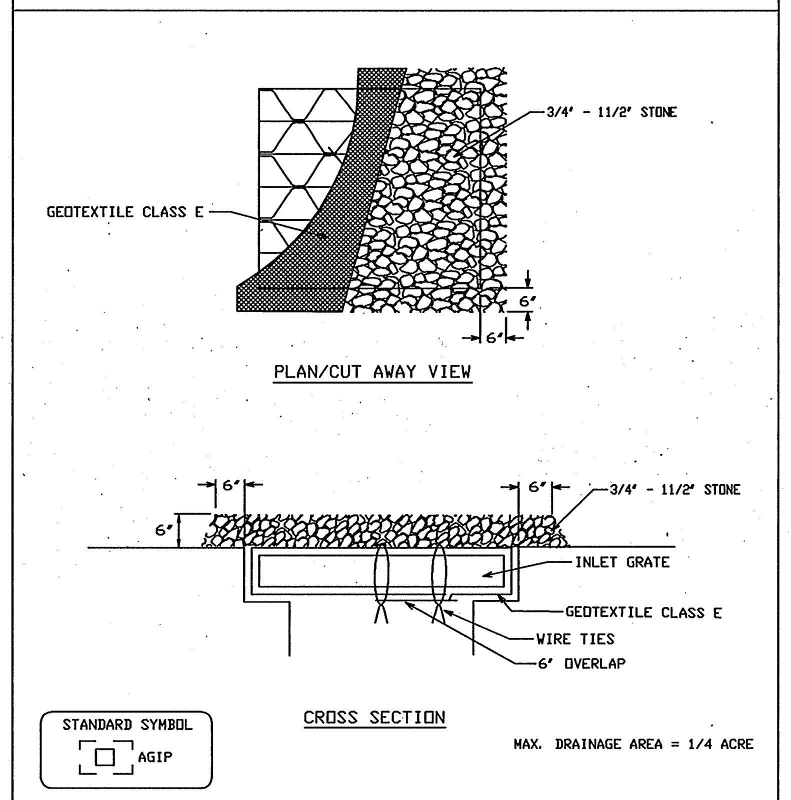
1. Fence posts shall be a minimum of 36" long, driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot.
2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft^2/minute (max.)	Test: MSMT 322
Filtering Eggeciency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 23B - AT GRADE INLET PROTECTION



STANDARD SYMBOL AGIP

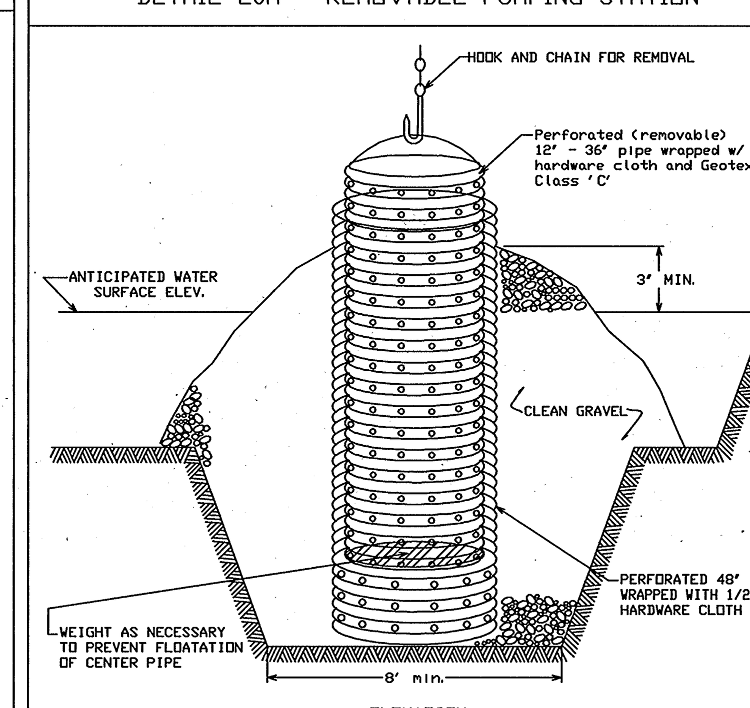
MAX. DRAINAGE AREA = 1/4 ACRE

Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
2. Place 3/4' to 11/2' stone, 4'-6' thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 20A - REMOVABLE PUMPING STATION



Construction Specifications

1. The outer pipe should be 48' dia. or shall, in any case, be at least 4' greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2' hardware cloth to prevent backfill material from entering the perforations.
2. After installing the outer pipe, backfill around outer pipe with 2' aggregate or clean gravel.
3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12' and 36' in diameter. The perforations shall be 1/2' X 6' slits or 1' diameter holes 6' on center. The center pipe shall be wrapped with 1/2' hardware cloth first, then wrapped again with Geotextile Class C.
4. The center pipe should extend 12' to 18' above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE D - 12 - 4	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: DEPARTMENT OF PLANNING & ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	3/30/04 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT	6/1/04 DATE
DIRECTOR	6/1/04 DATE

~~APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS~~

COUNTY ~~HEALTH OFFICER~~ N/A MR ~~DATE~~
~~HOWARD~~ COUNTY HEALTH DEPARTMENT

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

P.E. DATE 10/8/03

DEVELOPER'S/BUILDER'S CERTIFICATE

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

NAME DATE 10/9/03

No.	REVISION	BY	DATE	APPROVED	DATE

SEAL: STATE OF MARYLAND – RICHARD S. MORSE – PROFESSIONAL ENGINEER – DATE 10/8/03

Lane Engineering, Inc.
Civil Engineers – Land Planning – Land Surveyors
E-mail: mail @ leinc.com
408 N. Washington St. Easton, MD 21601 (410) 822-8003 FAX (410) 822-2024
15 Washington St. Cambridge, MD 21613 (410) 221-0818 FAX (410) 476-9942
114B West Water St. Centreville, MD 21617 (410) 758-2095 FAX (410) 758-4422

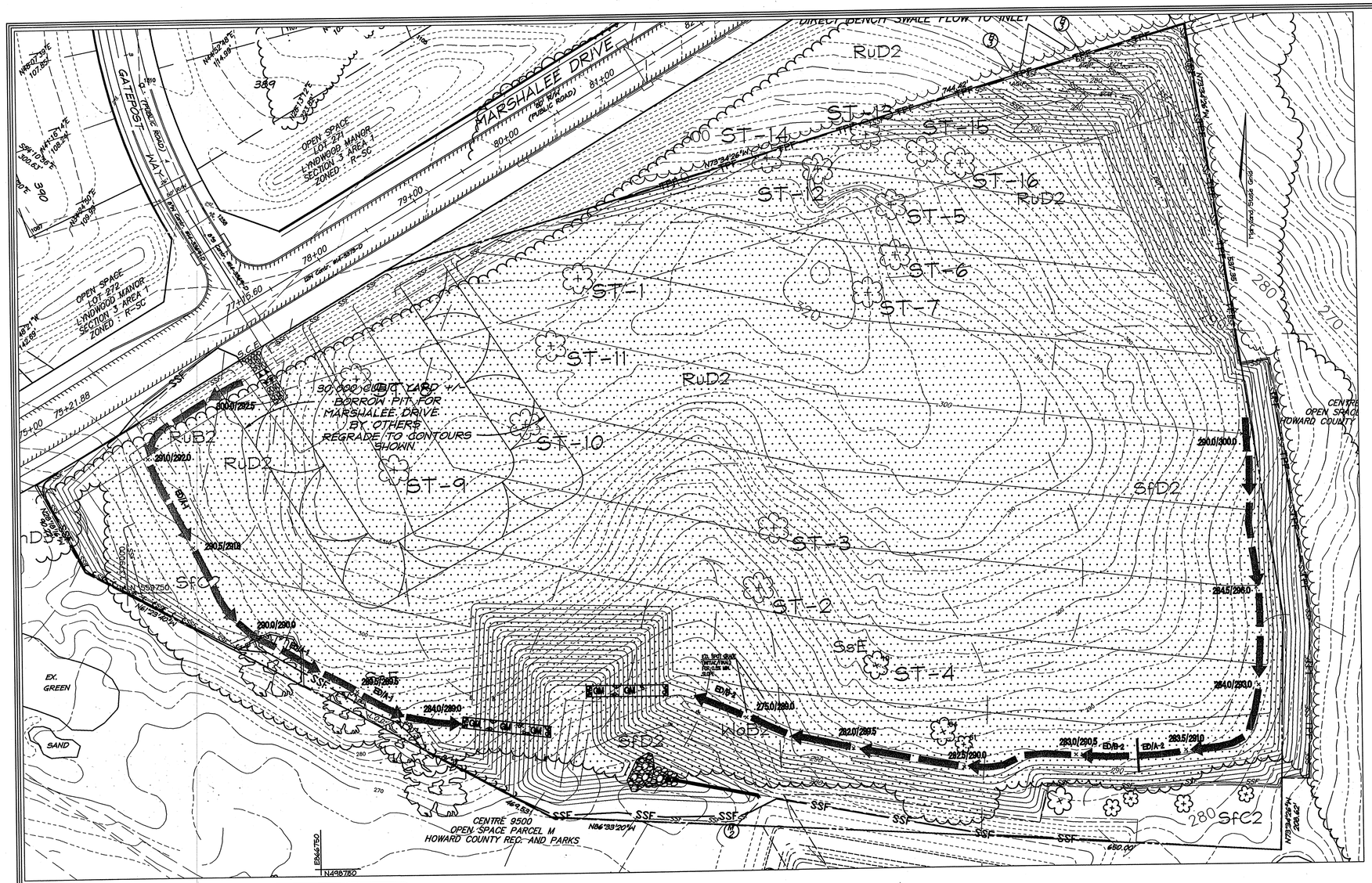
DATE	SCALE	JOB NO.	DRAWN BY	DWG. NAME	APPROVED
10-08-03	AS SHOWN	020822	T.D.	020822ESC2	

SEDIMENT CONTROL DETAILS
CENTRE 9500 PARCEL C, Ph. I
MASS GRADING PLAN

IN THE FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TAX MAP 37 GRID 11 PLAT 14213/16515

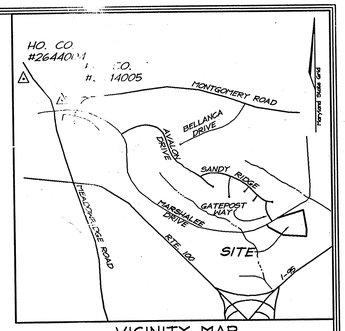
FILE No. B177

SDP-03-138



LEGEND

Existing Contour	382
Proposed Contour	82
Spot Elevation	+82.53
Direction of Flow	
Property Boundary Line	
Easment Line	
Soils Division Line	
Tree Protection Fence	TPF
Forest Clearing	



VICINITY MAP

SCALE:1=2000'

FOREST CONSERVATION WORKSHEET

Net Tract Area	Acres
A. Total Tract Area	12.59#
B. Area Within 100 Year Floodplain	--
C. Other deductions	9.98##
D. Net Tract Area	2.61
Zoning Use Category: HDR	
Land Use Category	
E. Afforestation Minimum (15 % x D)	0.39
F. Conservation Threshold (20 % x D)	0.52
Existing Forest Cover	
G. Existing Forest on Net Tract Area	2.61###
H. Forest Area Above Conservation Threshold	2.09
Breakeven Point	
I. Forest Retention Above Threshold with no Mitigation	0.94
J. Clearing Permitted without Mitigation	1.67
Proposed Forest Clearing	
K. Forest Areas to be Cleared	2.61
L. Forest Areas to be Retained	0
Planting Requirements	
M. Reforestation for Clearing Above Threshold	0.52
N. Reforestation for Clearing Below the Threshold	1.04
P. Credit for Retention Above Conservation Threshold	0
Q. Total Reforestation Required	1.57
R. Total Afforestation Required	0
S. Total Reforestation and Afforestation Requirement	1.57

#The total tract area includes the combined recorded acreage of Parcel C (12.38 acres) and the acreage of the LOD on adjacent Open Space Parcel N.

##Deductions include the total acreage of the LOD shown on parcel C on approved P-93-11 and 40,000 Sq. Ft. of forest beyond the LOD.

###The total forest contained on Parcel C and the adjacent Open space Parcel N before the deduction is 11.42 acres. Parcel C contains 11.21 acres and Parcel N contains 0.21 acres of forest. The acreage of the forest on Parcel C after the applicable deductions totals 2.40 acres and the acreage of the forest on Parcel N totals 0.21 acres.

STATE OF MARYLAND
STEPHEN L. HUBER
No. 985
EXPIRES 6/4/04
PROFESSIONAL FORESTER

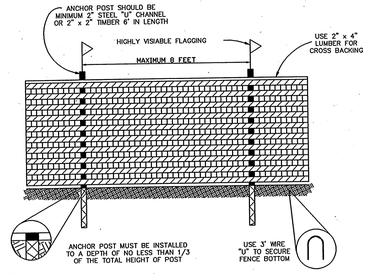
SPECIMEN TREES

NO.	DBH	COMMON NAME	SCIENTIFIC NAME	CONDITION
ST-1	32.5"	Chestnut oak	Quercus prinus	Fair
ST-2	34	Chestnut oak	Quercus prinus	Fair
ST-3	36"	Chestnut oak	Quercus prinus	Fair
ST-4	54.5	Chestnut oak	Quercus prinus	Fair
ST-5	45"	Chestnut oak	Quercus prinus	Fair
ST-6	36"	Chestnut oak	Quercus prinus	Good
ST-7	42.5"	Chestnut oak	Quercus prinus	Good
ST-8	41"	Chestnut oak	Quercus prinus	Good
ST-9	32"	Chestnut oak	Quercus prinus	Fair
ST-10	40"	Chestnut oak	Quercus prinus	Poor
ST-11	31"	Chestnut oak	Quercus prinus	Fair
ST-12	35"	Chestnut oak	Quercus prinus	Fair
ST-13	35"	Chestnut oak	Quercus prinus	Poor
ST-14	30"	Chestnut oak	Quercus prinus	Poor
ST-15	31.5"	Chestnut oak	Quercus prinus	Fair
ST-16	47"	Chestnut oak	Quercus prinus	Poor

SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
CnD3	Chillum-Fairfax loams, 5 to 15 percent slopes, severely eroded	C
RuB2	Rumford loamy sand, 1 to 5 percent slopes, moderately eroded	B
RuD2	Rumford loamy sand, 10 to 15 percent slopes, moderately eroded	B
SfC2	Sassafras gravelly sandy loam, 5 to 10 percent slopes, moderately eroded	B
SfD2	Sassafras gravelly sandy loam, 10 to 15 percent slopes, moderately eroded	B
SsE	Sassafras soils, 15 to 40 percent slopes	B
WoB2	Woodstown sandy loam, 1 to 5 percent slopes, moderately eroded	C

BLAZE ORANGE PLASTIC MESH



NOTES:

1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

TREE PROTECTION DETAIL

NOT TO SCALE

Forest Conservation Narrative

This Forest Conservation Plan was prepared in accordance with the Howard County Forest Conservation Manual.

The total tract area of the site is 12.59 acres, with no flood plains, streams, wetlands or associated buffers. The total tract area includes 12.38 acres, which is the recorded acreage of Parcel C and the 0.21 acres within the LOD on adjacent Open space Parcel N.

The total tract area of the site is 2.61 acres. The deductions include the acreage of the LOD shown on approved Parcel C plan P-93-11. and an additional 40,000 square feet of forest beyond the LOD shown on approved P-93-11. The total tract area contains 11.49 acres of forest. The net tract area contains 2.61 acres of forest. Forest clearing on site is 2.61 acres. The total forest conservation obligation for this site is 1.57 acres of reforestation planting.

This forest conservation planting will be fulfilled with a fee-in-lieu payment, as per the agreement reached by the county and developer. The fee is in the amount of ~~$31,195.00 (60,390 s.f. @ $0.50/s.f.)~~ $34,174.00 for 1.57 ac. of reforestation was paid to the Ho. Co. Forest Conservation Fund.

OWNER

100 Investment Limited Partnership
9030 Red Branch Rd., Suite 200
Columbia, Md 21045
410.465.8298

DEVELOPER

100 Investment Limited Partnership
9030 Red Branch Rd., Suite 200
Columbia, Md 21045
410.465.8298

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 3/30/04
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/1/04
DIRECTOR	DATE 6/4/04

APPROVED : FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS IN ACCORDANCE WITH THE MASTER PLAN OF HOWARD COUNTY

COUNTY HEALTH OFFICER N/A MR DATE

FOREST CONSERVATION PLAN
CENTRE 9500
PARCEL C, Ph.1

TAX MAP 37 GRID 11
1st ELECTION DISTRICT

PARCEL 687
HOWARD COUNTY, MARYLAND

EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS
6318 FORREST STREET
ELLICOTT CITY, MARYLAND 21043
TEL: (410) 750-1150 FAX: (410) 750-7350

DESIGN BY:	DSH
DRAWN BY:	DSH
CHECKED BY:	SLH
SCALE:	1"=50'
DATE:	March 02, 2004
W.O. No.:	2193
SHEET No.	25 OF 25

Plan prepared using base information provided by Lane Engineering, Inc.

SDP-03-138

N:\Lyswood_Parcel_C\dwg\3106_FCP_s1_R-03-02-04.dwg, 3/3/2004 5:48:37 PM, stsfyb