LEGEND EX MAJOR CONTOURS -----EX MINOR CONTOURS UTILITY EASEMENTS LIMIT OF DISTURBANCE washing as night to respect to specific or foreign a specific account to participate the participate of the SOIL LABEL SOIL BOUNDARY EX. FOREST EDGE PROPOSED EVERGREEN TREE CONSTRUCTION ENTRANCE

GENERAL NOTES

SILT FENCE

SUPER SILT FENCE

ROADWAY RIGHT-OF-WAY

EXISTING & PROPOSED CONDITIONS

PROPERTY LINE

DRAINAGE AREAS

SOIL BORING

- 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 Department of Public Works/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 being done.
- 4. Traffic control devices, markings and signing shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs be in place prior to the placement of any asphalt.
- 5. All plan dimensions are to face of curb unless otherwise noted.
- 6. The existing topography is taken from field run survey with 2' contour intervals prepared
- 7. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System Howard County Monument Nos. 0911 and 09CA are shown on the vicinity map.
- 8. Water is private.

Grass Swale automatically mer within the grass smale 10. Water quality is met by a Pocket Sand-Filter (F-5). Recharge is mot by a stone reservoir by extended detention of the 1 year storm in the forebay and by natural a credita. The 10 year storm within the grass small is non-crosive.

- 11. Existing utilities are based on a field survey completed by DMW.
- 12. There is no floodplain on this site.
- 13. There are no wetlands on the site.
- 14. No traffic study is required for this project.
- 15. Project background information: Subdivision Name: nla Tax Map: 9 Lot./Parcel: 94 Zoning: RC-DEO Election District: 3rd Total Site Area: 147.68 acres
- 16. The subject property is zoned RC-DEO per the September 18, 1992 comprehensive zoning plan.
- 17. Financial surety has been posted as part of the DPW developer's agreement in the amount of \$4,800 for 8 shade trees and 16 evergreen trees.
- 18. This project compiles with the requirements of Section 16.1200 of the Howard County Code for Forest Conservation by paying \$ 4,574.00 for a fee in lieu of planting the required 0.21 acres
- 19. There are no slopes of 15 25% or greater within the area of submission.
- 20. This Site Development Plan is consistent with and a follows the site plan submitted to the Howard County Board of Appeals. A petition, case no. BA-O1-44-C&V, for a Conditional Use for a 190 foot tall monopole and associated equipment within a 70 foot by 70 foot fenced compound and a Variance to reduce the 30 foot setback to zero feet for an existing gravel driveway accessing the condtional use site in an RC-DEO (Rural Conservation - Density change Option) Zoning District, filed pursuant to Sections 131.n.14 and 130.B.2 of the Howard County Zoning Regulations. The petition was granted by the Board of Appeals on December 10, 2002, subject to the following conditions:
- 1. The Conditional Use shall apply only to the commercial communications tower facility and its access as described in the petiion, and as depicted on the Conditional Use plan entitled "Warfield Property - Unmanned Wireless Communications Site" submitted on July 26, 2001, and not to any other activities, uses, or structures
- 2. That the variance shall apply only to the existing driveway and not any structures or other uses on the subject property.
- 3. The Petitioner shall comply with all applicable Federal, State and County laws and
- 21. A waiver to design manual Volume S Section 2.6.5.D which requires that all driveways and parking areas be paved, was requested in a letter dated January 7, 2003. The waiver request was approved by the Development Engineering Division in a letter dated January 21, 2003.
- 22. A walver petition (WP-03-107) requesting approval to allow direct access onto an arterial highway (Route 32) for a non-residential development, the proposed telecommunication facility, was approved on April 16, 2003, subject to compliance with all conditions of approval for BA-01-44CTV.

Site Development Plan

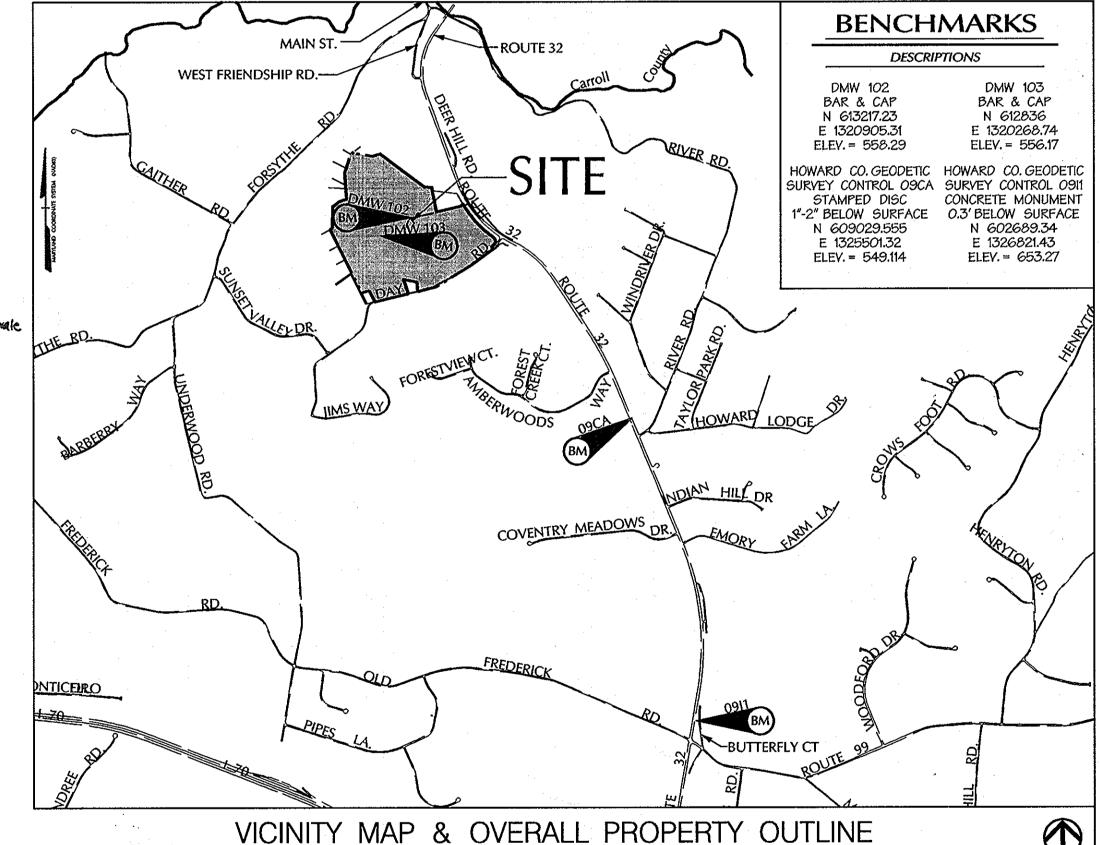


PROPOSED UNMANNED WIRELESS COMMUNICATION SITE

SITE NO.: BAN 224C

WARFIELD

SHT NO



Scale: 1"=2000'

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES NOTHING IN THESE PLANS 1S TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

1. IBC 2000 2. INTERNATIONAL MECHANICAL CODE 2000 3. NATIONAL ELECTRIC CODE (NEC) WITH LOCAL AMENDMENTS 2002

5. LIFE SAFETY CODE NFPA-101-2000

4. ANS/EIA-222-F

Professional Certification. I hereby certify that these

documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws

6. AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS (ASC) 7. UNDERWATER LABORATORIES APPROVED **ELECTRICAL PRODUCTS** 8. LOCAL BUILDING CODE 9. COUNTY ORDINANCES

FROM 1-695, TAKE THE 1-70 EAST WEST EXIT, EXIT NUMBER 16, TOWARDS FREDERICK KEEP RIGHT AT THE FORK IN THE RAMP. MERGE ONTO 1-70 W. TAKE 1-70 WUS-40 W. TAKE THE MD-32 EXIT, EXIT NUMBER 80, TOWARDS CLARKSVILLE/SYKESVILLE. KEEP RIGHT AT THE FORK IN THE RAMP MERGE ONTO MD-32 NSYKESVILLE RD.

DIRECTIONS

CODE COMPLIANCE

AS-BUILT CERTIFICATION FOR PSWM THEREBY CERTIFY THAT THE FECLITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE WAS CONSTRUCTED AS SHOWN ON THE WAS BUILT PLANS AND CONTROL WAS APPROVED PLANS AND SAFRICATIONS THAT THE CONTROL OF THE UNITED APPROVED SHOW FACILITY.

PREVENT CLOGGING OF THE UNDERSTRUCTED SHOW FACILITY.

AS-BUILT DATE 19-28-2012

NORTH

SMI. NO.	DESCRIPTION	nev.
1	TITLE SHEET	2
2	SITE PLAN & FOREST CONSERVATION WORKSHEET	2
3	COMPOUND DETAIL, SITE DETAILS, & SHA ENTRANCE DETAIL	2
4	SEDIMENT AND EROSION CONTROL PLAN	2
5	SEDIMENT AND EROSION CONTROL SPECIFICATIONS	2
6	SEDIMENT AND EROSION CONTROL DETAILS	-2
. 7	STORMWATER MANAGEMENT PLAN	2
8	STORMWATER MANAGEMENT DETAILS	2
9	LANDSCAPE PLAN, NOTES AND DETAILS	2

DESCRIPTION

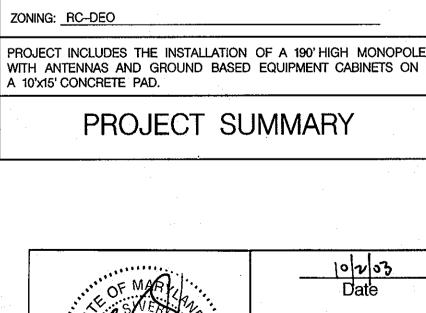
SHEET INDEX

EQUIPMENT TYPE:

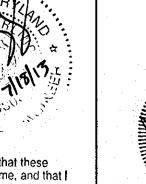
ANTENNA LOCATION:

·
1. TOTAL PROJECTED AREA:
2. AREA OF PLAN SUBMISSION:
3. LIMIT OF DISTURBED AREA:
4. PRESENT ZONING DESIGNATION: RC-DEO
5. PROPOSED USE FOR SITE: TELECOMMUNICATIONS FACILITY
6. FLOOR SPACE ON EACH LEVEL OF BUILDING PER USE: N/A
7. TOTAL NO. OF UNITS ALLOWED FOR PROJECT AS SHOWN ON FINAL PLAT:
8. TOTAL NO. OF UNITS PROPOSED ON SUBMISSION: NONE
9. MAXIMUM NO. OF EMPLOYEES:
10. NO. OF PARKING SPACES REQUIRED: NONE
11. NO. OF PARKING SPACES PROVIDED: ONE
12 OPEN SPACE ON SITE:
13. AREA OF RECREATION OPEN SPACE REQUIRED BY SUBDIVISION & LAND DEVELOPMENT REGULATIONS:NONE
14. BUILDING COVERAGE OF SITE:
15. APPLICABLE DPZ FILE REFERENCES: BA 01-44C&V

SITE ANALYSIS DATA CHART



JURISDICTION: HOWARD COUNTY



☑ OUTDOOR ☐ INDOOR

EXISTING WATER TANK

☐ LATTICE TOWER

MONOPOLE EXISTING BUILDING

X RAW LAND

X RBS 2102 ☐ NORTEL S-8000 ☐ ISM/WCS

Professional Certification I hereby certify that these documents were prepared or approved by me, and that I am a duly linguised professional engineer under the laws License No. 23303 Regiration Date: 77714

18878

Professional Engr. No.

MRA REVISION BLOCK CJS & TO SHOW VERIZON WIRELESS ADDRESS CHART LOT / PARCEL # STREET ADDRESS 720 SYKESVILLE ROAD APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

SUBMITTED FOR HOWARD COUNTY APPROVAL AND SIGNATURE REVISED PER COMMENTS RECEIVED BY DPZ AND DED REVISED PER COMMENTS RECEIVED BY DPZ, DED, AND ALPP Revision Description Date

SITE NO. BAN 224C UNMANNED WIRELESS COMMUNICATION SITE

WARFIELD PROPERTY 720 SYKESVILLE ROAD (MD ROUTE 32) SYKESVILLE, MD 21784

OWNER
SAMUEL L. WARFIELD, TRUSTEE SYKESVILLE, MD 21784

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC. 12050 BALTIMORE AVENUE BELTSVILLE, MARYLAND 20705 (240) 264-8618

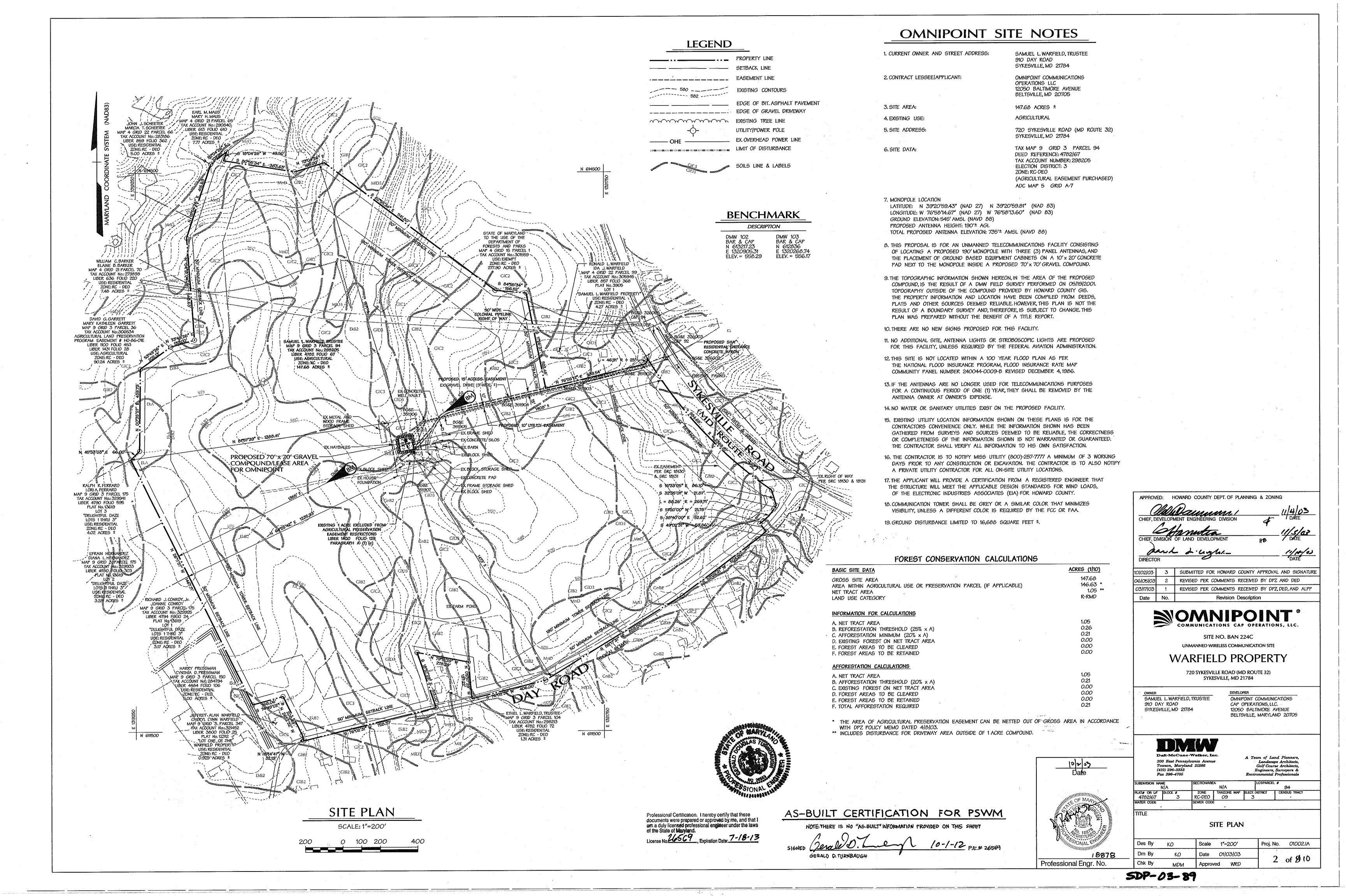
DMW Fax 298-4705

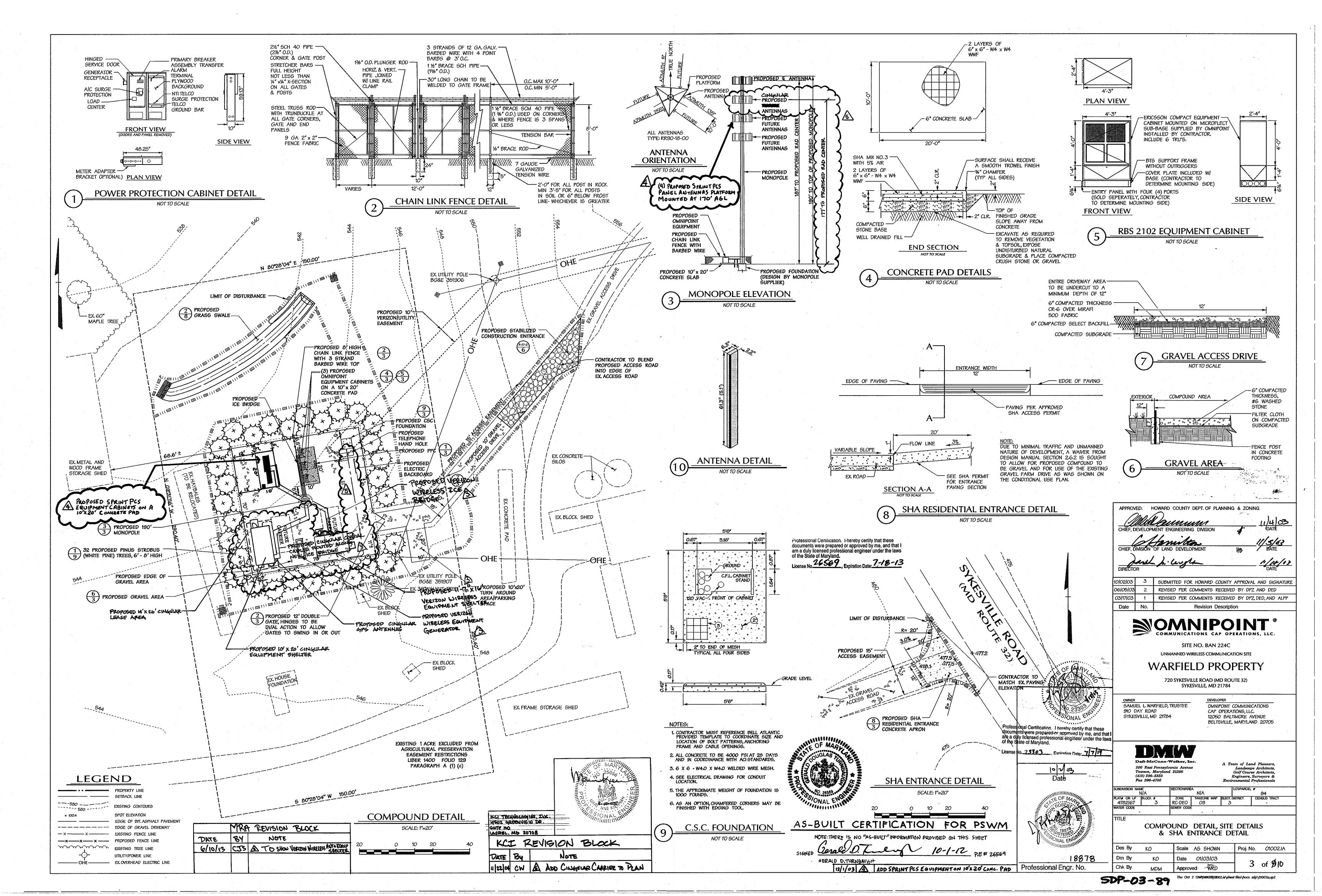
A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors & vironmental Professionals

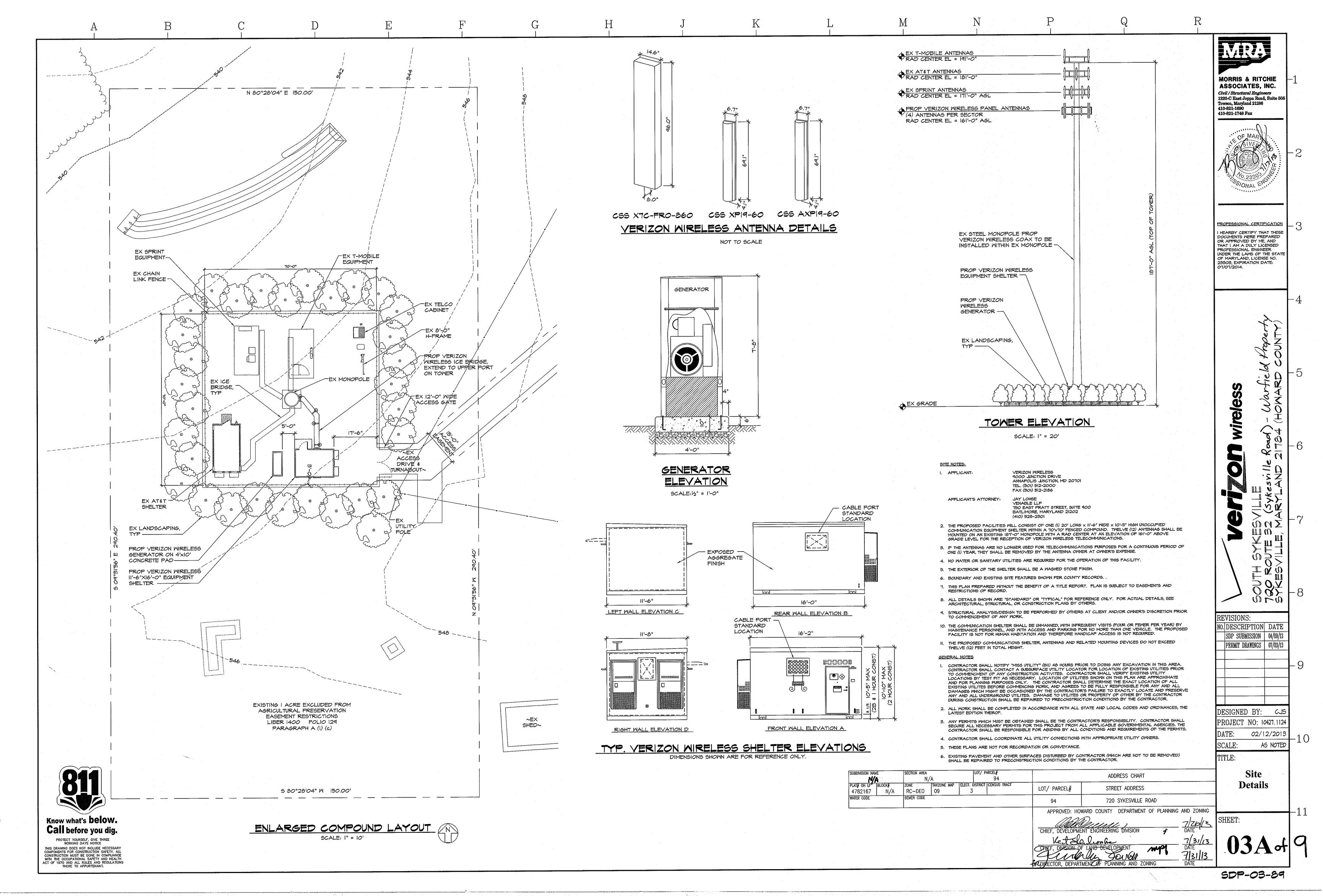
RC-DEO 09 3 4782167 N/A

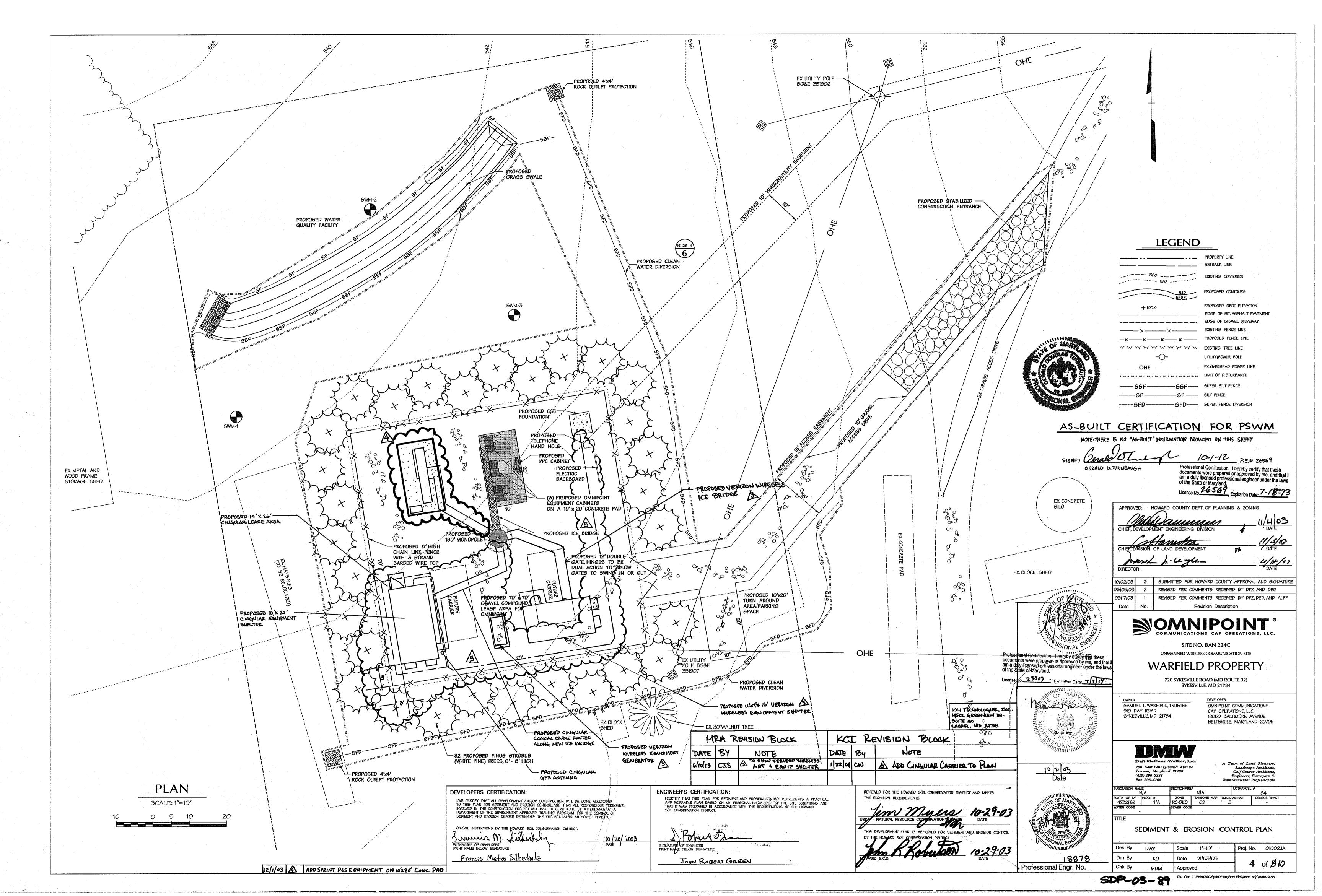
TITLE SHEET Scale AS SHOWN

Proj. No. 01002.1A KO. Date 01/03/03 of **9** 10 Approved WRD









SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- A. SITE PREPARATION
 - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms waterways, or sediment control
 - II. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - III. Schedule required soil test to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.
- B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)
 - Soil test 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 analysis.
 - II. 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 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 materials shall be ground limestone (hydrated or brunt 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 98 - 100% will pass through a #20 mesh sieve.
 - IV. Incorporate lime and fertilizer into the top 3 5 inches of soil by disking or other

C. SEEDBED PREPARATION

I. TEMPORARY SEEDING

- A. Seedbed preparation shall consist of loosening soil to a depth of 3 inches to 5 inches by means of suitable agricultural or construction equipment, such a disc harrows or chisel 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 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the counter
- B. Apply fertilizer and lime as prescribed on the plans.
- C. Incorporate lime and fertilizer into the top 3 5 inches of soil by disking or other sultable means

II. PERMANENT SEEDING

- A. Minimum soil conditions required for permanent vegetative establishment:
- i. Soil ph shall be between 6.0 and 7.0.
- 2. Soluble salts shall be less than 500 parts per million (PPM). 3. The soil shall contain less than 40% clay but enough fine grained material (> 30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if Lovegrass or Serecia Lespedeza is to be planted. Then a sandy soil (< 30% silt plus clay) would be acceptable.
- 4. Soil shall contain 1.5% minimum organic matter by weight. 5. Soli must contain sufficient pore space to permit adequate root penetration. 6. If these conditions cannot be met by the soils on site, adding topsoil is required in accordance with Section 21 - Standard and Specification for
- B. Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3 - 5 inches to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
- C. Apply soil amendments as per soil test or as included on the plans.
- D. Mix soil amendments into the top 3 5 inches of topsoil by disking or other buitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed 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 inches of soil should be loose and friable. Seedbed loosening may not be necessary on newly disturbed areas.

D. SEED SPECIFICATIONS

- 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 laboratory. 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
- II. Inoculant The inoculant for treating legume seed in the seed mixtures shall be a pure culture of nitrogen-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. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75-80 F. can weaken bacteria and make the inoculant less effective.

E. METHODS OF SEEDING

- I. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder, or 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 pounds per acre total of soluble Nitrogen; P205 (phosphorous): 200 pounds per acre; K20 (potassium): 200 pounds per acre.
- B. Lime: Use only ground agricultural limestone, (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by lydroseeding 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 25 or 26. The seeded area shall then be rolled with a weighed roller to provide good seed 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.

F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

- Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weeds seeds as specified in the Maryland Seed Law.
- II. Wood cellulose fiber mulch (WCFM)
- A. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- B. WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
- C. WCFM, including dye shall contain no germination or growth inhibiting factors.
- D. WCFM 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 and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-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 arowth of the arass seedlnas.
- E. WCFM material shall contain no elements or compounds at concentration levels that will be phyto-toxic.
- F. WCFM must conform to the following physical requirements: Fiber length to approximately 10 mm., diameter approximately 1mm., ph range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90%

Note: Only sterile straw mulch should be used in areas where one species of grass ls desired.

G. MULCHING SEEDED AREAS - Mulch shall be applied to all seeded areas where one species of arass is desired.

- I. If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
- II. When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons per acre. Muich shall be applied in a uniform loose depth of between linches and 2 inches. Mulch applied shall achieve a uniform distribution and depth so that the surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 tons per acre.
- III. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 pounds per acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of
- H. SECURING STRAW MULCH Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon size of area and erosion hazard:
 - 1. A mulch anchoring tool is a tractor drawn implement design to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should be used on the contour

II. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied

- at a net dry weight of 750 pounds per acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- III. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys or on crest of banks. The remainder of area should appear uniform after binder application. Synthetic binders - such as Acrylic DLR (agro-tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch
- IV. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300

SECTION II - TEMPORARY SEEDING

VEGETATION - Annual grass or grain used to provide cover on disturbed areas for up to 12 months. For longer duration of vegetative cover, permanent seeding is required.

	Seed Mixture (Hardiness Zone 7A)				Fertilizer Rate	Lime Rate	
No.	Species	Application Rate (Lb./Ac.)	Seeding Dates	Seeding Depths	(10-10-10)	Lime Nate	
1	Annual Ryegrass	50	2/1 - 4/30 8/15 - 11/1	1/4"-1/2"	600 Lbs./Ac.	2 Tons/Ac.	
2	Weeping	4	5/1 - 8/14	1/4"-1/2"	(15 Lbs./1000 SF)	(100 Lbs./1000 SF)	

SECTION III - PERMANENT SEEDING

Seeding grass and legumes to establish ground cover for a minimum of one year on disturbed areas generally receiving low maintenance.

	Seed Mixture No. 3 (Ha		diness Zone	ness Zone 7A)		Fertilizer Rate (10-20-20)		
%	Species	Application Rate (Lb./Ac.)	Seeding * Dates	Seeding Depths	N	P205	K20	Rate
85	Rebel II Tail Fescue	125	3/1 - 5/15 8/15 - 11/15		90	175	175	0.514
10	Pennfine Perennial Ryegrass	15		3/1 - 5/15 8/15 - 11/15	1/4"-1/2"	Lb./Ac. (2 Lb./ 1000	Lb./Ac. (4 Lb./ 1000	Lb./Ac. (4 Lb./ 1000
5	Kenblue Kentucky Bluegrass	10			Sq.Ft.)	Sq.Ft.)	Sq.Ft.)	

^{*} For 5-16 through 8-14 add two (2) pounds of Weeping Lovegrass per acre or ten (10) pounds of Millet per acre to seed mixture (i.e. Mix #3 shown).

DEVELOPERS CERTIFICATION:

I'ME CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SECIMENT 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 INSPECTIONS BY THE HI	OWARD SOIL CONSERVATION DISTRICT,		
M rimon of	Lillushah	10/20	2003
GNATURE OF DEVELOPER PINT NAME BELOW SIGNATURE	8	DATE	

Francis Metro Silberholz

ENGINEER'S CERTIFICATION:

I CERTILY 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

1	771 1		
<u> </u>	your	Dru_	
signature Print name	OF ENGINEER BELOW SIGN/	ATURE	
7.	OHN ROS	BERT GREEN	

REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEETS THE TECHNICAL REQUIREMENTS

SECTION IV - SOD

To provide quick cover on disturbed areas (2:1 grade or flatter)

A. GENERAL SPECIFICATIONS

- I. Class of turfgrass sod shall be Maryland or Virginia State certified or approved. Sod labels shall be made available to the job foreman and inspector.
- II. Sod shall be machine cut at a uniform soil thickness of 34", plus or minus 14", at the time of cutting. Measurement for thickness shall exclude top growth and thatch. Individual pieces of sod shall be cut to the suppliers width length. Maximum allowable deviation from standard widths and lengths shall be 5 percent. Broken pads and torn or uneven ends will not be acceptable.
- . III. Standard size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.
- IV. Sod shall not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.
- V. Sod shall be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period shall be approved by an agronomist or soil scientist prior to its installation.

B. SOD INSTALLATION

- I. During periods of excessively high temperature or in areas having dry subsoil, the subsoil shall be lightly irrigated immediately prior to laying the sod.
- II. The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which
- III. Wherever possible, sod shall be laid with the long edges parallel to the contour and with staggering joints. Sod shall be rolled and tamped, pegged or otherwise secured to prevent slippage on slopes and to ensure solid contact between sod roots and
- IV. Sod shall be watered immediately following rolling or tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. the operations laying, tamping and irrigating for any piece of sod shall be completed within eight hours.

C. SOD MAINTENANCE

- I. In the absence of adequate rainfall, watering shall be performed daily or as often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4 inches. Watering should be done during the heat of the day to prevent wiltina.
- II. After the first week, sod watering is required as necessary to maintain adequate
- III. The first mowing of sod should not be attempted until the sod is firmly rooted. No more than 1/3 of the grass leaf shall be removed by the initial cutting or subsequent cuttings. Grass height shall be maintained between 2 inches and 3 inches unless otherwise specified.

SECTION Y - TURFGRASS ESTABLISHMENT

- Areas where turfgrass may be desired may include lawns, parks, playgrounds, and commercial sires which will receive a medium high level of maintenance. Areas to receive seed shall be tilled by disking or other approved methods to a depth of 2 to 4 inches, leveled and raked to prepare a proper seedbed. Stones and debris over 11/2 inches in diameter shall be removed. The resulting seedbed shall be in such condition that future mowing of grasses will pose no difficulty.
- Note: Choose certified material. Certified material is the best quarantee of cultivar purity The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure aenetic line.

A. TURFGRASS MIXTURES

I. Kentucky Bluegrass - Full sun mixture - For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended certified Kentucky Bluegrass cultivars seeding rate: 1.5 to 2.0 pounds per 1000 square feet. A minimum of three Bluegrass cultivars should be chosen ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.

II. Kentucky Bluegrass/Perennial Rye - Full sun mixture - For use in full sun areas where

- rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass cultivars/certified Kentucky Bluegrass seeding rate: 2 pounds mixture per 1000 square feet. A minimum of 3 Kentucky Bluegrass cultivars must be chosen, with each cultivar ranging from 10% to 35% of the mixture by weight.
- III. Tail Fescue/Kentucky Bluegrass Full sun mixture For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; certified Tall Fescue cultivars 95-100%, certified Kentucky Bluegrass cultivars 0 - 5%, seeding rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.
- IV. Kentucky Bluegrass/Fine Fescue Shade mixture For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes; certified Kentucky Bluegrass cultivars 30-40% and certified Fine Fescue and 60-70%. Seeding rate: 1½- 3 pounds per 1000 square feet. A minimum of 3 Kentucky Bluegrass cultivars must be chosen. With each cultivar ranging from a minimum of 10% to a maximum of 35% of the mixture by weight.
- Note: Turfgrass varieties should be selected form those listed in the most current University of Maryland publication, agronomy mimeo number 77, "Turfgrass Cultivar Recommendations for Maryland".

B. IDEAL TIMES OF SEEDING

- Western Maryland: March 15 June 1, August 1 October 1 (hardiness zones 5B, 6A). Central Maryland: March 1 - May 15, August 15 - October 15 (hardiness zone - 6B).
- Southern Maryland, Eastern Shore: March 1 May 15, August 15 October 15 (hardiness zones - 7A, 7B).

C. IRRIGATION

If soil moisture is different, supply new seedlings with adequate water for plant growth (1/2" - 1" every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

D. REPAIRS AND MAINTENANCE

- Inspect all seeded areas for failures and make necessary repairs, replacements, and reseedings within the planting season.
- Once the vegetation is established, the site shall have 95% groundcover to be considered adequately stabilized.

II. If the stand provides less than 40% ground coverage, re-establish following original lime,

- fertilizer, seedbed preparation and seeding recommendations.
- III. If the stand provides between 40% and 94% ground coverage, overseeding and fertilizing using half of the rates originally applied may be necessary. IV. Maintenance fertilizer rates for permanent seedings are shown in Table 24, for lawns and

other medium high maintenance turfgrass areas, refer to the University of Maryland

G - 20 - 1A Vegetative Stabilization

publication "Lawn Care in Maryland" bulletin number 171.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland

AS-BUILT CERTIFICATION FOR PSWM NOTE: THERE IS NO "AS-BUILT" INFORMATION PROVIDED ON THIS SHEET

TABLE 28 STONE SIZE

	Size Range	050	D ₁₀₀	AASHT0	Weight
Number 57 *	3/8" - 11/2"	1/2"	1½"	M-43	N/A
Number 1	2" - 3"	2½"	3″	M-43	N/A
Rip-Rap **	4" - 7"	5½"	7"	N/A	NIA
Class I	N/A	9.5*	15*	N/A	150 Lb. max.
Class II	N/A	16"	24"	N/A	700 Lb. max.
Class III	. N/A	23"	34"	N/A	2000 Lb. max

* This classification is to be used on the inside face of stone outlets and check dams.

** This classification is to be used when ever small rip-rap is required. The State Highway Administration designation for this stone is stone for gabions (905.01.04).

STONE FOR GABION BASKETS

Basket Thickness		Size of Individual Stones		
Inches	мм	Inches	ММ	
6	150	3 - 5	75 - 125	
9	225	4 - 7	100 - 175	
12	300	4 - 7	100 - 175	
18	460	4 - 7	100 - 175	
36	910	4 - 12	100 - 300	

Note: Recycled concrete equivalent may be substituted for all stone classifications. Recycled concrete equivalent shall be concrete broken into the sizes meeting the appropriate classification, shall contain no steel reinforcement, and shall have a density of 150 pounds per cubic foot.

TABLE 27 GEOTEXTILE FABRICS

Class	Apparent Opening Size MM. Max.	Grab Tensile Strength Lb. Min.	Burst Strength PSI. Min.
Α	0.30 **	250	500
В	0.60	200	320
C	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F (silt fence)	0.40-0.80*	90	190

* US Standard sieve CW-02215

** .50 MM max. for super slit fence

The properties shall be determined in accordance with the following procedures: Apparent opening size memt 323

- Grab tensile strength ASTMD 1682: 4 imes 8" specimen, 1 imes 2" clamps, 12" min. strain rate in both principal directions of geotextile fabric. - Burst strength: ASTMD D 3786.

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of polyolephins, polyesters, or polyamides. The geotextile fabric shall resist deterioration from ultraviolet exposure

In addition, classes A through E shall have a 0.01 cm./sec. minimum permeability when tested in accordance with msmt 507, and an apparent minimum elongation of 20 percent (20%) when tested in accordance with the grab tensile strength

Class F geotextile fabric for silt fence shall have a 50 lb./in. minimum tensile strength and a 20 lb./in. minimum tensile modules when tested in accordance with msmt 509. The material shall also have a 0.3 gal. Ift. Imin. flow rate and seventy-five percent (75%) minimum filtering efficiency when tested in accordance with memt 322. Geotextile fabrics used in the construction of silt fence shall resist deterioration from ultraviolet exposure. The fabric shall contain sufficient amount of ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable construction life at a temperature range of 0 to 120 degrees fahrenhelt.

H - 24 - 1

MATERIALS SPECIFICATIONS

Silt fence

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3 SUBMITTED FOR HOWARD COUNTY APPROVAL AND SIGNATURE REVISED PER COMMENTS RECEIVED BY DPZ AND DED 03/17/03 REVISED PER COMMENTS RECEIVED BY DPZ, DED, AND ALPP Date Revision Description

SITE NO. BAN 224C

UNMANNED WIRELESS COMMUNICATION SITE

WARFIELD PROPERTY

SAMUEL L. WARFIELD, TRUSTEE 910 DAY ROAD SYKESVILLE, MD 21784

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC. 12050 BALTIMORE AVENUE BELTSYILLE, MARYLAND 20705

200 East Pennsylvania Avenue Towson, Maryland 21286

(410) 296-3333

A Team of Land Planners Landscape Architects, Golf Course Architects, Engineers, Surveyors

PLAT# OR LF BLOCK # 4782162 N/A

18878

Professional Engr. No.

SEDIMENT & EROSION CONTROL SPECIFICATIONS DWR

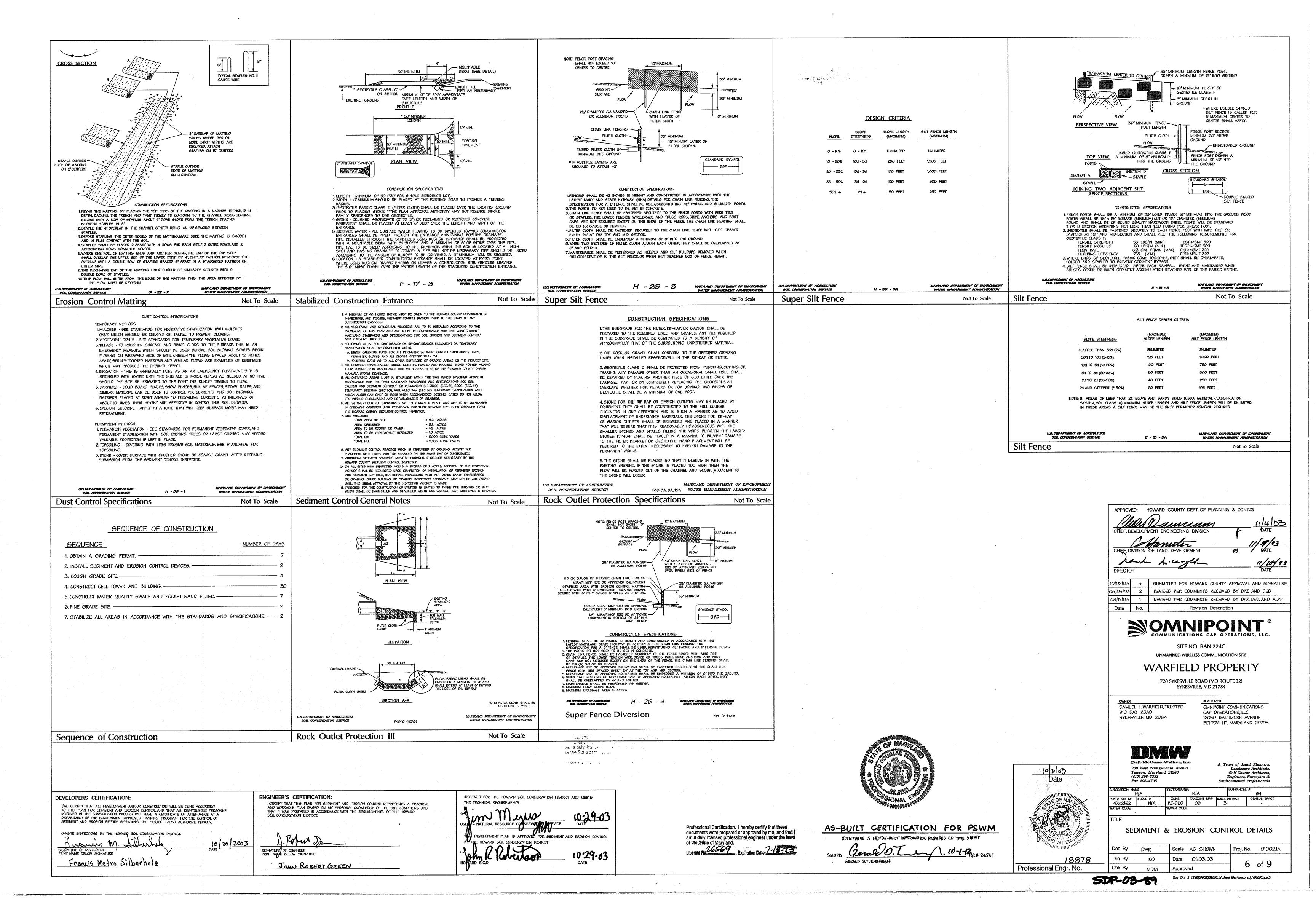
Scale 1"=20' Proj. No. 01002.1A KO Date 01/03/03 Chk By MDM Approved

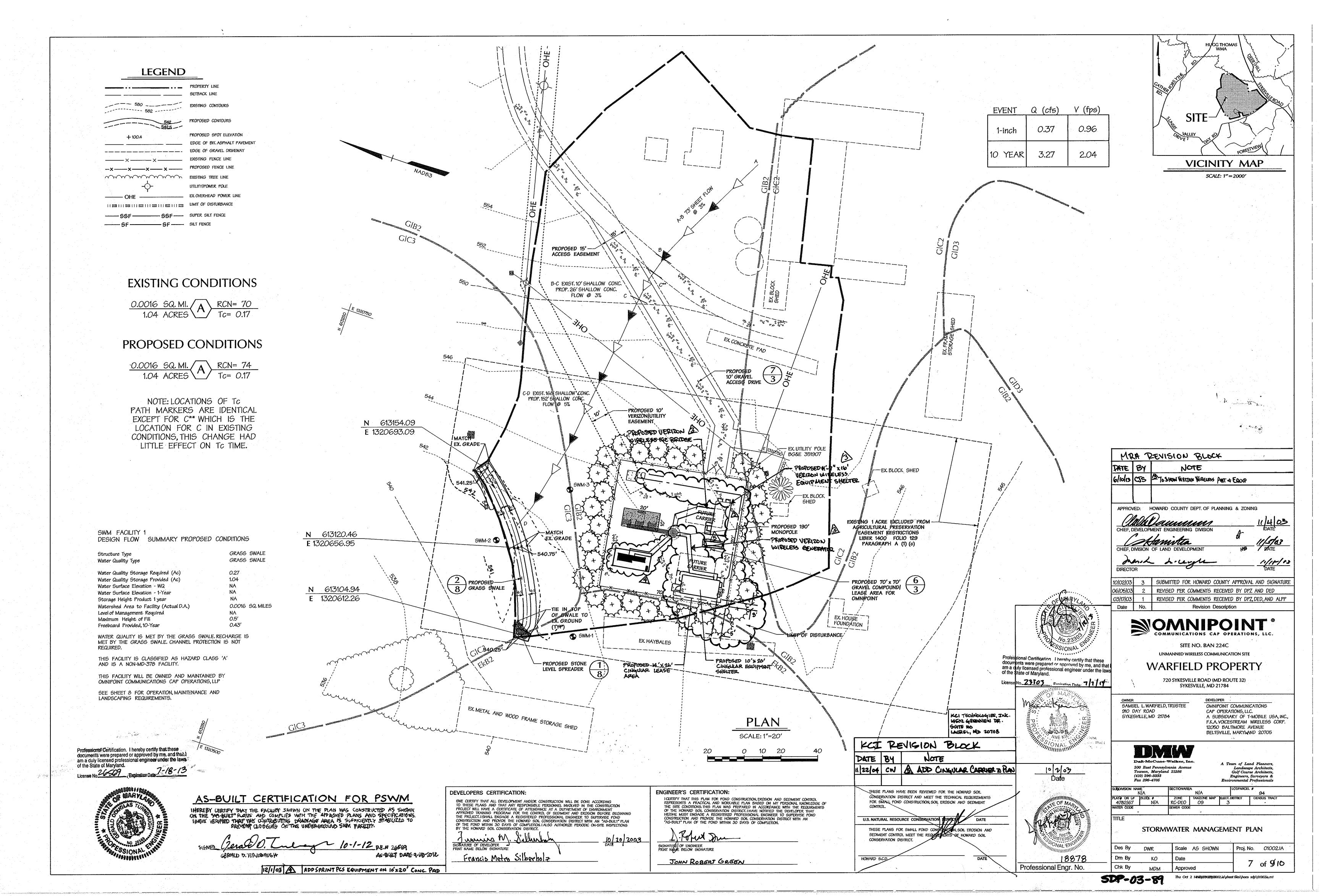
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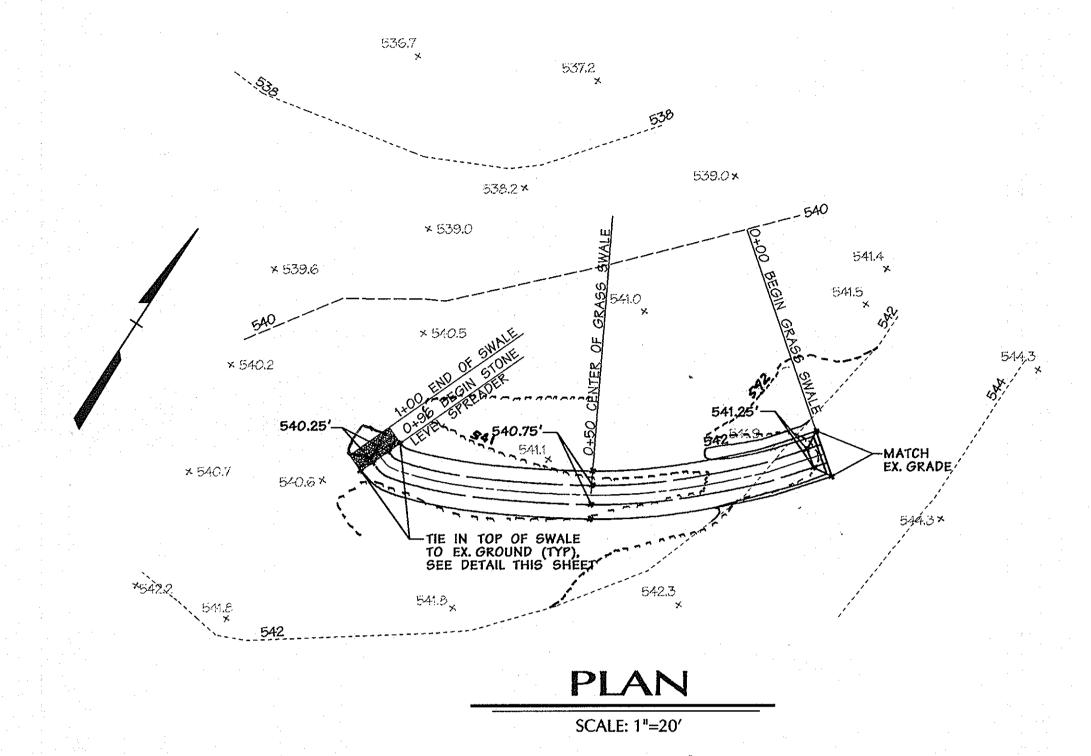
720 SYKESVILLE ROAD (MD ROUTE 32) SYKESVILLE, MD 21784

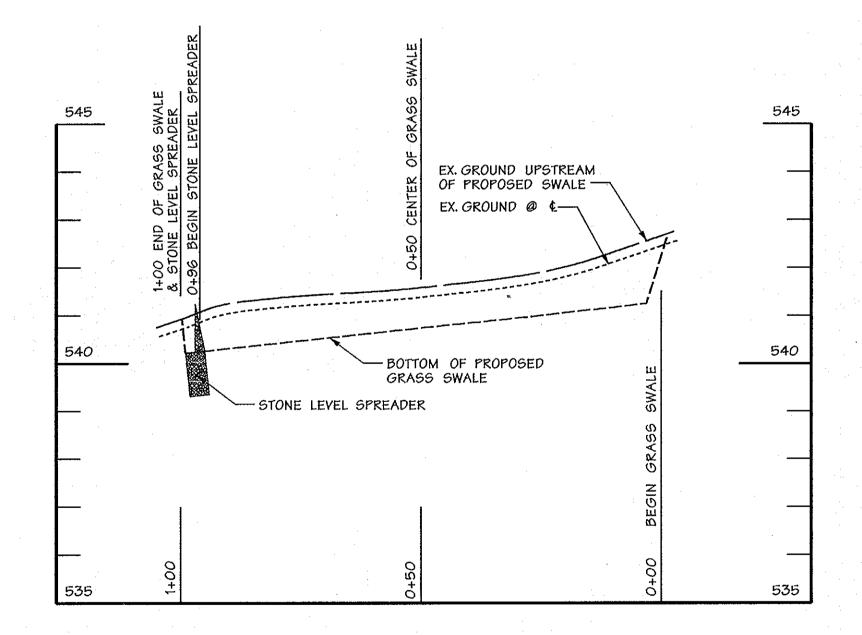
ZONE TAXZONE MAP ELECT. DISTRICT CENSUS TRACT RC-DEO 09 3

SDP-03-89



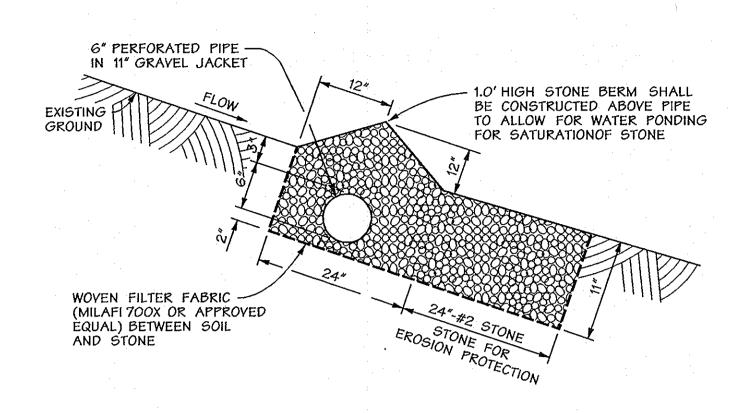


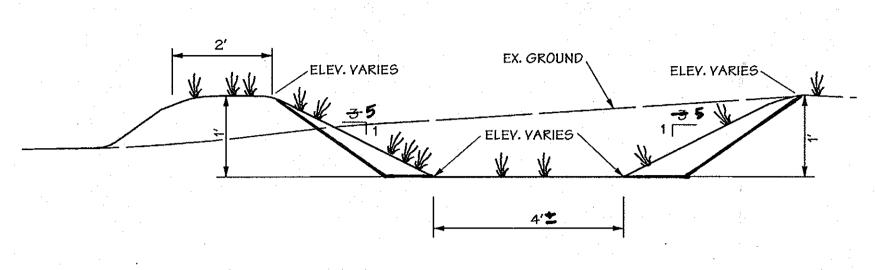




PROFILE

SCALE: HORIZONTAL 1"=20' VERTICAL 1"=2"





TYPICAL SECTION

STONE LEVEL SPREADER NOT TO SCALE

TYPICAL SECTION **GRASS SWALE**

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED OPEN CHANNEL SYSTEMS (O-1 AND O-2)

- 1. THE OPEN CHANNEL SYSTEM SHALL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHALL BE PERFORMED DURING WET WEATHER TO DETERMINE IF THE FACILITY IS FUNCTIONING PROPERLY.
- 2. THE OPEN CHANNEL SHALL BE MOWED A MINIMUM OF AS NEEDED DURING THE GROWING SEASON TO MAINTAIN A MAXIMUM GRASS HEIGHT OF LESS THAN 6 INCHES.
- 3. DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS
- 4. VISIBLE SIGNS OF EROSION IN THE OPEN CHANNEL SYSTEM SHALL BE REPAIRED AS SOON AS IT IS NOTICED.
- 5. REMOVE SILT IN THE OPEN CHANNEL SYSTEM WHEN IT EXCEEDS 25% OF THE ORIGINAL WQV.



APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

Stamulta

WARFIELD PROPERTY 720 SYKESVILLE ROAD (MD ROUTE 32)

SYKESVILLE, MD 21784

10/02/03 3 | SUBMITTED FOR HOWARD COUNTY APPROVAL AND SIGNATURE

REVISED PER COMMENTS RECEIVED BY DPZ AND DED

SAMUEL L. WARFIELD, TRUSTEE 910 DAY ROAD SYKESVILLE, MD 21784

06105103

OMNIPOINT COMMUNICATIONS CAP OPERATIONS, LLC. 12050 BALTIMORE AVENUE BELTSVILLE, MARYLAND 20705

200 East Pennsylvania Avenue Towson, Maryland 21286 (410) 296–3333

A Team of Land Planners, Landscape Architects, Golf Course Architects, Engineers, Surveyors &

N/A 94

ZONE TAXZONE MAP ELECT. DISTRICT CENSUS TRACT
RC-DEO 09 3 PLAT# OR LF | BLOCK # 4782/67 | N/A

STORMWATER MANAGEMENT DETAILS

Scale AS SHOWN Proj. No. 01002.1A KO-Date 01/03/03 Chk By Approved WRD MDM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.

AS-BUILT CERTIFICATION FOR PSWM THEREBY CERTIFY THAT THE FACILITY SHOWN ON THE PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND COMPLIES WITH THE APPROVED PLANS AND SPECIFICATIONS I HAVE VERIFIED THAT THE CONTRIBUTING DRAWAGE AREA IS SUFFICIENTLY STABILIZED TO PREVENT CLOSIGNIO OF THE UNDERGROUND SWIM FACILITY.

10-1-12 PE# 26569 AS-BULT PATE: 9-28-2012 GERALD D.TURNBAUGH

U.S. NATURAL RESOUR

THESE PLANS FOR SMALL PO

CONSERVATION DISTRICT.

SEDIMENT CONTROL MEET THE

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

MALL POND CONSTRUCTION, SOIL EROSION AND SEDIME

TRUCTION, SOIL EROSION AND

G OF HOWARD SOIL

ENGINEER'S CERTIFICATION: I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL TCERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL. REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIRMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERMSE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

JOHN ROBERT GREEN

INVECERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROMDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT. BY THE HOWARD SOIL CONSERVATION DISTRICT Zumis M. Sillarlo SIGNATURE OF DEVELOPER PRINT NAME BELOW SIGNATURE Francis Metro Silberholz

DEVELOPERS CERTIFICATION:

Professional Engr. No. Thu Oct 2 14x18(01402801002.ia\sheet files\hoco sdp\01002ia.m2

