

Construction Specifications

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

1. The poles do not need to set in concrete

2. Chain link fence shall be fastened securely to the fence

3. Filter cloth shall be fastened securely to the chain link

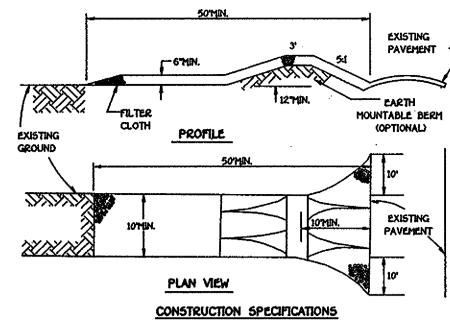
fence with ties spaced every 24" at the top and mid section. 4. Fifter cloth shall be empedded a minimum of 6" into the

5. When two sections of filter cloth adjain each other. they small be overlapped by 6" and folded.

6. Maintenance shall be performed as needed and silt buildubs removed when "bulges" develop in the siit fence.

SUPER SILT FENCE

NOT TO SCALE



E STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT. 2. Length - as required, but not less than 50 feet (except on a single residence LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).

3. THICKNESS - NOT LESS THE SIX (6) INCHES. 4. WIDTH - TEN GO) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT. 6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL,

A MOUNTABLE BERM WITH SI SLOPES WILL BE PERMITTED. 7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS
MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND /OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDEMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY

8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE - 2

NOT TO SCALE

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS: SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING
OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS:

APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/
L000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER
(14 LBS./L000 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 UREAFORM FERTILIZER
(9 LBS./L000 SQ.FT.) AND 500 LBS. PER ACRE (II.5 LBS./
L000 SQ.FT.) OF 10-20-20 FERTILIZER.

SPEDING:

FOR THE PRERIODS MARCH I THROUGH APRIL 30, AND AUGUST
I THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (2.3
LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE
PERIOD MAY I THROUGH JULY 31, SEED WITH 60 LBS/ACRE
(1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND
2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING
LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH
FEBRUARY 28. PROJECT SITE BY: OPTION (1) - TWO TONS PER
ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS
POSSIBLE IN THE SPRING; OPTION (2) - USE SOO; OPTION (3) SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH
WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD
BE HYDROSEEDED.

MULCHING:
APPLY 1 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING.
ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200
GALLONS PER ACRE (5 GAL/1,000 SQ.FT.) OF EMULSIFIED
ASPHALT ON FLAT ACRES. ON SLOPES & FEET OR HIGHER USE
348 GALLONS PER ACRE (8 GAL/1,000 SQ.FT.) FOR ANCHORING.

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

\* FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS/ACRE AS THE SEEDING REQUIRMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

PERMANENT SEEDING NOTES

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

LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY

SOIL AMENDMENTS:
APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER Q4 LBS./

FOR THE PERIODS MARCH I THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 1? BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE OF WEEPING LOVEGRASS (07 LBS./1,000 SQ.FT. FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 20, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE PERIOD OF USER SOON

APPLY 17 TO 2 TONS PER ACRE (70 TO 90 LBS./1,000 SQ.FT.)
OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING.
ANCHORING TOOL OR 210 GALLONS PER ACRE (5 GALL,000 SQ.FT.)
OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 0 FEET OR
HIGHER, USE 340 GALLONS PER ACRE (0 GAL/1,000 SQ.FT.) FOR
ANCHORING

REFER TO THE 1900 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

TEMPORARY SEEDING NOTES

A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL. DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (3)3-1855).

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

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN BY A CALENDAR DAYS FOR ALL PERMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 31, BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

ALL SEDIMENT TRAPS/BASING 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.

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 SEEDING (SEC. 50), AND MULCHING (SEC. 52). 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

AREA DISTURBED

AREA TO BE ROOFED OR PAVED

AREA TO BE VEGETATIVELY STABILIZED

TOTAL CUT

TOTAL CUT

TOTAL FILL

10 DE PAVED

10 CULYDS

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.

1D TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

SEDIMENT CONTROL NOTES

Using vegetation as cover for barren soil to protect it from forces that cause erosion.

Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erose and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources.

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration Oup to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc. EFFECTS ON WATER QUALITY AND QUANTITY Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plan will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seedbed preparation, seeding, mulching and vegetative establishmen to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters. SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS Install erosion and sediment control structures (either temporary of permanent) such as diversi-Perform all grading operations at right angles to the slope. Final grading and shaping is not usually recessary for temporary seeding.

Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.

Amendments (Fertilizer and Lime Specifications)

Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.

Fertilizers shall be uniform in composition free flowing and suitable for accurate application by Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee of the producer.

III. Lime majerials shall be ground limestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a \*100 mesh sieve and 90-100% will pass through a \*20 at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to fineness that at least 50% will pass through a \*100 mesh sieve and 96-100% will pass through mesh sieve.

iv. Incoporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

Seedbed Preparation

1. Tempovary Seeding

a. Seedbed preparation shall consist of loosening soil to a depth of 3° to 5° by means of suitable agricultural or construction equipment, such as disc harrows or chiest plows or rippers mounted on construction equipment, After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 31) should be tracked leaving the surface in an irregular condition with ridges running parallel to the confour of the slope.

b. Apply fertilizer and lime as prescribed on the plans.

c. in corporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

Permanent Seeding

a. Hindray soil conditions required for permanent vegetative establishment:

1. Soil phi shall be between 6.0 and 7.0.

2. Soluble salfs shall be less than 500 parts per million (opm).

3. The soil shall contain less than 40% clay, but enough fine grained material 030% silf plus clay) to provide the capacity to hold a moderate amount of moleture. An exception is if lovegrass or serecial tespedezas is to be planted, then a sandy soil (030% silf plus clay) would be acceptable.

4. Soil shall contain 1.5% minimum organic matter by weight.

5. Soil must contain sufficient pore space to permit adequate root penetration.

6. If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.

Areas previously graded in conformance with the drawings shall be malmained in a true and even grade, then scarifled or otherwise loosened to a depth of 3-5° to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent top to the surface area and to create horizontal erosion check stots to prevent topsoil from sliding down a slope.

Apply soil amendments as per soil test or as included on the plans.

Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3° of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed aboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this job.

Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.

ii. Inoculant - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of itrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-80° r. can weaken bacteria and make the inoculant less effective.

Methods of Seeding

i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.

a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 lbs. per acre total of soluble nitrogens P205 (phosphorous): 200 lbs/ac; K20 (potassium): 200 lbs/ac.

b. Lime - use only ground agricultural imestone, (Up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.

c. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption.

ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to shall then be rolled with a weighted roller to provide good seed to soil contact.

b. Where practical, seed should be applied in two directions perpendicular to each other.

Apply half the seeding rate in each direction.

iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.

b. Where practical, seed should be applied in two directions perpendicular to each other.

Apply half the seeding rate in each direction.

Mulch Specifications (In order of preference)

i. Straw shall consist of thoroughly threshed wheat, rise or oat straw, reasonable bright in color, and shall not be musty, moidly caked decayed, or excessively dusty and shall be free of noucous weed seeds as specified in the Haryland Seed Law.

ii. Wood Cellulose Fiber Mulch (WCPIP)

a. WCPM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.

b. WCPM shall be died green or contain a green die in the package that will provide an appropriate color to facilitate visual inspection of the uniformy spread sharry.

c. WCPM including die, shall contain no germination or growth inhibiting factors.

d. WCPM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation c. WCPM including dre shall contain no germination or growth inhibiting factors.

d. WCPM materials shall be mainsfactured and processed in such a manner that the wood casulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous shury. The mulch material shall form a biotyter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedings.

e. WCPT material shall comtain no elements or compounds at concentration levels that will be phyto-toxic.

f. WCPM must conform to the following physical requirements: fiber length to approximately 10 mm. diameter approximately 1 mm. phyranes of 4.0 to 5.5, ash confern of 1.65 maximum and water holding clapacity of 90% minimum.

Note: Only sterile straw much should be used in areas where one species of grass is desired. Mulching Seeded Areas - Mulch shall be applied to all seeded areas inmateriately after seeding.

i. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed in this section and mainfained until the seeding season returns and seeding can be performed in accordance with these specifications.

ii. When straw much is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform losse depth of between 1° and 2°. Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons/acre.

iii. Wood celulose fiber shall be mixed with water, and the mixture shall comtain a maximum of 50 bs. of wood celulose fiber shall be mixed with water, and the mixture shall comtain a maximum of 100 calls and excell preference, depending upon size of area and erosion hazard:

i. A mulch anchoring to lie a tractor drawn implement designed to punch an

of water.

iii. Application of liquid binders should be heavier at the edges where wind catches much, such as In valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petrosef, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor muich.

iv. Lightweight plastic netting may be stapled over the muich according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.



## STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

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FISHER, COLLINS	& CARTER, INC.
CIVIL ENGINEERING CONSULT	TANTS & LAND SURVEYORS
9)	
CENTENNAL SQUARE OFFICE PARK -	10272 AN THORE NATIONAL PICE
ELUCOTT CITY, N	
(410) 461 - 2	

10291 SITE PLAN DETAIL

APPROVED: HOWARD COUNTY HEALTH DEPARTMENT FOR PUBLIC WATER AND SEWER. May Su Balon p. F.S.
COLLATY HEALTH OFFICER MA 4=16-99

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 of Engineer (Print name below signature) DEVELOPER'S CERTIFICATE "L'We certify that all development and 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 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." Signature of Developer (Fint name below signature)

Reviewed for HOWARD SCD and meets Technical Requirements.

W.S.D.A.-Natural Resources Conservation Service the HOWARD SOIL SANSESVATION DISTRICT. OWNER CONSOLIDATED DELIVERY COMPANY

7970 TAR BAY DRIVE

JESSUP MD, 20794

IPPROVED: DEPARTMENT OF PLANNING AND ZONING 4/5/45 Date SUBDIVISION GREATER BALTIMORE SECTION/AREA TWO/BUK-B ONSOLIDATED WHOLESALE FOOD MARKET PARCEL A BLOCK NO. ZONE TAX/ZONE ELEC. DIST. CENSUS TR. M-2 4316 113.23 F.39 20 24 6009.01 WATER CODE SEWER CODE 2-B-02

NOTES ! DETAILS

GREATER BALTIMORE CONSOLIDATED WHOLESALE FOOD MARKET

SECTION TWO BLOCK B PARCEL A

TAX MAP No: 16.43 PARCEL: A SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: SHEET 2 OF 3

