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SITE DEVELOPMENT PLAN PLAY N' LEARN OAKLAND RIDGE INDUSTRIAL PARK LOTS 23&24 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

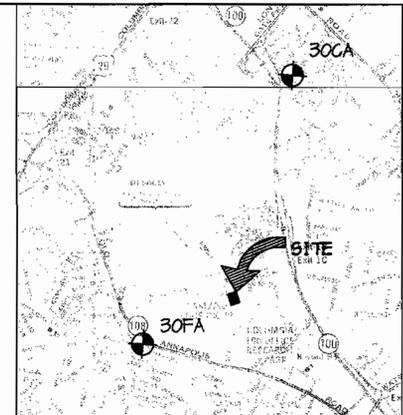
GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERS/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE NOTED.
- 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. 4386 AND 4382 WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 2638-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATUXENT CONTRACT NO. 228 M45
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- A 100-YEAR FLOODPLAIN STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THERE ARE NO ON-SITE WETLANDS AFFECTING THIS PROJECT.
- AN APPX TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY LEE GUNNINGHAM & ASSOCIATES DATED NOVEMBER 2000.
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- THE BOUNDARY SURVEY FOR THIS PROJECT IS BASED ON PREVIOUSLY RECORDED PLAT NO. PLAT BOOK 22 PAGE 81.
- SUBJECT PROPERTY ZONED NT PER 10-18-93 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS FDP-25-A-IV, F-68-22 AND SDP-12-24C PLAT BOOK 22 PAGE 81.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDINGS SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILES STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T180.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEHER MUEGGE & ASSOCIATES, INC. DATED OCTOBER 19, 2000.
- A GEOTECHNICAL STUDY WAS PREPARED BY EGS, LTD. DATED NOVEMBER 2000.
- STORMWATER QUALITY AND QUANTITY MANAGEMENT IS PROVIDED VIA A STORMCEPTOR HANDBOLE AND AN UNDERGROUND DETENTION FACILITY.
- THERE ARE NO CEMETARIES OR BURIAL GROUNDS ON THE SITE TO THE BEST OF OUR KNOWLEDGE.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BECAUSE IT IS PART OF A PLANNED UNIT DEVELOPMENT (NEWTOWN) WITH PRELIMINARY PLAN APPROVAL PRIOR TO 12/31/92.

BENCHMARKS

HO. CO. SURVEY CONTROL STATION 30CA
N 514,334.49 E 852,263.71
ELEV. 380.83
LOCATED AT 1.5 FT FROM EDGE OF RAMP TO LONG GATE PKWY. AND 126.6 FT SOUTH OF LIGHT POLE.

HO. CO. SURVEY CONTROL STATION 30FA
N 507,812.40 E 849,145.90
ELEV. 441.62
LOCATED AT 4.4 FT FROM EDGE OF PAVING OF RTE. 100, 51.6 FT EAST OF 6' EVER-GREEN AND 60.8 FT NORTH OF 4"x4" ORANGE POST R/W MARKER.



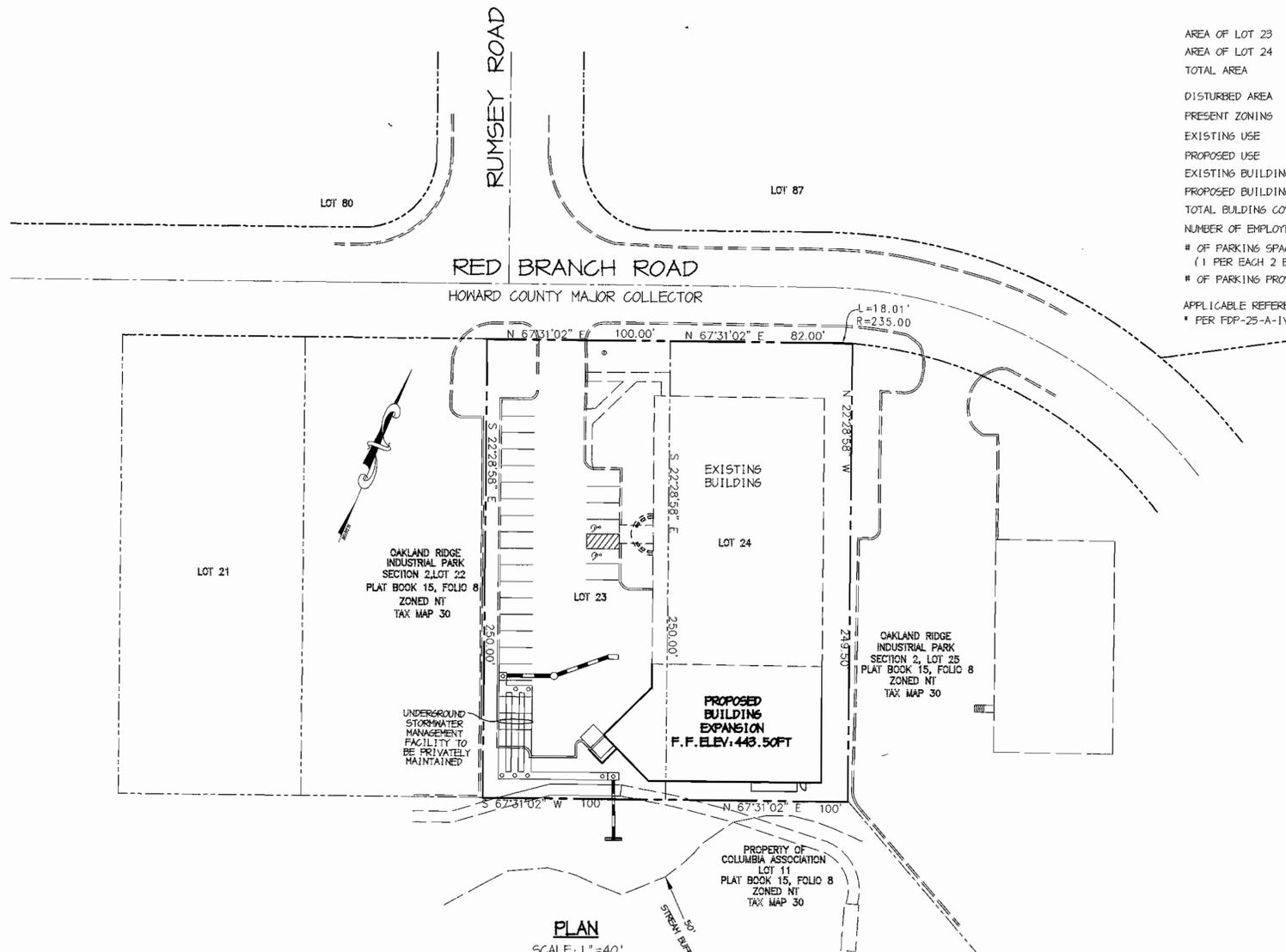
VICINITY MAP

SCALE: 1" = 2000'
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SITE ANALYSIS

AREA OF LOT 23	0.574 ACRES	25,000 SF
AREA OF LOT 24	0.574 ACRES	24,998 SF
TOTAL AREA	1.148 ACRES	49,998 SF
DISTURBED AREA	0.41 ACRES	19,166 SF
PRESENT ZONING	NEWTOWN - EMPLOYMENT CENTER INDUSTRIAL	
EXISTING USE	WAREHOUSE FACILITY	
PROPOSED USE	WAREHOUSE FACILITY EXPANSION (ONE STORY)	
EXISTING BUILDING COVERAGE	15,000 SF	(30% COVERAGE)
PROPOSED BUILDING COVERAGE	6,600 SF	(13% COVERAGE)
TOTAL BUILDING COVERAGE	21,600 SF	(43% COVERAGE)
NUMBER OF EMPLOYEES	26 SPACES	
# OF PARKING SPACES REQUIRED (1 PER EACH 2 EMPLOYEES) *	13 SPACES	
# OF PARKING PROVIDED	27 SPACES (INCLUDING 2 HC)	

APPLICABLE REFERENCES: FDP-25-A-IV, F-68-22 AND SDP-12-24C
* PER FDP-25-A-IV



ELEVATION
NOT TO SCALE

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: MARCH 8, 2001

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>[Signature]</i> DIRECTOR	11/9/01 DATE
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	11/10/01 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	11/9/01 DATE

DATE NO. REVISION

DEVELOPER/OWNER:
GOLDEN PROPERTIES, LLC.
4133 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
(410) 992-0992

PROJECT
PLAY N' LEARN
LOT 23 AND LOT 24

AREA TAX MAP 30 ZONED NT-EC1 PARCEL 269 BLOCK 18
OAKLAND RIDGE INDUSTRIAL PARK
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
TITLE SHEET

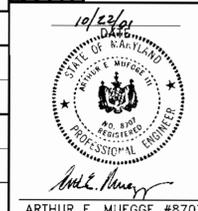
RIEMER MUEGGE
a division of:
Patton Harris Rust & Associates, pc
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS
8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8900 fax 410.997.9282

DESIGNED BY: C.J.R.
DRAWN BY: K.E.V.
CHECKED BY: C.J.R.
PROJECT NO: 00223/ SDP1.DWG
DATE: MARCH 16, 2001
SCALE: AS SHOWN
DRAWING NO. 1 OF 7

ADDRESS CHART

LOT	STREET ADDRESS
23 & 24	4133 RED BRANCH ROAD

SUBDIVISION NAME: OAKLAND RIDGE INDUSTRIAL PARK	SECT / AREA: 2	PARCEL: 269, LOTS 23 & 24
PLAT # - PLAT BOOK 15, F. 08	BLOCK # - 18	ZONING - NT-EC1
TAX MAP NO. - 30	ELECT. DIST. - 2nd	CENSUS TRACT - 6023.02
WATER CODE - 6-04	SEWER CODE - 5651400	



SDP-01-71

UNDERGROUND SMMF DESIGN SUMMARY: 0.86 AC.

DESIGN STORM (YR.)	*ALLOWABLE RELEASE (C.F.S.)	FACILITY INFLOW (C.F.S.)	FACILITY DISCHARGE (C.F.S.)	WATER SURFACE ELEVATION (FT.)	STORAGE VOLUME (C.F.)	REMARKS
2	2.54	2.98	1.96	437.87	834.12	
10	4.55	4.42	4.42	438.43	1,450.36	
100	N/A	N/A	N/A	N/A	N/A	

LEGEND
 P-3 PAVING
 PERENNIAL STREAM

- NOTES:
- ALL LIGHTING SHALL COMPLY WITH THE REQUIREMENTS OF ZONING SECTION 134.
 - ALL CURB RADII ARE 5' UNLESS OTHERWISE LABELED.
 - ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE LABELED.
 - * INDICATES TRANSITION FROM STANDARD 7" CURB & GUTTER TO REVERSE 7" CURB & GUTTER AND VICE-VERSA.
 - UNDERGROUND STORMWATER MANAGEMENT PIPES TO BE ALUMINIZED CORRUGATED METAL PIPE TYPE 11 12 6A.

- OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED UNDERGROUND STORMWATER MANAGEMENT FACILITY
- Underground structures will require periodic inspection and cleaning to maintain operation and function. Owners will have the underground structures inspected yearly or as required by Howard County, utilizing the underground units Inspection/Monitoring Form. Inspections can be done by using a clear Plexiglas tube ("sludge judge") to extract a water column sample. When sediment depths exceed 5" then cleaning of the structures is required.
 - Underground facility structures must be checked and cleaned immediately after petroleum spills. Contact appropriate regulatory agencies.
 - Maintenance of underground structures should be done by a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons, and other materials in the unit. The proper cleaning and disposal of the removed materials and liquid must be followed.
 - Inlet and outlet pipes must be checked for any obstructions and if any obstructions are found they must be removed. Structural parts of the underground facility will be repaired as needed.
 - Owner shall retain and make underground facility Inspection/Monitoring Forms available to Howard County officials upon their request.

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE: MARCH 8, 2001

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John H. ... 11/9/01
 DIRECTOR DATE

William ... 11/10/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cinda ... 11/5/01
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO. REVISION

DEVELOPER/OWNER:
 GOLDEN PROPERTIES, LLC
 4133 RED BRANCH ROAD
 COLUMBIA, MARYLAND 21045
 (410) 942-0942

PROJECT
PLAY N' LEARN
 LOT 23 AND LOT 24

AREA TAX MAP 30 ZONED NT-ECT PARCEL 269 BLOCK 18
 OAKLAND RIDGE INDUSTRIAL PARK
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

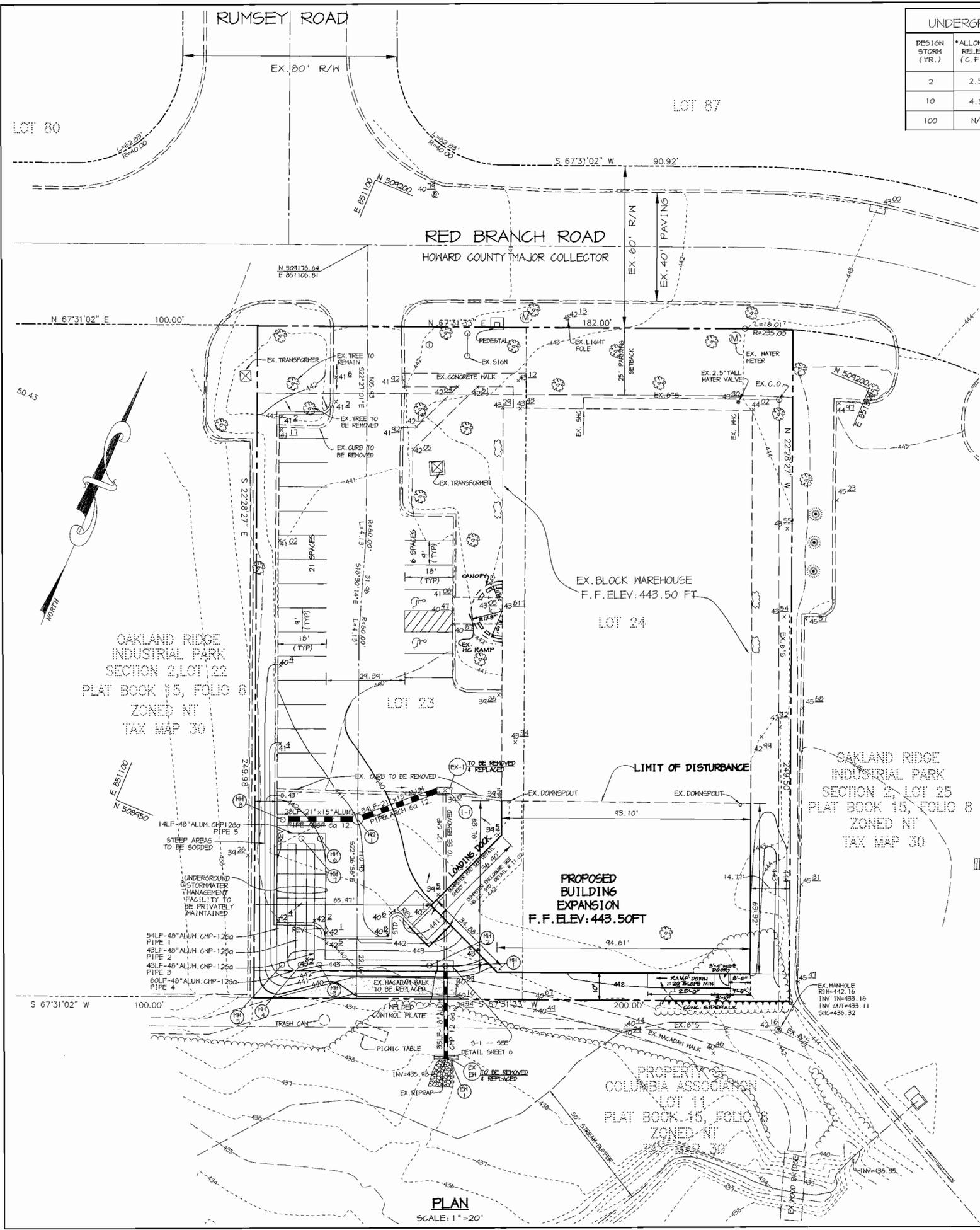
TITLE
SITE DEVELOPMENT PLAN

RIEMER MUEGGE
 a division of
Patton Harris Rust & Associates, pc
 ENGINEERS • SURVEYORS • PLANNERS
 LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS
 8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8900 fax 410.997.9282

10/27/01
 DATE

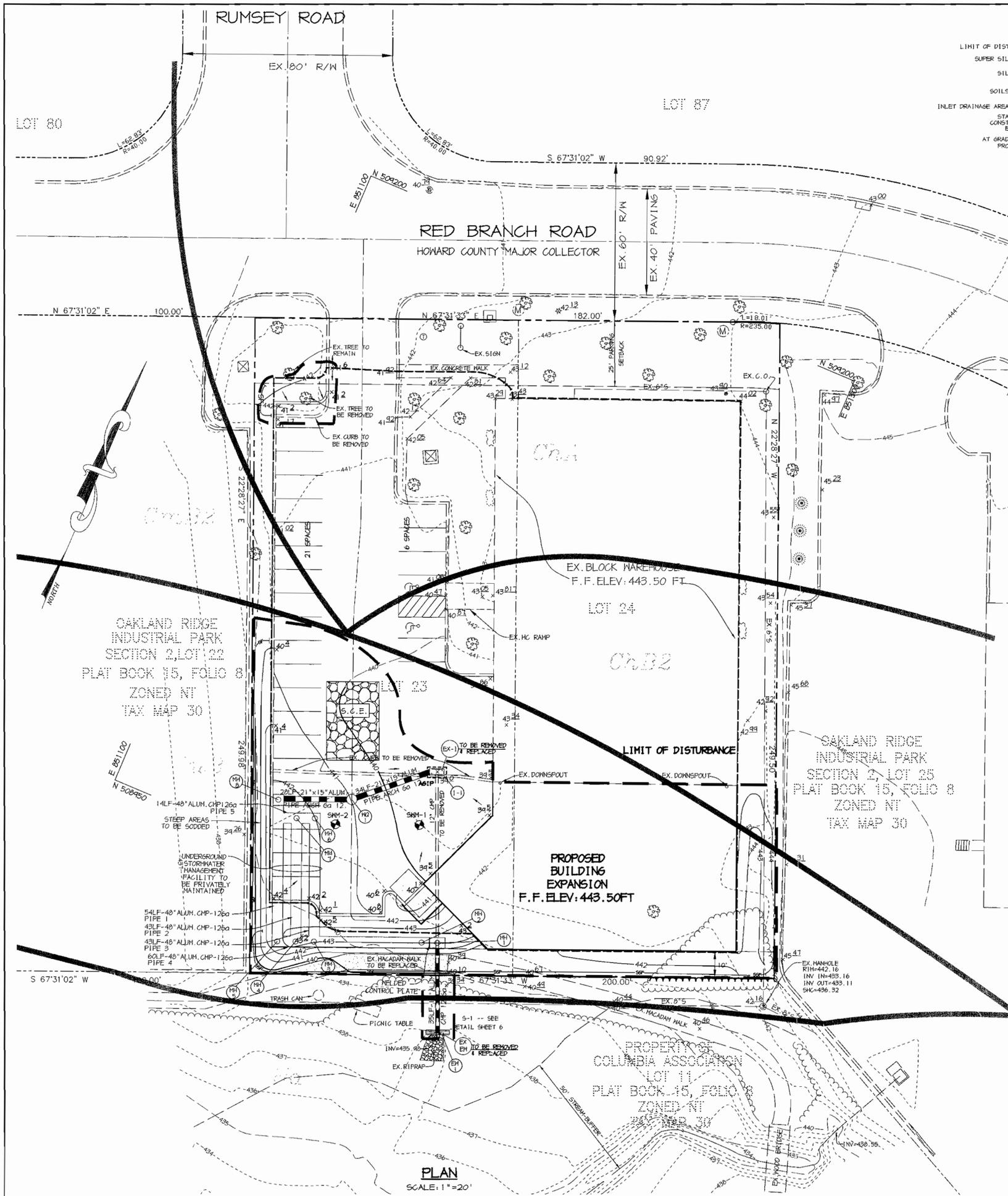
DESIGNED BY: C.J.R.
 DRAWN BY: K.E.V.
 CHECKED BY: C.J.R.
 PROJECT NO: 00223/
 SDP2.DWG
 DATE: MARCH 16, 2001
 SCALE: 1" = 20'
 DRAWING NO. 2 OF 7

ARTHUR E. MUEGGE #8707



PLAN
 SCALE: 1" = 20'

2 \project\00223\SDP2.dwg Fri Mar 16 10:42:50 2001: Riemer Muegge, a division of PHR&A



LEGEND

- LIMIT OF DISTURBANCE
- SUPER SILT FENCE
- SILT FENCE
- SOILS DIVIDE
- INLET DRAINAGE AREA DIVIDE
- STABILIZED CONSTRUCTION ENTRANCE
- AT GRADE INLET PROTECTION

DRAINAGE DATA

INLET NOS	AREA IN ACRES	C FACTOR	PERCENT IMPERVIOUS
1	0.86	0.14	90

441.0' TOP SOIL
 440.5' FINE TO MEDIUM SAND, SOME SILT AND CLAY, TRACE MICA, BROWN, MOIST TO VERY MOIST, MEDIUM DENSE (SM-SC) [SANDY CLAY LOAM]

BORING SWM-1
NO SCALE

441.0' TOP SOIL
 440.5' CLAYEY FINE TO MEDIUM SAND, LITTLE SILT AND MICA, BROWN, MOIST TO VERY MOIST, MEDIUM DENSE (SM-SC) [SANDY CLAY LOAM]

BORING SWM-2
NO SCALE

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE MARCH 8, 2001

BY THE DEVELOPER :

I/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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Jim Egan 10/19/01
 DEVELOPER DATE

BY THE ENGINEER :

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.

W.L. Muegge 3/16/01
 ENGINEER DATE

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

Jim Muegge 10/29/01
 NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John K. Robertson 10/29/01
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Paul Bantz 11/9/01
 DIRECTOR DATE

John DeWitt 11/10/01
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Stender 11/5/01
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

DEVELOPER/OWNER:
 GOLDEN PROPERTIES, LLC.
 9135 RED BRANCH ROAD
 COLUMBIA, MARYLAND 21045
 (410) 992-0942

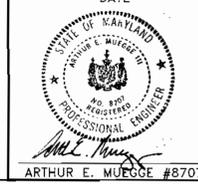
PROJECT
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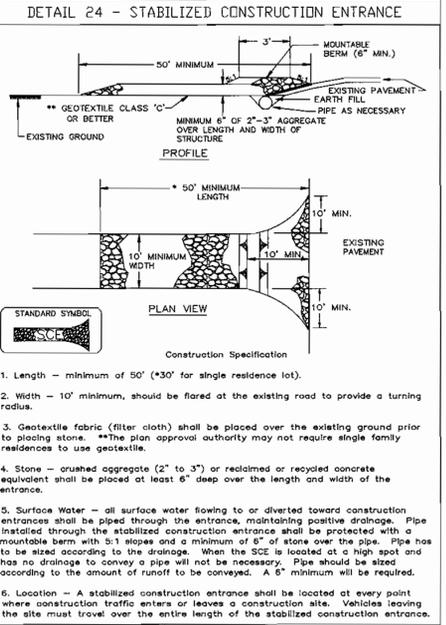
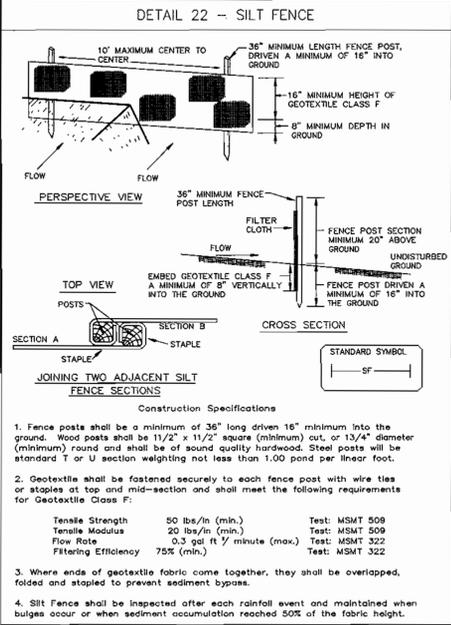
TITLE
GRADING AND SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP

RIEMER MUEGGE
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 ENGINEERS • SURVEYORS • PLANNERS
 LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS
 8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8900 fax 410.997.9262

DESIGNED BY : C.J.R.
 DRAWN BY : K.E.V.
 CHECKED BY : C.J.R.
 PROJECT NO : 00223/
 SDP3.DWG
 DATE : MARCH 16, 2001
 SCALE : 1" = 20'
 DRAWING NO. 3 OF 7



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21.0 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:

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish containing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- 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:

- 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-505 in cooperation with Maryland Agricultural Experimentation Station.
- Topsoil specifications - Soil to be used as topsoil must meet the following:
 - 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 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.
 - 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 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.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - section 1 - Vegetative Stabilization Methods and Materials.
 - For sites having disturbed areas over 5 acres:
 - On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - 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.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on 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 phytotoxic materials.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE F-17-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARD SEDIMENT CONTROL NOTES

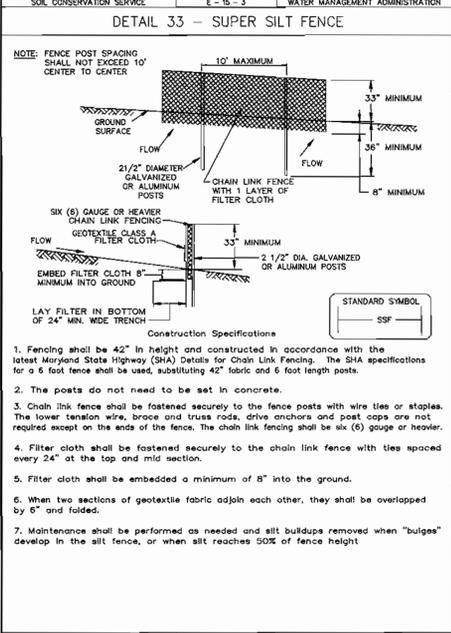
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF PLANNING, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 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: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1; B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, 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, SOD, TEMPORARY SEEDING, AND MULCHING (SEC. 6.). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHED OF GRASSES.
- 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.
- SITE ANALYSIS:

TOTAL AREA OF SITE	1.15 ACRES
AREA DISTURBED	0.41 ACRES
AREA TO BE ROOFED OR PAVED	0.31 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.11 ACRES
TOTAL CUT	0 CU. YARDS
TOTAL FILL	2,000 CU. YARDS

 OFF-SITE WASTE AREA LOCATION TO HAVE ACTIVE GRADING PERMIT
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTOR IS REQUIRED 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.
- 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.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE AND SILT FENCE. (2 DAYS)
- UPON PERMISSION OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, PERFORM ROUGH GRADING. START BUILDING EXPANSION (1 WEEK).
- AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL UNDERGROUND STORM WATER MANAGEMENT FACILITY (4 WEEKS).
- REMOVE EXISTING CURB. REMOVE EXISTING 12"CHP. REMOVE AND REPLACE EXISTING INLET AND HEADWALL. INSTALL STORMCATCHER. CONNECT 1-1" AND STORMCATCHER TO UNDERGROUND STORM WATER MANAGEMENT FACILITY. INSTALL INLET PROTECTION AT 1-1" (5 DAYS).
- INSTALL CONTROL PLATE AND CONNECT TO UNDERGROUND STORMWATER MANAGEMENT FACILITY AND HEADWALL (1 WEEK).
- INSTALL CURB AND GUTTER THEN PAVE. REDD STRIPING. CLEAN STORM DRAIN INLETS AND FLUSH OUT PIPES (1 WEEK).
- FINISH BUILDING EXPANSION (2 MONTHS).
- UPON PERMISSION OF DILP SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES. STABILIZE REMAINING DISTURBED AREA IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (1 WEEK)



30.0 - 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 OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS:

TEMPORARY METHODS

- MULCHES - SEE STANDARDS FOR VEGETATIVE STABILIZATION WITH MULCHES ONLY. MULCH SHOULD BE CRIMPED OR TACKED TO PREVENT BLOWING.
- VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.
- TILLAGE - TO ROUGHEN SURFACE AND BRING CLOS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS, BEGIN FLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE FLOWS SPACED ABOUT 12" APART, SPRING-TOOTHED HARRONS, AND SIMILAR FLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.
- IRRIGATION - THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOST REPEAT AS NEEDED. AT NO TIME SHOULD THE SITE BE IRRIGATED TO THE POINT THAT RUNOFF BEGINS TO FLOW.
- BARRIERS - SOLID BOARD FENCES, SILT FENCES, SNOW FENCES, BURLAP FENCES, STRAW BALES, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.
- CALCIUM CHLORIDE - APPLY AT RATES THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

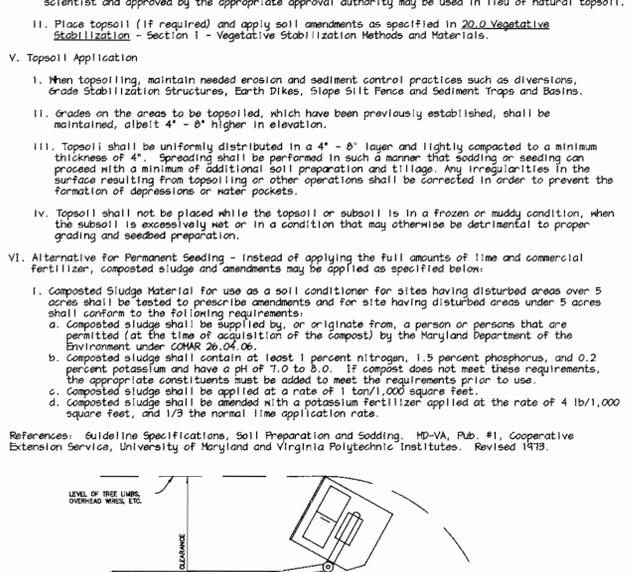
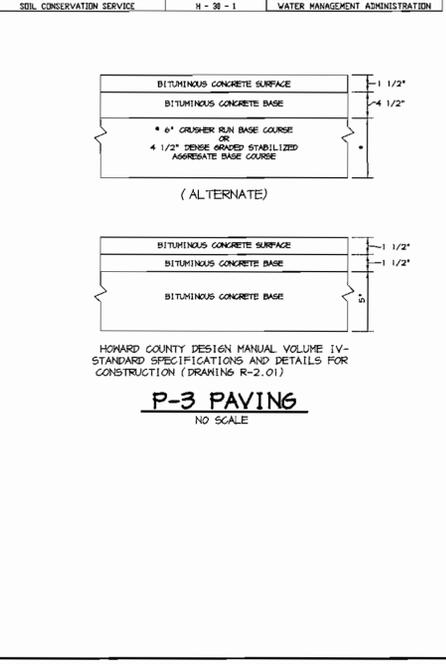
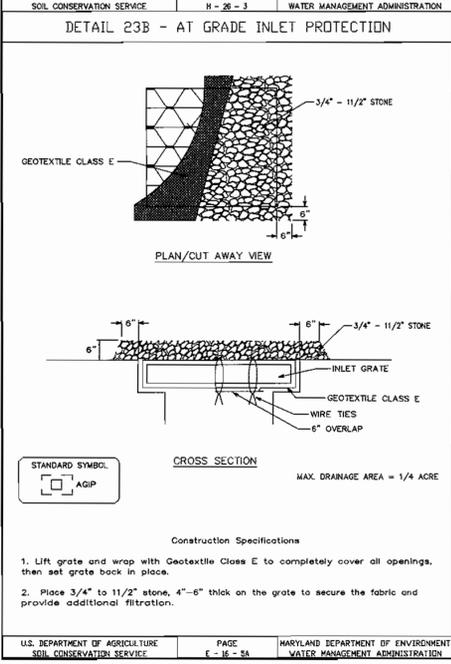
PERMANENT METHODS

- 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.
- TOPSOILING - COVERING WITH LESS ERODIBLE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.
- STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

REFERENCES:

- AGRICULTURE HANDBOOK 346. WIND EROSION FORCES IN THE UNITED STATES AND THEIR USES IN PREDICTING SOIL LOSS.
- AGRICULTURE INFORMATION BULLETIN 354. HOW TO CONTROL WIND EROSION, USDA-ARS.

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



TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.

Seeded Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq. ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual ryegrass (8.2 lbs. per 1000 sq. ft.) and 1 bushel per acre of annual rye (8.2 lbs. per 1000 sq. ft.) for the period August 16 thru November 14. For the period November 15 thru February 28, seed with 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 (10 to 20 lbs. per 1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gal. per acre (5 gal. per 1000 sq. ft.) of heaping loamgrass (0.09 lbs. per 1000 sq. ft.) of heaping loamgrass. During the period October 16 thru February 28, protect site by one of the following options:

- 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- Use sod.
- Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw (14 lbs. per 1000 sq. ft.).

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

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeded Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (42 lbs. per 1000 sq. ft.) and 400 lbs. per acre 10-10-10 fertilizer (14 lbs. per 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 ureaform fertilizer (4 lbs. per 1000 sq. ft.).
- Acceptable - Apply 2 tons per acre dolomitic limestone (42 lbs. per 1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March 1 thru April 30 and from August 1 thru October 15, seed with 60 lbs. per acre 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 (0.09 lbs. per 1000 sq. ft.) of heaping loamgrass. During the period October 16 thru February 28, protect site by one of the following options:

- 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- Use sod.
- Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw (14 lbs. per 1000 sq. ft.).

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

APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE: MARCH 9, 2001

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

SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYEGRASS (8.2 LBS. PER 1000 SQ. FT.) AND 1 BUSHEL PER ACRE OF ANNUAL RYE (8.2 LBS. PER 1000 SQ. FT.) FOR THE PERIOD AUGUST 16 THRU NOVEMBER 14. FOR THE PERIOD NOVEMBER 15 THRU FEBRUARY 28, SEED WITH 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 (10 TO 20 LBS. PER 1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GAL. PER ACRE (5 GAL. PER 1000 SQ. FT.) OF HEAPING LOAMGRASS (0.09 LBS. PER 1000 SQ. FT.) OF HEAPING LOAMGRASS. DURING THE PERIOD OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

2 TONS PER ACRE OF WELL-ANCHORED MULCH STRAW AND SEED AS SOON AS POSSIBLE IN THE SPRING.

USE SOD.

SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW (14 LBS. PER 1000 SQ. FT.).

MULCHING - APPLY 1-1/2 TO 2 TONS PER ACRE (10 TO 20 LBS. PER 1000 SQ. FT.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 210 GAL. PER ACRE (5 GAL. PER 1000 SQ. FT.) OF HEAPING LOAMGRASS (0.09 LBS. PER 1000 SQ. FT.) OF HEAPING LOAMGRASS. DURING THE PERIOD OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY ONE OF THE FOLLOWING OPTIONS:

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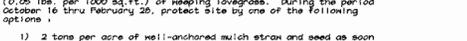
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USE SOD.

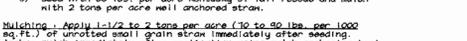
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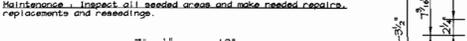
ASPHALT WALK DETAIL



REVERSE 7" COMBINATION CURB AND GUTTER



STANDARD 7" COMBINATION CURB AND GUTTER



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

SEEDING - FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 1 THRU NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYEGRASS (8.2 LBS. PER 1000 SQ. FT.) AND 1 BUSHEL PER ACRE OF ANNUAL RYE (8.2 LBS. PER 1000 SQ. FT.) FOR THE PERIOD AUGUST 16 THRU NOVEMBER 14. FOR THE PERIOD NOVEMBER 15 THRU FEBRUARY 28, SEED WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOD.

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SEED WITH 60 LBS. PER ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE WELL ANCHORED STRAW (14 LBS. PER 1000 SQ. FT.).

BY THE DEVELOPER:

I/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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Frank J. ... 10/19/01
DEVELOPER DATE

CONTRACTOR INSTALLATION PROCEDURE FOR STORMCEPTOR (STC400)

1. STAKE-OUT THE LOCATION OF THE INLET STORMCEPTOR AND EXCAVATE HOLE. EXCAVATE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO UNIT. INSTALL A 12" DEEP (OR AS REQUIRED) LAYER OF COMPACTED AGGREGATE SUBBASE AT BOTTOM OF EXCAVATION.
2. CHECK ELEVATION OF UNIT BY MEASURING ITS SECTIONS FROM THE BASE OF THE STORAGE CHAMBER (BOTTOM OF BASE SLAB) TO THE INVERT OF THE UNIT BYPASS CHAMBER (OUTLET ELEVATION/FIBERGLASS INSERT). SUBTRACT THIS DISTANCE FROM DESIGN OUTLET ELEVATION TO DETERMINE TOP OF SUBBASE ELEVATION. CHECK ELEVATION OF INSTALLED SUBBASE AND ADJUST AS NEEDED.
3. SECURE INSPECTOR APPROVAL OF SUBGRADE AND SUBBASE.
4. INSTALL STORAGE CHAMBER. ATTACH CABLES OR CHAINS TO THE THREE PULLING IRONS ON THE BASE SLAB. USING LARGE EQUIPMENT OR CRANE, LIFT AND PLACE THE BASE SECTION OF THE STORAGE CHAMBER IN THE EXCAVATED HOLE ON THE SUBBASE. MAKE SURE THE BASE IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS NOT REQUIRED. INSTALL RUBBER GASKET ON THE BASE UNIT AND APPLY LUBRICATING SOAP (PROVIDED IN SHIPMENT).
5. INSTALL BYPASS CHAMBER OF INLET STORMCEPTOR WITH FACTORY INSTALLED INSERT. LIFT BYPASS SECTION, LUBRICATE BELL, AND INSTALL WHILE CHECKING ALIGNMENT AND GRADE OF OUTLET DRAINAGE PIPE. CHECK AND MAKE SURE BYPASS CHAMBER IS SET FLUSH, LEVEL, AND IS AT THE PROPER ELEVATION. INSTALL RUBBER GASKET ON TOP OF BYPASS RISER AND LUBRICATE.
6. INSTALL INLET AND OUTLET STORM DRAIN PIPES. CONNECT PIPE WITH FLEXIBLE BOOTS (WHEN PROVIDED) AND WITH NON-SHRINK GROUT WHEN FLEXIBLE BOOTS ARE NOT PROVIDED. THE INVERT OF THE OUTLET PIPE IS TO MATCH THE INVERT OF THE STORMCEPTOR INSERT. FLEXIBLE BOOT INSTALLATION PROCEDURES: CENTER THE PIPE IN THE BOOT OPENING. LUBRICATE THE OUTSIDE OF THE PIPE AND/OR THE INSIDE OF THE BOOT. POSITION THE PIPE CLAMP IN THE GROOVE OF THE BOOT WITH THE SCREW AT THE TOP. TIGHTEN THE PIPE CLAMP WHILE ENSURING EVEN CONTRACTION OF THE RUBBER.
7. INSTALL INLET DOWN PIPE WITH HANDLE AND 4" VENT PIPE ACCORDING TO INSTALLATION INSTRUCTIONS FOR INLET STORMCEPTOR MODEL STC400.
8. INSTALL RISER SECTION. ALIGN STEPS ABOVE INLET (12") DOWN PIPE. NOTE, FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED.
10. BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 6" LIFTS. BACKFILL SHOULD BE COMPACTED TO LOCAL/STATE REQUIREMENTS.
11. INSTALL AND SET GRADE ADJUSTING RINGS, AS NEEDED.
12. INSTALL AND SET FRAME AND GRATE.
13. THE STORMCEPTOR SHOULD BE PUMPED OUT WHEN SEDIMENT CONTROL MEASURES ARE REMOVED (SITE PERMANENTLY STABILIZED).
14. FINAL INSPECTION.

FOR TECHNICAL INFORMATION CALL CSR HYDRO CONDUIT AT (301) 698-7373 OR STORMCEPTOR CORPORATION AT 1-800-762-4708

OPERATION AND MAINTENANCE SCHEDULE FOR INLET STORMCEPTOR STC400

1. THE STORMCEPTOR WILL REQUIRE PERIODIC INSPECTION AND CLEANING TO MAINTAIN OPERATION AND EFFECTIVENESS. OWNERS WILL INSPECT THE UNIT YEARLY OR AS REQUIRED BY THE MUNICIPALITY, UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS CAN BE DONE BY USING A CLEAR FIBERGLASS TUBE ("SLUDGE JACKET") TO EXTRACT A WATER COLUMN SAMPLE. WHEN SEDIMENT DEPTHS EXCEED EIGHT (8) INCHES, CLEANING OF THE UNIT IS REQUIRED.
2. INLET AND OUTLET PIPES MUST BE CHECKED FOR ANY OBSTRUCTIONS AND IF ANY OBSTRUCTIONS ARE FOUND, THEY MUST BE REMOVED.
3. THE STORMCEPTOR MUST BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. CONTACT APPROPRIATE REGULATORY AGENCIES.
4. MAINTENANCE OF THE STORMCEPTOR UNITS SHOULD BE PERFORMED BY A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS, AND OTHER MATERIALS IN UNIT. THE PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED.
5. OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO MUNICIPALITY OFFICIALS UPON REQUEST.

Precast Concrete Order Request Form

CONTRACTOR INFORMATION

Name _____
Address _____
City _____
State _____
Zip Code _____
Contact _____
Phone _____
Fax _____

OWNER INFORMATION

Name PLAY N' LEARN
Phone (410) 552-0242
Fax (410) 315-0287

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

Stormceptor Model	Insert Size	Manhole Number
4500	SINGLE INLET	702-1
900	DISC	440-75
1200	MULTIPLE INLET DISC	436-51
1800		436-41
2400		23" x 14"
		23" x 14"
		23" x 14"

Project Name PLAY N' LEARN

Approximate time frame of delivery (weeks) _____

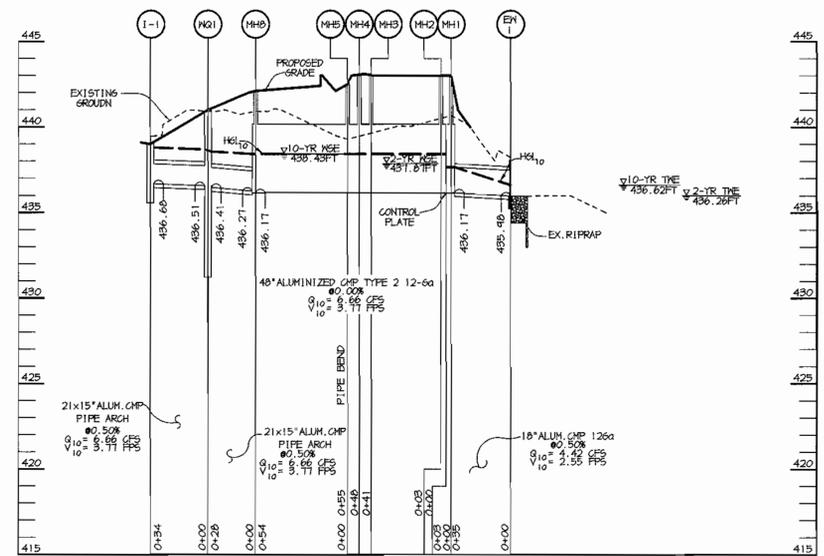
Delivery Address Street 4133 RED BRANCH ROAD

City COLUMBIA State MARYLAND Zip Code 21045

Designer Company RIEMER MUEGGE, A DIVISION OF PATTON, HARRIS, RUST & ASSOCIATES, PC

Designer Contact CHRIS REID, P.E. Phone (410) 981-8400 Fax (410) 981-4282

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR Hydro Conduit**
ATTN: JAMES TAYLOR FAX: (301) 698-5351, PHONE: (301) 698-7373
FOR TECHNICAL ASSISTANCE PLEASE CALL JAMES TAYLOR, PHONE (301) 698-7373 EXT 228



PROFILE

SCALE: 1"=5'
HOR. - 1"=50'
VERT. - 1"=5'

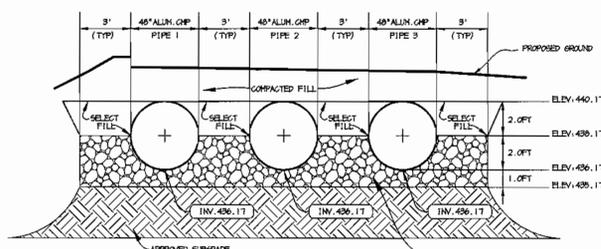
STRUCTURE SCHEDULE

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
I-1	DOUBLE 15"	* N 504000.71 E 051211.75	-	436.68(ARCH)	434.0	HOCO STD. DETAIL SD 4.23
MH-1	2'DIA. ACCESS MH	* N 508440.74 E 051231.37	436.17 (48")	436.17 (48")	443.0	SEE DETAILS SHEET 6 OF 7
MH-2	2'DIA. ACCESS MH	* N 508430.54 E 051231.84	436.17 (48")	436.17 (48")	443.0	SEE DETAILS SHEET 6 OF 7
MH-3	2'DIA. ACCESS MH	* N 508422.03 E 051193.94	436.17 (48")	436.17 (48")	443.0	SEE DETAILS SHEET 6 OF 7
MH-4	2'DIA. ACCESS MH	* N 508420.15 E 051181.47	436.17 (48")	436.17 (48")	443.1	SEE DETAILS SHEET 6 OF 7
MH-5	2'DIA. ACCESS MH	* N 508417.47 E 051181.01	436.17 (48")	436.17 (48")	442.5	SEE DETAILS SHEET 6 OF 7
MH-6	2'DIA. ACCESS MH	* N 508466.25 E 051175.94	436.17 (48")	436.17 (48")	442.0	SEE DETAILS SHEET 6 OF 7
MH-7	2'DIA. ACCESS MH	* N 508463.57 E 051164.48	436.17 (48")	436.17 (48")	442.1	SEE DETAILS SHEET 6 OF 7
MH-8	2'DIA. ACCESS MH	* N 508467.36 E 051160.33	436.27 (ARCH)	436.17 (48")	442.1	SEE DETAILS SHEET 6 OF 7
EN-1	18" ENHANCED TYPE C	* N 508404.00 E 051250.94	435.48 (18")	435.48 (18")	-	HOCO STD. DETAIL SD 5.21
HQ-1	STORMCEPTOR	* N 508470.40 E 051186.03	436.51 (ARCH)	436.41 (ARCH)	441.0	SEE DETAILS THIS SHEET

NOTES: * LOCATION OF "S" 4 MG FACILITY INLETS AND MANHOLES IS AT CENTER OF TOP COVER; FOR "A" INLETS LOCATION IS 61VEN FOR CENTER OF THROAT OPENING AT FACE OF CURB; FOR END SECTIONS AND HEADWALLS THE LOCATION IS CENTER OF THROAT OPENING AT FACE OF STRUCTURE TOP ELEVATION IS TOP OF CURB/GRATE/RIM.

CORRUGATED METAL PIPE BACKFILL AND BEDDING SPECIFICATIONS

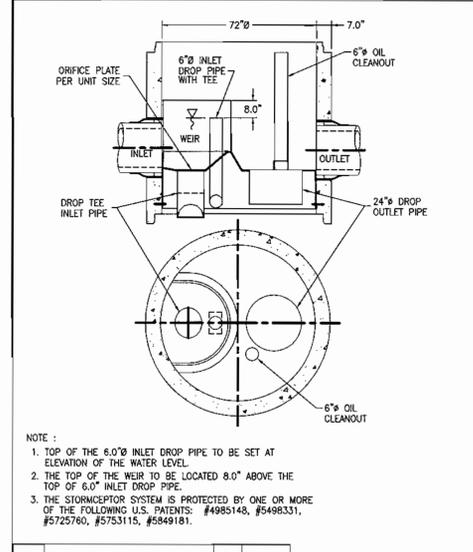
- 1.0 **BACKFILL**
 - 1.1 BACKFILL MATERIAL SHALL BE A WELL GRADED GRANULAR MATERIAL AND SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY STANDARD SPECIFICATIONS FOR FILL UNDER ROADS.
 - 1.2 HIGHLY PLASTIC SILTS, HIGHLY PLASTIC CLAYS, ORGANIC SILTS, ORGANIC CLAYS, AND PEATS SHALL NOT BE USED AS BACKFILL MATERIALS.
 - 1.3 BACKFILL SHALL BE PLACED SYMMETRICALLY ON EACH SIDE OF THE STRUCTURE IN 6" TO 8" LOOSE LAYERS TO 1 FOOT ABOVE THE TOP OF THE PIPE. EACH LAYER IS TO BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY. ALL COMPACTION SHALL BE AASHTO T-99-C.
- 2.0 **BEDDING**
 - 2.1 THE PIPE SHALL BE PLACED TO UNIFORM GRADE AND LINE TO ENSURE GOOD VERTICAL ALIGNMENT AND TO AVOID EXCESSIVE STRESSES AT PIPE JOINTS. THE BEDDING SHALL BE FREE OF ROCK FORMATIONS, PROTRUDING STONES, FROZEN LUMPS, ROOTS, AND OTHER FOREIGN MATERIAL. THE BEDDING FOUNDATION MUST BE A STABLE, WELL GRADED GRANULAR MATERIAL. ANY SUBGRADE THAT HAS INADEQUATE BEARING CAPABILITY MUST BE REMOVED AND REPLACED WITH A COMPACTED SELECT FILL APPROVED BY THE ENGINEER.
 - 2.2 BEDDING MATERIALS SHALL BE NO. 57 STONE PER MSHA SPECIFICATIONS OR AN APPROVED EQUAL. SEE BEDDING DETAIL THIS SHEET.
 - 2.3 THE SELECT FILL SHALL BE AASHTO A-2-4. SEE DETAIL THIS SHEET.
- 3.0 **MATERIALS**
 - 3.1 PIPE - ALUMINIZED STEEL PIPE, TYPE 11, 12 GA. THIS PIPE AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AASHTO 3.1 SPECIFICATIONS M-214 WITH WATER-TIGHT COUPLING BANDS OR FLANGES. ANY ALUMINUM COATING DAMAGED OR OTHERWISE REMOVED SHALL BE REPLACED WITH GOLD APPLIED BITUMINOUS COATING COMPOUND.
 - 3.2 WATER-TIGHT CONNECTIONS WILL BE HUGGABAND-12" WIDE MINIMUM WITH SINGLE BAR AND STRAP CONNECTORS AND O-RING GASKETS.



TYPICAL BEDDING DETAIL

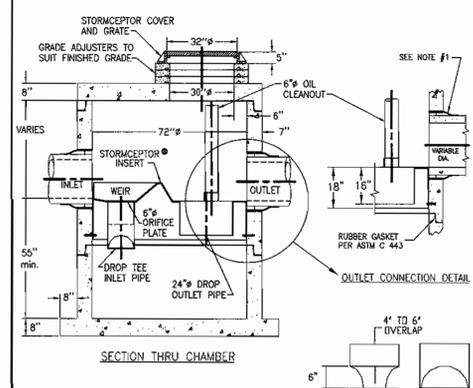
SCALE: 1"=5'
FOR LOCATION SEE PLAN

CSR Hydro Conduit
Stormceptor® Submerged Disc Detail
DWG.#



NOTE:
1. TOP OF THE 6.0" INLET DROP PIPE TO BE SET AT ELEVATION OF THE WATER LEVEL.
2. THE TOP OF THE WEIR TO BE LOCATED 8.0" ABOVE THE TOP OF 6.0" INLET DROP PIPE.
3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181.

CSR Hydro Conduit
SFC 900 Precast Concrete Stormceptor®
(900 US Gallon Capacity)
PROJECT LOCATION _____



NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. THE COVER SHOULD BE POSITIONED OVER THE OUTLET DROP PIPE AND THE OIL CLEANOUT PIPE.
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
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APPROVED PLANNING BOARD OF HOWARD COUNTY

DATE MARCH 8, 2001

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.
DIRECTOR Paul Katz 11/9/01 DATE
CHIEF, DEVELOPMENT ENGINEERING DIVISION John DeMunn 11/1/01 DATE
CHIEF, DIVISION OF LAND DEVELOPMENT Cindy Hamilton 11/5/01 DATE

DATE NO. _____ REVISION _____
DEVELOPER/OWNER:
GOLDEN PROPERTIES, LLC.
4133 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
(410) 982-0942

PROJECT
PLAY N' LEARN
LOT 23 AND LOT 24
AREA TAX MAP 30 ZONED NT-EG1 PARCEL 269 BLOCK 18
OAKLAND RIDGE INDUSTRIAL PARK
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
WATER QUALITY DETAILS, STORM DRAIN AND STORMWATER MANAGEMENT PROFILES

RIEMER MUEGGE
a division of:
Patton Harris Rust & Associates, pc
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS
8819 Centre Park Drive, Columbia, MD 21045 • tel 410.987.8800 fax 410.987.3282

DESIGNED BY: C.J.R.
DRAWN BY: K.E.V.
CHECKED BY: C.J.R.
PROJECT NO: 00223/SDF5.DWG
DATE: MARCH 16, 2001
SCALE: AS SHOWN
DRAWING NO. 5 OF 7



- MANHOLE NOTES:
1. CONCRETE CAP TO BE MIX No. 3
 2. MANHOLE RISER TO BE SAME GA. AS MAINLINE PIPE.
 3. STEPS TO BE INSTALLED IN MANHOLE PER MANUFACTURER'S SPECIFICATIONS.
 4. COMPACT TOP 1" OF SUBGRADE UNDER CONCRETE CAP 100% OF MAXIMUM DRY DENSITY (PER AASHTO T-99-G).
 5. SEE STRUCTURE SCHEDULE FOR MANHOLE LOCATIONS AND RIM ELEVATIONS SHT. 5.

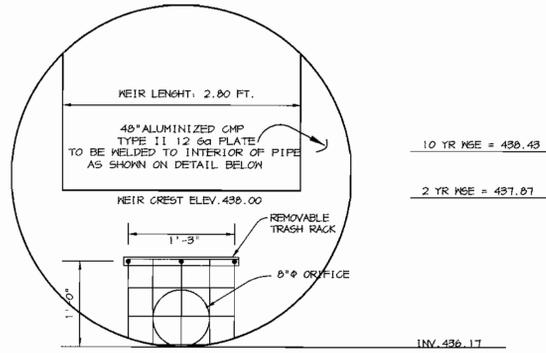
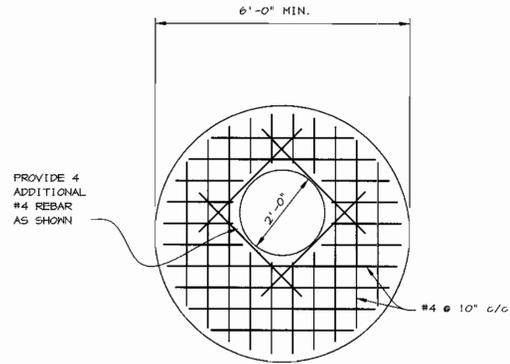
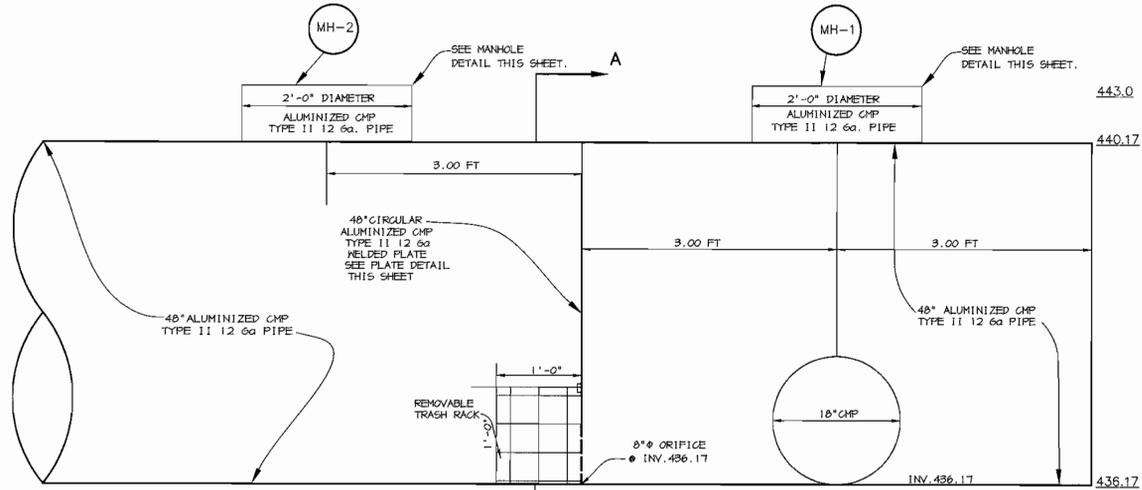


PLATE DETAIL-SECTION A-A
SCALE: 1" = 1'



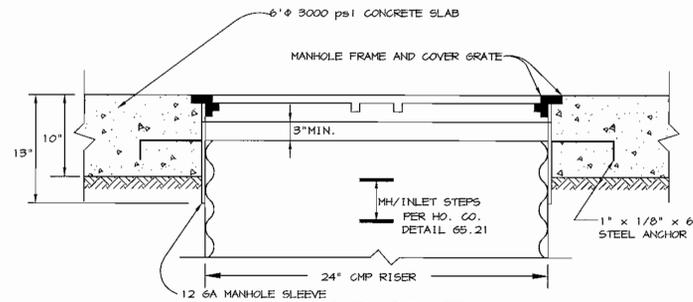
MANHOLE CONCRETE CAP
SCALE: 1" = 2'



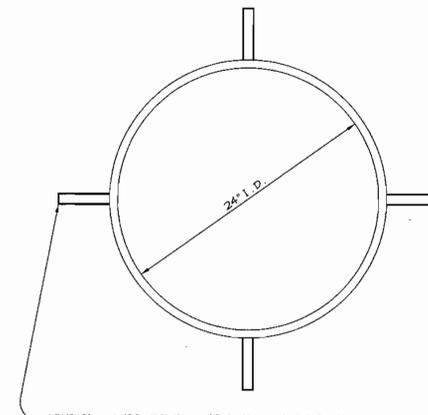
SWMF PROFILE - S-1
SCALE: 1" = 1'

- NOTES:
1. STRUCTURE S-1 TO BE DESIGNED TO MEET ROADWAY LOAD STANDARDS.
 2. ALL CONSTRUCTION SHALL MEET THE HOWARD CO. STANDARDS AND SPECIFICATIONS.
 3. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION.
 4. THE STRUCTURE FOUNDATION SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER.
 5. ALL DEBRIS SHALL BE KEPT OUT OF THE FACILITY DURING AND AFTER CONSTRUCTION.

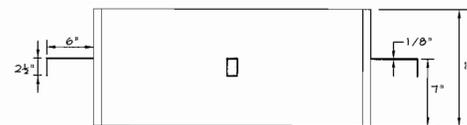
- TRASH RACK NOTES:
1. STEEL TO CONFORM TO ASTM A-36. BARS TO BE SMOOTH.
 2. #4 REBARS @ 4" O/C HORIZONTALLY AND 4" O/C VERTICALLY.
 3. ALL REBAR TO BE WELDED AT ALL INTERSECTIONS.
 4. ALL BENDS TO BE 2" RADIUS.
 5. WELD BARS TO 2" x 1/8" STEEL PLATE AND BOLT STEEL PLATE TO STRUCTURE WITH 1/2" ANCHOR BOLTS.
 6. GALVANIZE TRASH RACK AFTER FABRICATION AND PAINT WITH 2 COATS OF BATTLESHIP GRAY.



CMP RISER
MANHOLE SLEEVE DETAIL
NOT TO SCALE



MANHOLE SLEEVE
PLAN VIEW
NOT TO SCALE



MANHOLE SLEEVE
SIDE VIEW
NOT TO SCALE

*THIS SLEEVE SLIDES OVER THE OUTSIDE OF THE MANHOLE RISER AND REMOVES THE LIVE LOADS FROM THE PIPE ITSELF.

APPROVED
PLANNING BOARD
of HOWARD COUNTY

DATE: March 8, 2001

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>Joseph J. Smith</i> DIRECTOR	11/9/01 DATE
<i>Chris Drummond</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	4/1/01 DATE
<i>Carol Hamilton</i> CHIEF, DIVISION OF LAND DEVELOPMENT	11/9/01 DATE

DATE	NO.	REVISION
------	-----	----------

DEVELOPER/OWNER:
GOLDEN PROPERTIES, LLC.
4133 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
(410) 992-0992

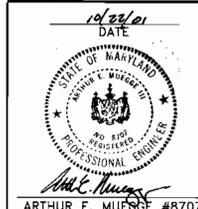
PROJECT
PLAY N' LEARN
LOT 23 AND LOT 24

AREA TAX MAP 30 ZONED NT-EC1 PARCEL 269 BLOCK 18
OAKLAND RIDGE INDUSTRIAL PARK
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

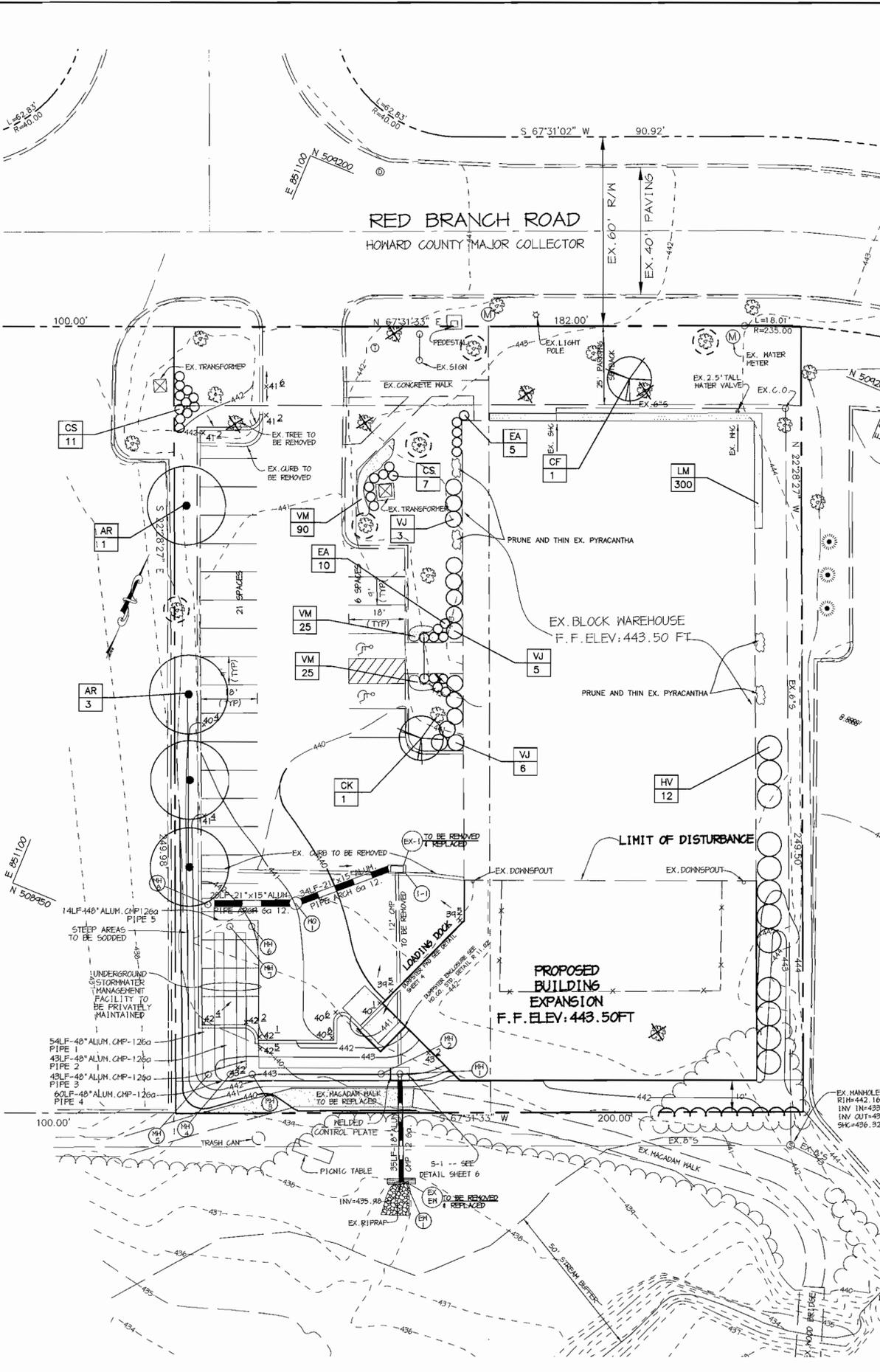
TITLE
STORMWATER MANAGEMENT DETAILS

RIEMER MUEGGE
a division of:
Patton Harris Rust & Associates, pc
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS
8818 Centre Park Drive, Columbia, MD 21045 • tel 410.997.8500 fax 410.997.8282

DATE: 10/23/01	DESIGNED BY: C.J.R.
	DRAWN BY: K.E.V.
	CHECKED BY: C.J.R.
	PROJECT NO: 00223/ SDP6.DWG
	DATE: MARCH 16, 2001
	SCALE: AS SHOWN
	DRAWING NO. 6 OF 7



ARTHUR E. MUESSE #8707



PLANTING SPECIFICATIONS

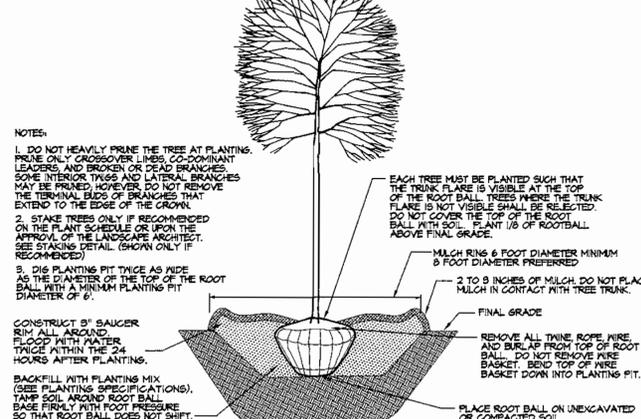
- Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein.
- All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to American Association of Nurserymen (AAN) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sunscald injuries, distortions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All B&B plants shall be freshly dug; no heated-in plants or plants from cold storage will be accepted.
- Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.
- Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.
- Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence at the drip line, see detail.
- Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within growing season of completion of site construction. Do not plant Pinus strobus or Xcupressocyparis leylandii between November 15 and March 15. Landscape plants are not to be installed before site is graded to final grade.
- Contractor to regrade, sod, hydroseed and straw mulch all areas disturbed as a result of their work.
- Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.
- Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plan take precedence. Where discrepancies on the plan exist between the symbols and the callout leader, the number of symbols take precedence.
- All shrubs and groundcover areas shall be planted in continuous planting beds, prepared as specified. (See Specification 12) Beds to be mulched with minimum 2" and maximum 3" of composted, double-shredded hardwood mulch.
- Positive drainage shall be maintained in planting beds (minimum 2 percent slope).
- Bed preparation shall be as follows: Till into a minimum depth of 6" 1 yard of Compro or Leafgro per 200 SF of planting bed, and 1 yard of topsoil per 100 SF of bed. Add 3 lbs of standard 5-10-5 fertilizer per cubic yard of planting mix and till. Ericaceous plants (Azaleas, Rhododendrons, etc.); top dress after planting with iron sulfate or comparable product according to package directions. Taxus baccata 'Repandens' (English weeping yew); Top dress after planting with 1/4 to 1/2 cup lime each.
- Planting mix: For trees not in a prepared bed, mix 50% Compro or Leafgro with 50% soil from tree hole to use as backfill; see tree planting detail.
- Need Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. For tree planting, apply a pre-emergent on top of soil and root ball before mulching. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated. Maintain the mulch need-free for a minimum of three years after planting.
- Water: All plant material planted shall be watered thoroughly the day of planting. All plant material not yet planted shall be properly protected from drying out until planted. At a minimum, water unplanted plant material daily.
- Pruning: Do not heavily prune trees and shrubs at planting. Prune only broken, dead, or diseased branches.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded, grass seed planted, and covered with straw mulch.
- This plan is intended for landscape use only. See other plan sheets for more information on grading, utilities, sediment control, layout, etc.

NOTES:

- DO NOT HEAVILY PRUNE THE SHRUB AT PLANTING. PRUNE ONLY BROKEN, DAMAGED, OR DISEASED BRANCHES.
- DIG PLANTING PIT 24" WIDER THAN THE DIAMETER OF THE ROOT BALL. THE ROOT BALL SHALL BE PLANTED WITH A MINIMUM PLANTING PIT DIAMETER OF 36".
- FOR B&B SHRUBS: REMOVE ALL TWINE ROPE AND BURLAP FROM TOP OF ROOT BALL.
- ALL CONTAINERS SHALL BE REMOVED BEFORE INSTALLATION.
- CONSTRUCT 3" SAUKER RIM AROUND PLANTING PIT. PLACE ROOT BALL ON UNGRAVATED OR COMPACTED SOIL.

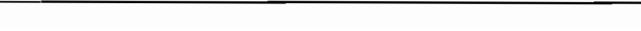
INDIVIDUAL SHRUB PLANTING DETAIL - B&B AND CONTAINER SHRUBS

NOT TO SCALE



DECIDUOUS B&B TREE PLANTING DETAIL

NOT TO SCALE



GENERAL NOTES:

- HOWARD COUNTY PLANTING REQUIREMENTS HAVE BEEN MET BY NEW TOWN ZONE ALTERNATIVE COMPLIANCE AS SPECIFIED BY OAKLAND RIDGE ASSOCIATION IN A LETTER DATED JANUARY 18, 2001.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$1,350.00. FINANCIAL SURETY FOR THIS PROJECT WAS CALCULATED BASED ON THE REQUIREMENTS IN THE HOWARD COUNTY LANDSCAPE MANUAL. 5 EVERGREEN TREES (\$150.00 EACH) AND 4 SHADE TREES (\$300.00 EACH) ARE REQUIRED ACCORDING TO THE LANDSCAPE MANUAL.
- THE TYPE B LANDSCAPE BUFFER ALONG THE ROAD FRONTAGE REQUIRES 4 SHADE TREES AND 5 EVERGREEN TREES. 1 SHADE TREE IS REQUIRED TO MEET THE PARKING LOT LANDSCAPING REQUIREMENTS, AND A TYPE A BUFFER ALONG THE REAR LOT LINE REQUIRES 3 SHADE TREES. 4 EXISTING SHADE TREES LOCATED ALONG RED BRANCH ROAD SATISFY THE SHADE TREE REQUIREMENT FOR THE TYPE B BUFFER. THE REMAINING REQUIREMENT IS 4 SHADE TREES AND 5 EVERGREEN TREES.
- THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN.
- ALL MATERIAL SHALL BE PLANTED ACCORDING TO THE LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREA AS PRODUCED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METRO WASHINGTON AND THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, MARYLAND POTOMAC CHAPTERS, OR EQUAL.
- CONTRACTOR SHALL REMOVE ALL TREES AS SHOWN ON THE LANDSCAPE PLAN.
- CONTRACTOR SHALL LIMB UP ALL OF THE EXISTING SHADE TREES AS SHOWN ON THE LANDSCAPE PLAN TO 8' FROM THE GROUND AT THE TREE TRUNK.
- CONTRACTOR SHALL PRUNE AND THIN THE EXISTING PYRACANTHA ON THE EAST AND WEST SIDES OF THE BUILDING TO ENCOURAGE GROWTH CLOSER TO THE BUILDING.

PLANT SCHEDULE					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	SPACING
AR	4	Acer rubrum 'October Glory' October Glory Red Maple	2 1/2" - 3" cal.	B&B	PLANT AS SHOWN
CF	1	Cornus florida 'Cherokee Princess' Cherokee Princess Flowering Dogwood	8' - 10' HT	B&B	PLANT AS SHOWN
CK	1	Cornus kousa 'Milky Way' Milk Way Kousa Dogwood	8'-10' HT.	B&B	PLANT AS SHOWN
CS	10	Cornus sericea 'Cardinal' Cardinal Redosier Dogwood	30" HT	Cont.	PLANT AS SHOWN
EA	15	Euonymus alata 'Compacta' Compact Burning Bush	30" HT	Cont.	PLANT AS SHOWN
HV	12	Hamamelis virginiana Common Witchhazel	36" HT	B&B	PLANT AS SHOWN
VJ	14	Viburnum x Juddii Judd Viburnum	30" HT	B&B	PLANT AS SHOWN
LM	300	Liriodendron muscari 'Big Blue' Blue Lilyturf	QT. Pots	Cont.	12" Spacing
VM	140	Vinca minor Periwinkle	QT. Pots	Cont.	12" Spacing

APPROVED
PLANNING BOARD
OF HOWARD COUNTY
DATE: MARCH 8, 2001

LEGEND

- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO BE LIMBED UP
- EXISTING SHRUBS
- PROPOSED SHADE TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED SHRUB
- PROPOSED GROUNDCOVER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Logan Smith 11/9/01
DIRECTOR DATE

Mike Dammann 11/1/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Chris Hamant 11/5/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

1/22/01 1 recalculate surety, add specs
DATE NO. REVISION

DEVELOPER/OWNER:
GOLDEN PROPERTIES, LLC.
1133 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045
(410) 912-0912

PROJECT: **PLAY N' LEARN**
LOT 23 AND LOT 24

AREA TAX MAP 30 ZONED NT-EC1 PARCEL 269 BLOCK 18
OAKLAND RIDGE INDUSTRIAL PARK
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: **LANDSCAPE PLAN**

RIEMER MUEGGE
a division of
Patton Harris Rust & Associates, pc
ENGINEERS • SURVEYORS • PLANNERS
LANDSCAPE ARCHITECTS • ENVIRONMENTAL SPECIALISTS
8818 Centre Park Drive, Columbia, MD 21045 • tel: 410.997.8900 fax: 410.997.9282

3/16/01
DATE

DESIGNED BY: PJS
DRAWN BY: PJS
CHECKED BY: DTD
PROJECT NO: 00223/
LSCP.DWG
DATE: MARCH 16, 2001
SCALE: AS SHOWN
DRAWING NO. 7 OF 7

David D. Muegge
STATE OF MARYLAND
DAVID D. MUEGGE
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
NO. 830

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 CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Paul E. Spalding 10/19/01
SIGNATURE DATE

SCALE: 1"=20'