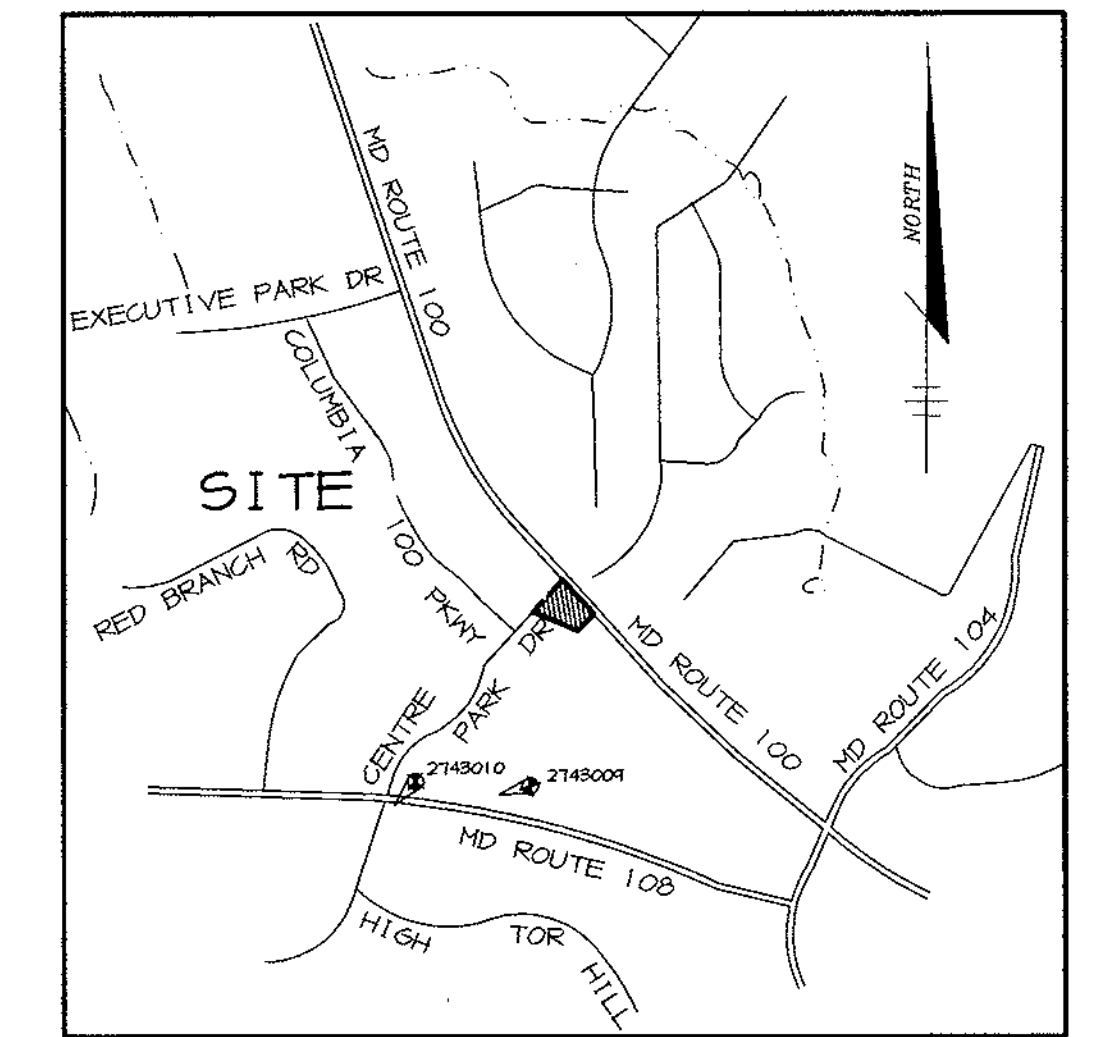


SHEET INDEX	
No.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	GRADING, SEDIMENT CONTROL & DRAINAGE AREA MAP
4	DETAILS & NOTES
5	DETAILS, NOTES & PROFILES
6	LANDSCAPE PLAN

# SITE DEVELOPMENT PLAN

## CENTRE PARK 100



VICINITY MAP  
SCALE: 1"=2000'

### 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 ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-297-7777 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 UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC. DATED FEBRUARY 1999.
- 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. 2143001 AND 2143010 WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 24-3767-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA; PATUXENT CONTRACT NO. 24-3767-D
- THE STORMWATER MANAGEMENT QUANTITY FACILITY IS EXISTING OFFSITE. DESIGNED UNDER F-87-13. WATER QUALITY IS PROVIDED VIA A PRIVATE STORMWATER INLET.
- 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.
- NO 100- YEAR FLOODPLAIN STUDY IS REQUIRED FOR THIS PROJECT.
- NO WETLANDS ARE ON-SITE.
- NO AFPO TRAFFIC STUDY FOR THIS PROJECT IS REQUIRED AS FAR RATIO IS ONLY 0.24.
- NO GEOTECHNICAL STUDY IS REQUIRED FOR THIS PROJECT.
- THE BOUNDARY FOR THIS PROJECT IS BASED ON PLAT #11832
- SUBJECT PROPERTY ZONED (POR) 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 NO'S. F-87-13, F-88-13 AND F-96-05
- 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 I 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, 1.0., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE 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 T100.
- BA-35-64V WAS GRANTED ON FEBRUARY 6, 1996 TO REDUCE 50 FOOT SETBACK TO 20 FEET. THE APPROVED VARIANCE IS NON VOID DUE TO NO ACTION ON THE SITE.
- BA-38-144V APPROVED THE NEW VARIANCE ON JUNE 9, 1999. THE REQUEST WAS A VARIANCE TO REDUCE THE REQUIRED 50 FOOT USE SETBACK FROM A RESIDENTIAL DISTRICT TO 5 FEET FOR PARKING USES (SECTION 115.D.2.b.(1)). VARIANCE TO REDUCE THE REQUIRED 30 FOOT USE SETBACK FROM PUBLIC STREET RIGHTS-OF-WAY TO 10 FEET FOR PARKING USES (SECTION 115.D.2.b.(2)).  
Decision + Order dated July 15, 1999

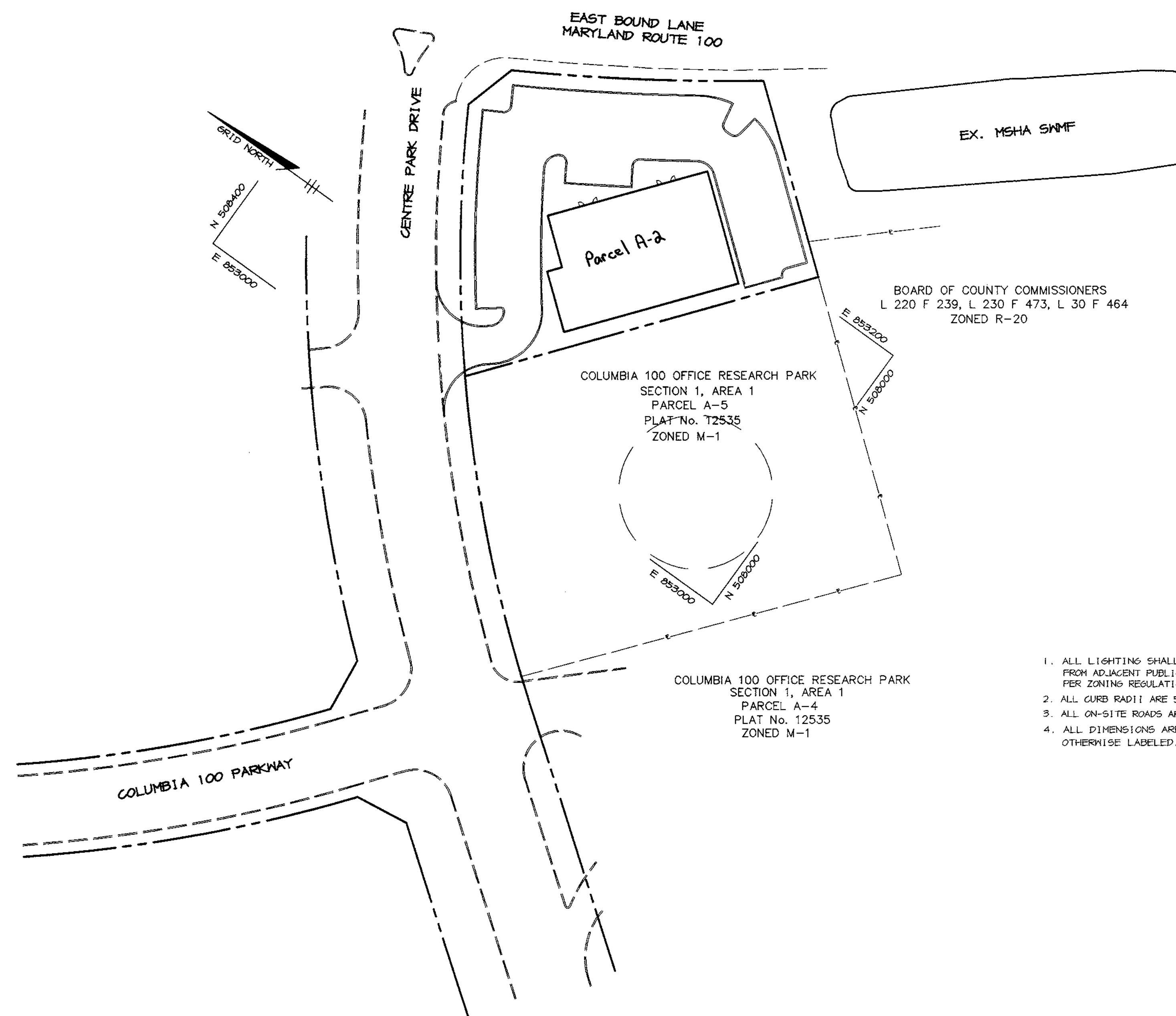
### BENCHMARKS

HO. CO. SURVEY CONTROL STATION: 2743001  
N 507,261 E 852,631

HO. CO. SURVEY CONTROL STATION: 2743010  
N 507,084 E 851,924

### SITE TABULATION

TOTAL AREA	0.799 AC. (34,805 SF)
CURRENT ZONING	POR
PROPOSED USE	OFFICE BUILDING
BUILDING FLOOR AREA	8,509 SQ. FT.
REQUIRED PARKING	3.3 SPACES PER/1000 SF* = 29 SPACES
PROPOSED PARKING	42 SPACES (INCLUDES 2 HC SPACES)
PAVED AREA	16,540 SF (48% OF SITE)
	* PER HOWARD COUNTY ZONING REGULATIONS SECTION 133



PLAN  
SCALE: 1"=50'

- ALL LIGHTINGS SHALL BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES PER ZONING REGULATIONS SECTION 134.
- ALL CURB RADIUS ARE 5' UNLESS OTHERWISE SHOWN.
- ALL ON-SITE ROADS ARE PRIVATE.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE LABELED.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>John H. Smith</i> DIRECTOR	7/15/99 DATE
<i>Chris Demme</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	7/16/99 DATE
<i>Cindy Hamilton</i> CHIEF, DIVISION OF LAND DEVELOPMENT	7/16/99 DATE

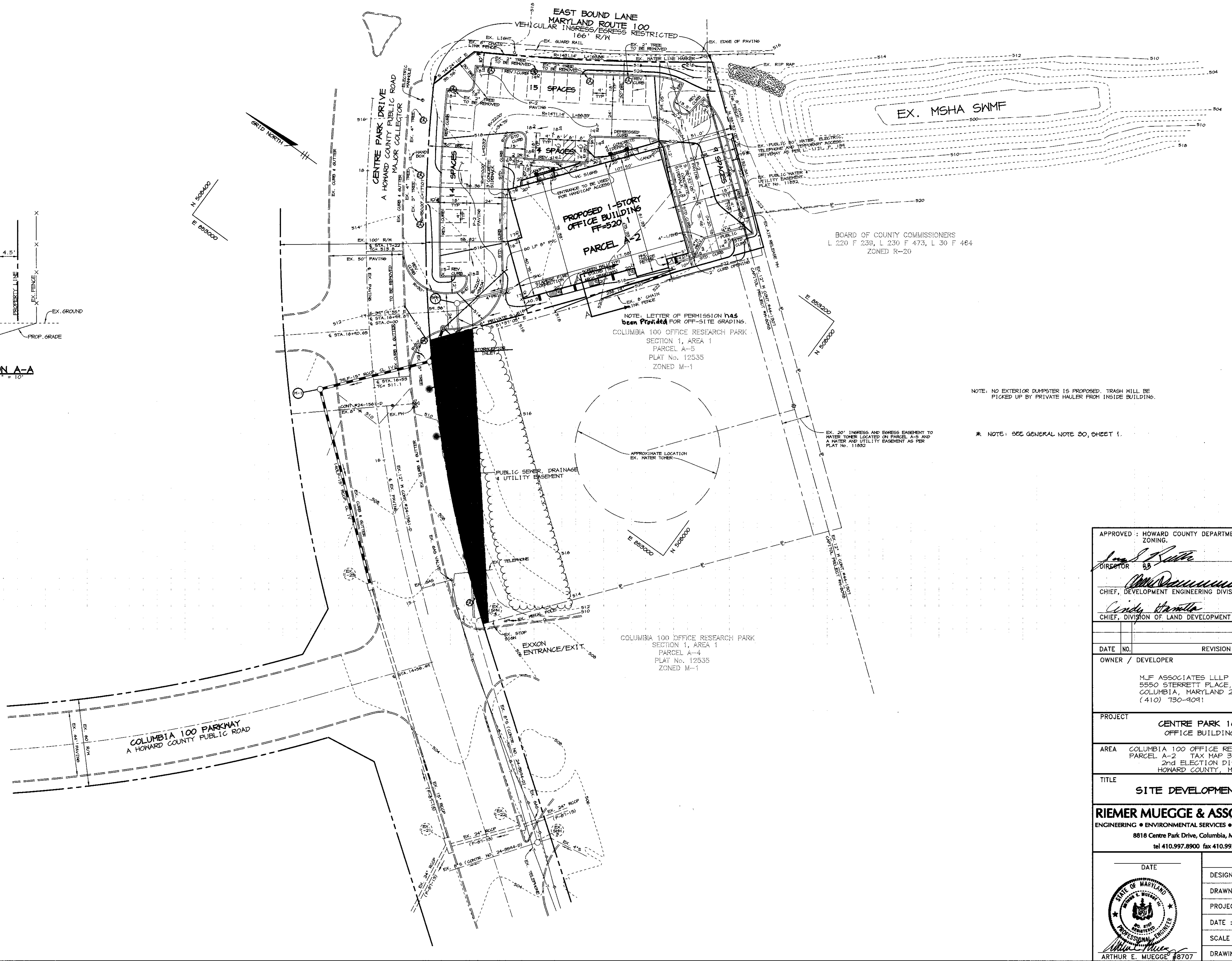
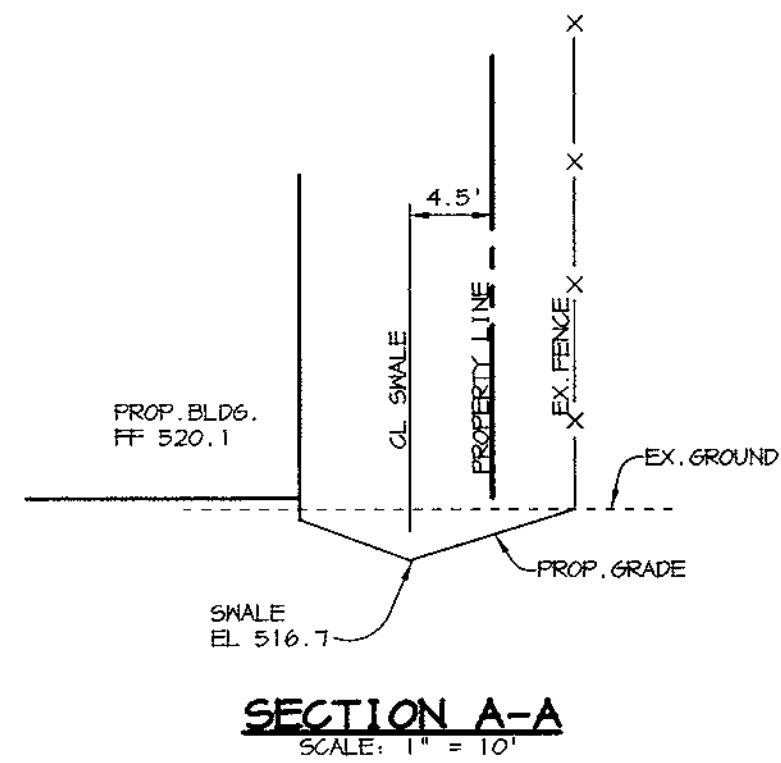
DATE	NO.	REVISION
OWNER / DEVELOPER		
MLJ ASSOCIATES LLLP 5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044 (410) 730-9091		
PROJECT		
CENTRE PARK 100 OFFICE BUILDING		
AREA		
COLUMBIA 100 OFFICE RESEARCH PARK PARCEL A-2 TAX MAP 30 ZONED POR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
TITLE SHEET		

RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

	DESIGNED BY: CJR
	DRAWN BY: MAD
	PROJECT NO. 99029 SDP1.DWG
	DATE: JUNE 23, 1999
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 6

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
A-2	8890 CENTRE PARK DRIVE
SUBDIVISION NAME: COLUMBIA 100 OFFICE RESEARCH PARK	
SECT./AREA: 1/1	PARCEL: A-2
PLAT #: 11832	BLOCK #: 23
ZONE: POR	TAX MAP NO.: 30
ELECT. DIST: 2nd	GENSUS TRACT: 6069.02
WATER CODE: 7000000	SEWER CODE: C04

BUILDING ELEVATION  
NO SCALE



NOTE: NO EXTERIOR DUMPSTER IS PROPOSED. TRASH WILL BE PICKED UP BY PRIVATE HAULER FROM INSIDE BUILDING.

\* NOTE: SEE GENERAL NOTE 20, SHEET 1.



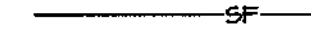


APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
<i>[Signature]</i> DIRECTOR	7/12/99 DATE
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	7/15/99 DATE
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	7/16/99 DATE
DATE NO.	REVISION
OWNER / DEVELOPER	
M.J.F. ASSOCIATES L.L.P. 5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044 (410) 730-9091	
PROJECT	
CENTRE PARK 100 OFFICE BUILDING	
AREA	
COLUMBIA 100 OFFICE RESEARCH PARK PARCEL A-2 TAX MAP 30 ZONED FOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
SITE DEVELOPMENT PLAN	
RIEMER MUEGGE & ASSOCIATES, INC. ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING 8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE	DESIGNED BY : CJR
	DRAWN BY: MAD
	PROJECT NO : 99029 SDP2.DWG
	DATE : JUNE 23, 1999
	SCALE : 1" = 30'
ARTHUR E. MUEGGE #8707	DRAWING NO. 2 OF 6

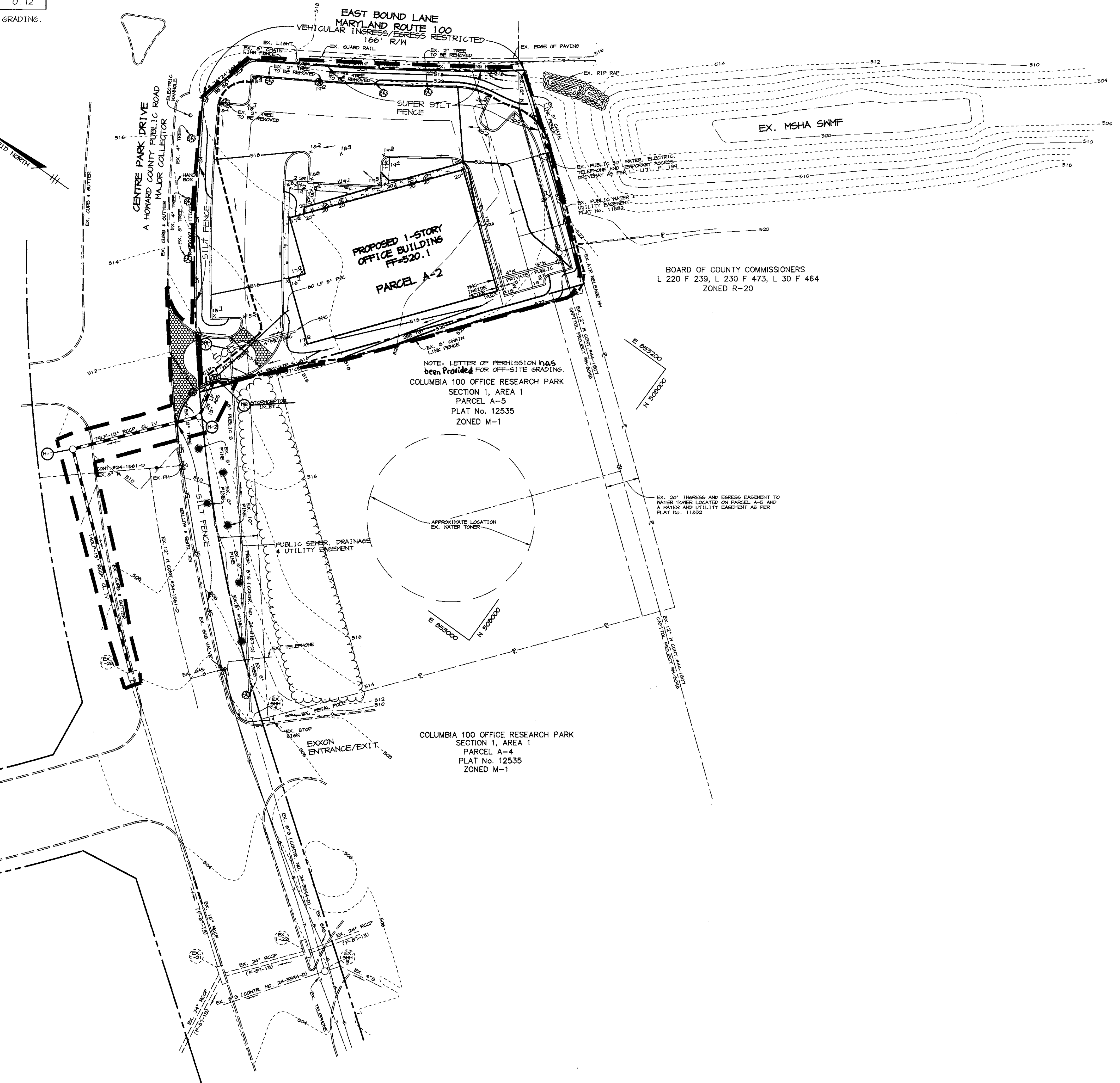
# DRAINAGE CHART

INLET	DRAINAGE AREA (AC)	%IMP	'C'
MG-1	0.65	80%	0.72

NOTE: ALL ON-SITE SOILS ARE ASSUMED TYPE "C" DUE TO MASS GRADING.

## LEGEND

-  LIMIT OF DISTURBANCE
-  DRAINAGE AREA DIVIDE
-  SILT FENCE
-  SUPER SILT FENCE
-  STABILIZED CONSTRUCTION ENTRANCE



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.

*Christine A. Richards* 6-28-99  
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.

*Arthur E. Muegge* 6-22-99  
ENGINEER DATE

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

*Deborah Simmons* 7/7/99  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John P. Robertson* 7/7/99  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Frank Smith* 7/19/99  
DIRECTOR DATE

*William D. ...* 7/6/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Linda Hamilton* 7/16/99  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER / DEVELOPER


MJF ASSOCIATES LLLP  
5550 STERRETT PLACE, SUITE 312  
COLUMBIA, MARYLAND 21044  
(410) 730-9091

PROJECT: CENTRE PARK 100 OFFICE BUILDING

AREA: COLUMBIA 100 OFFICE RESEARCH PARK PARCEL A-2 TAX MAP 30 ZONED FOR 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: GRADING, SEDIMENT CONTROL & DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

	DATE	DESIGNED BY : CJR
		DRAWN BY: MAD
		PROJECT NO : 99029 / SDP3.DWG
		DATE : JUNE 23, 1999
		SCALE : 1" = 30'
		DRAWING NO. 3 OF 6

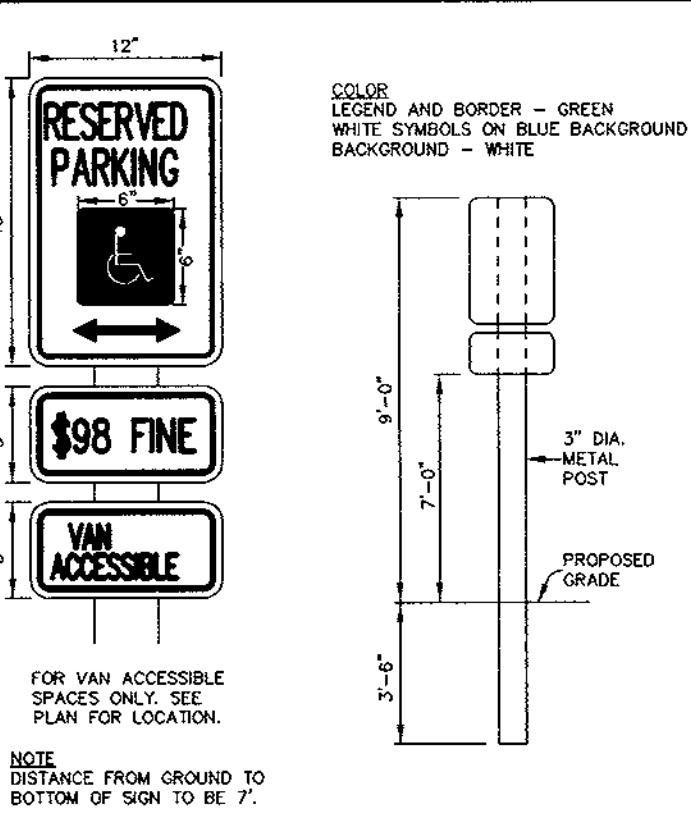
**SEDIMENT CONTROL NOTES**

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS 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 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERETO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO 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 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SO2 (SEC. 54), TEMPORARY SEEDING (SEC. 52) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

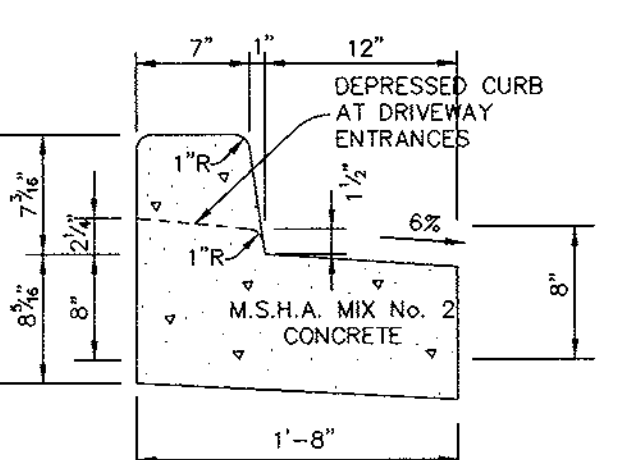
TOTAL AREA OF SITE	0.80 ACRES
AREA DISTURBED	0.98 ACRES
AREA TO BE ROOFED OR PAVED	0.82 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.36 ACRES
TOTAL CUT	1056 CU.YDS.
TOTAL FILL	892 CU.YDS.

**21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL**

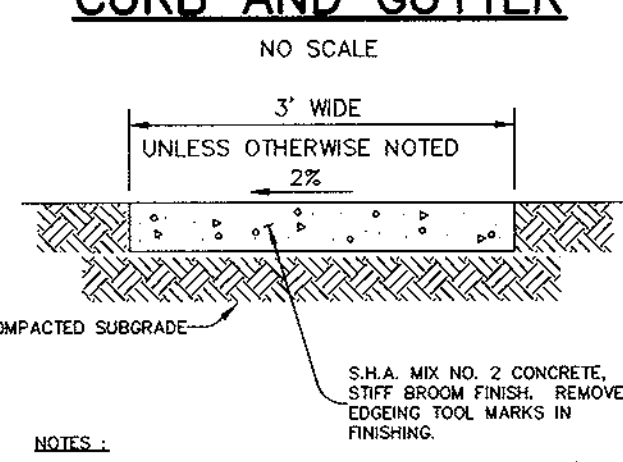
- Definition**  
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
- Purpose**  
To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable 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 continuing 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 profiles section in the soil survey published by USDA-SSS 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.
    - 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 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.
          - Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
            - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for site having disturbed areas under 5 acres shall conform to the following requirements:
              - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
              - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
              - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
              - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.



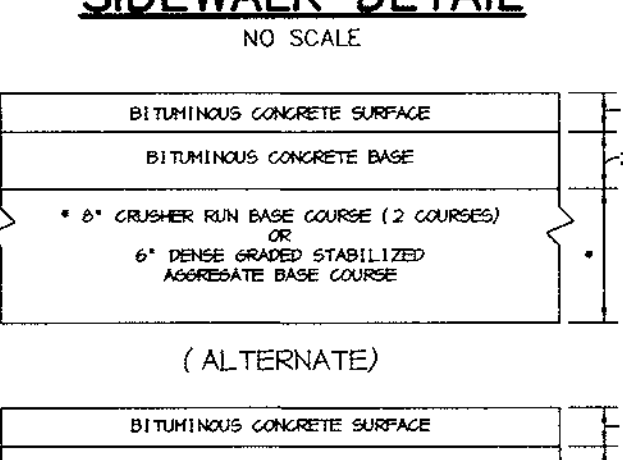
**HANDICAP SIGN DETAIL**  
NO SCALE



**REVERSE 7" COMBINATION CURB AND GUTTER**  
NO SCALE



**SIDEWALK DETAIL**  
NO SCALE



**P-2 PAVING**  
NO SCALE

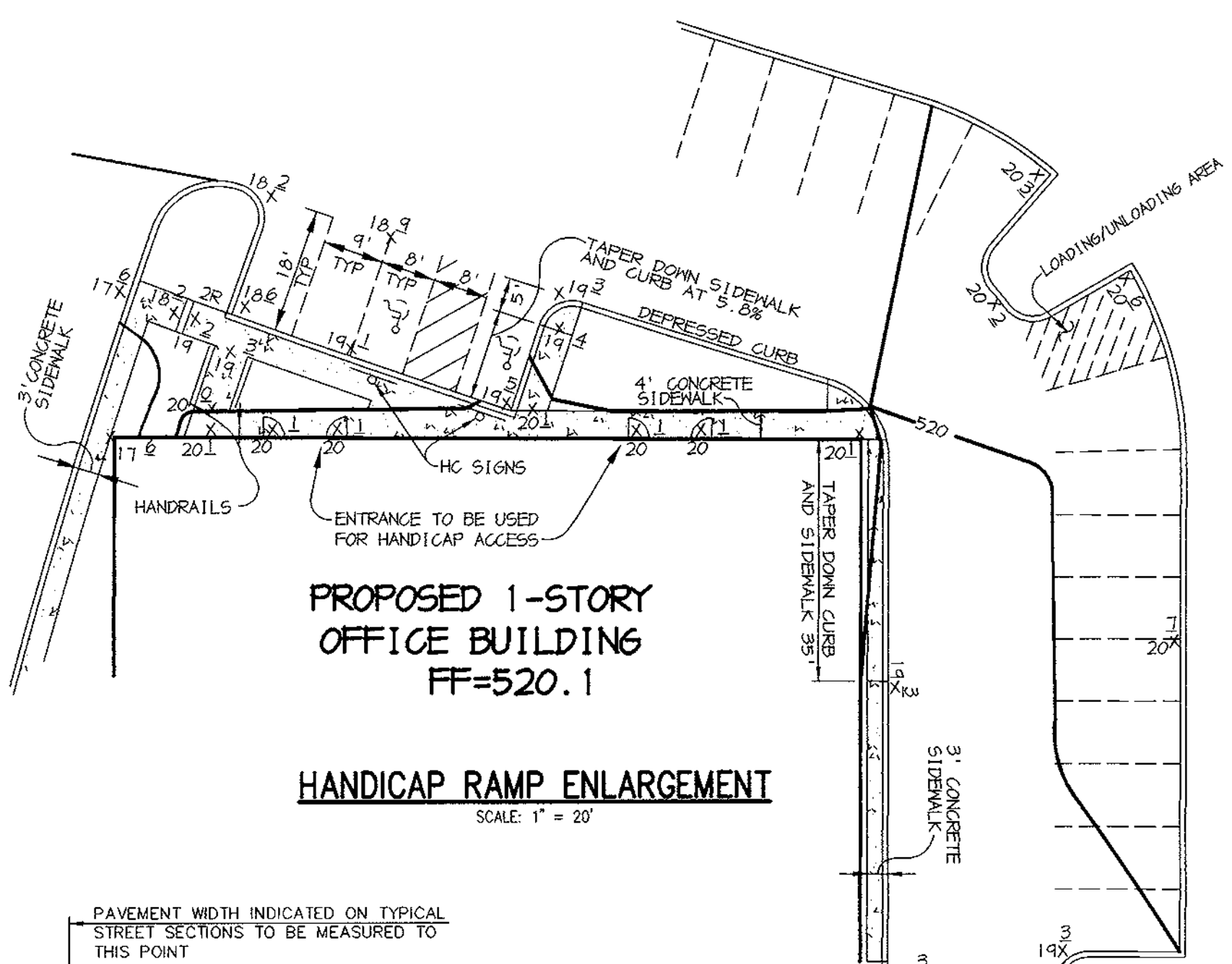
**SEQUENCE OF CONSTRUCTION**

- OBTAIN GRADING PERMIT FOR SITE PLAN.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCES AND SILT FENCE. (1 DAY)
- ROUGH GRADE SITE AND BEGIN BUILDING CONSTRUCTION. (4 DAYS)
- AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL STORM DRAINS, WATER AND SEWER. PROVIDE INLET PROTECTION.
- INSTALL CURB AND GUTTER, THEN PAVE. (1 WEEK)
- FINE GRADE SITE. (2 DAYS)
- STABILIZE DISTURBED AREAS AS NECESSARY AND COMPLETE REMAINING CONSTRUCTION. (4 WEEKS)
- INSTALL LANDSCAPING AND COMPLETE BUILDING CONSTRUCTION.
- UPON APPROVAL OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, REMOVE TEMPORARY SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 DAYS)

**STRUCTURE SCHEDULE**

STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	TOP	REMARKS
HD-1	NO STRUCTURE	N 500,219.02 E 899,097.61	504.11	504.13	512.00	HYDRO CONDUIT 510' 450' PRECAST CONCRETE STORMSECTOR 1/4' REINFORC R-2424-30 SERIES 2' x 4' SQUARE FRAME & GRATE
H-1	4'-0" HANDBOLE	N 500,250.34 E 892,454.07	500.07	509.97	511.0	HOGO STD. DETAIL 6.5.12
H-2	4'-0" HANDBOLE	N 500,200.60 E 899,019.88	507.94	507.44	512.0	HOGO STD. DETAIL 6.5.12
SH-1	4'-0" HANDBOLE	N 500,217.00 E 899,097.54	507.85	507.52	513.75 9.44	HOGO STD. DETAIL 6.5.12

NOTE: \* LOCATION OF NO FACILITY INLETS IS AT CENTER OF TOP CURB LOCATION OF HANDBOLES IS AT CENTER OF TOP COVER.



**PROPOSED 1-STORY OFFICE BUILDING**  
FF=520.1

**HANDICAP RAMP ENLARGEMENT**  
SCALE: 1" = 20'

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.

*Christine A. Richards* 6-28-99  
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.

*Michael Muegge* 6-22-99  
ENGINEER DATE

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

*Deeyl Simmons* 7/1/99  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John P. Roberts* 7/1/99  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Paul S. Smith* 7/19/99  
DIRECTOR DATE

*Michael Muegge* 7/1/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Cindy Swanton* 7/1/99  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO.	REVISION

OWNER / DEVELOPER  
MUEGGES ASSOCIATES L.L.P.  
5550 STERRETT PLACE, SUITE 312  
COLUMBIA, MARYLAND 21044  
(410) 730-9041

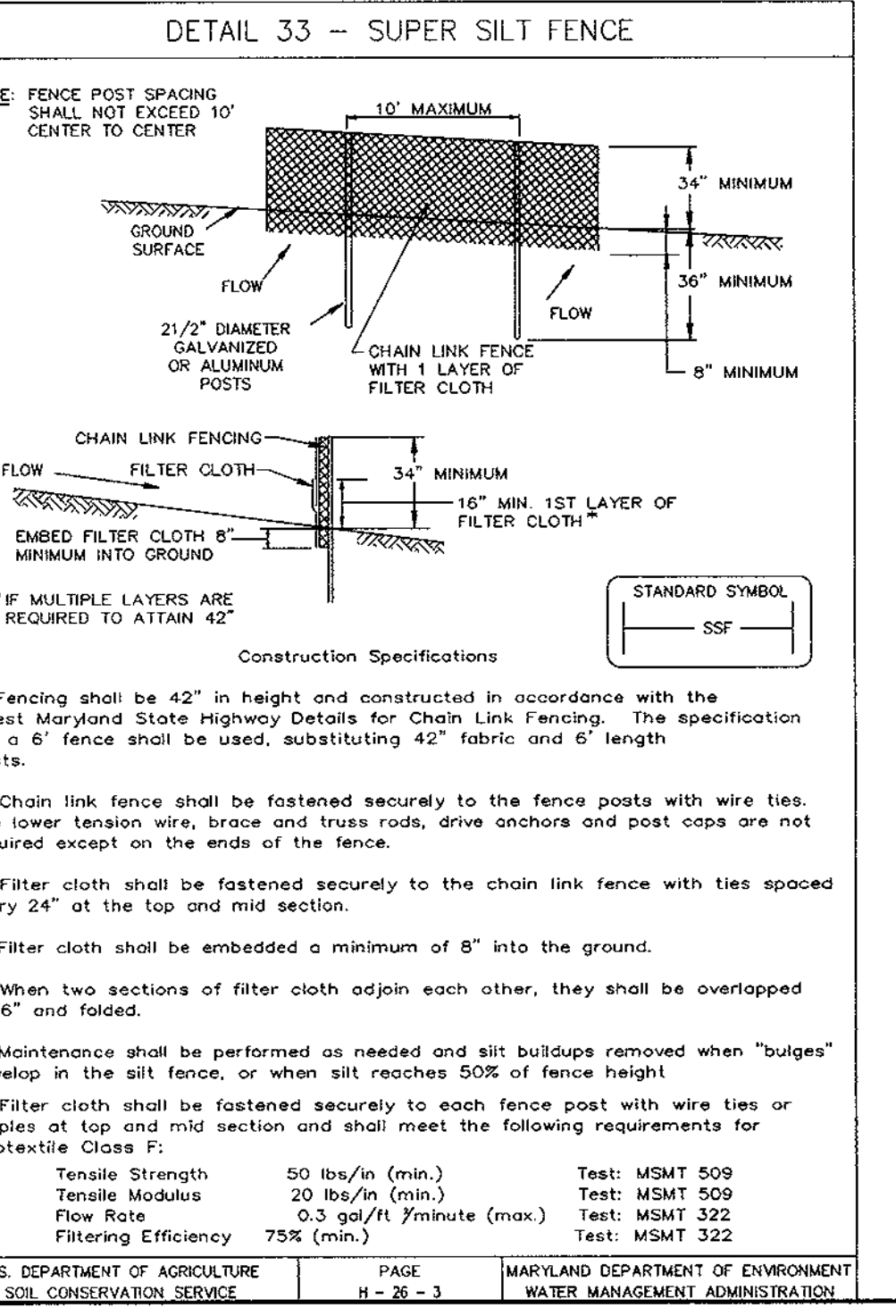
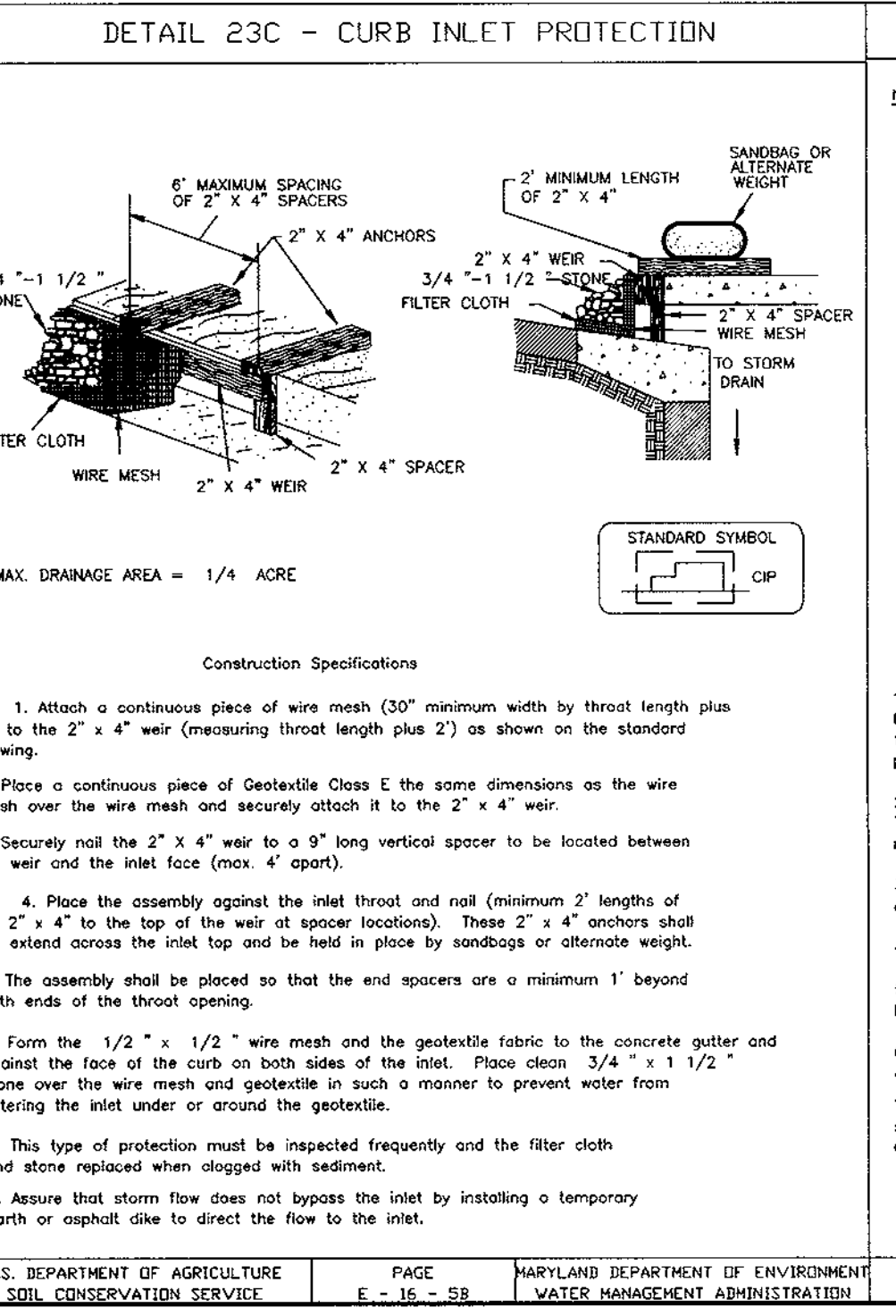
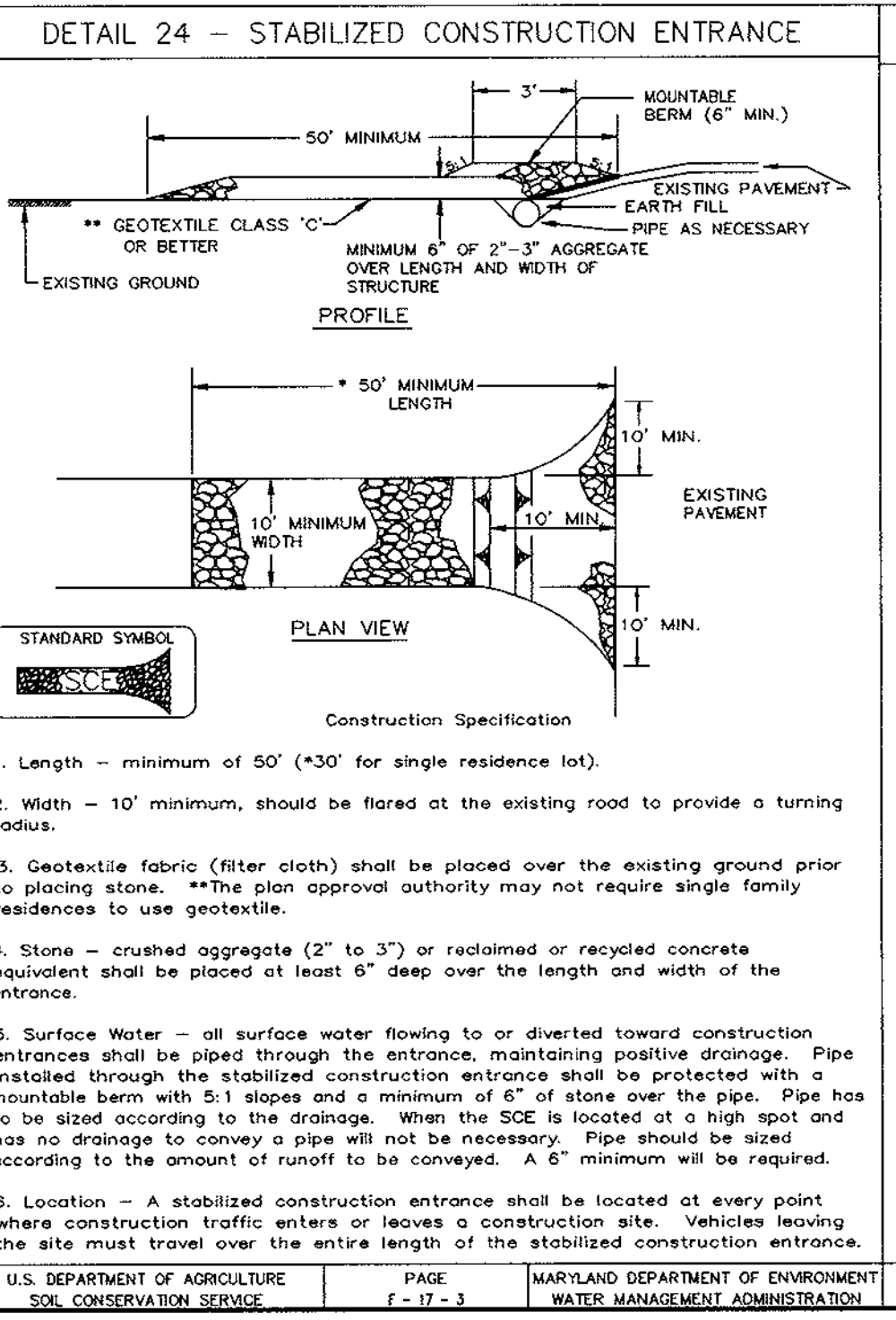
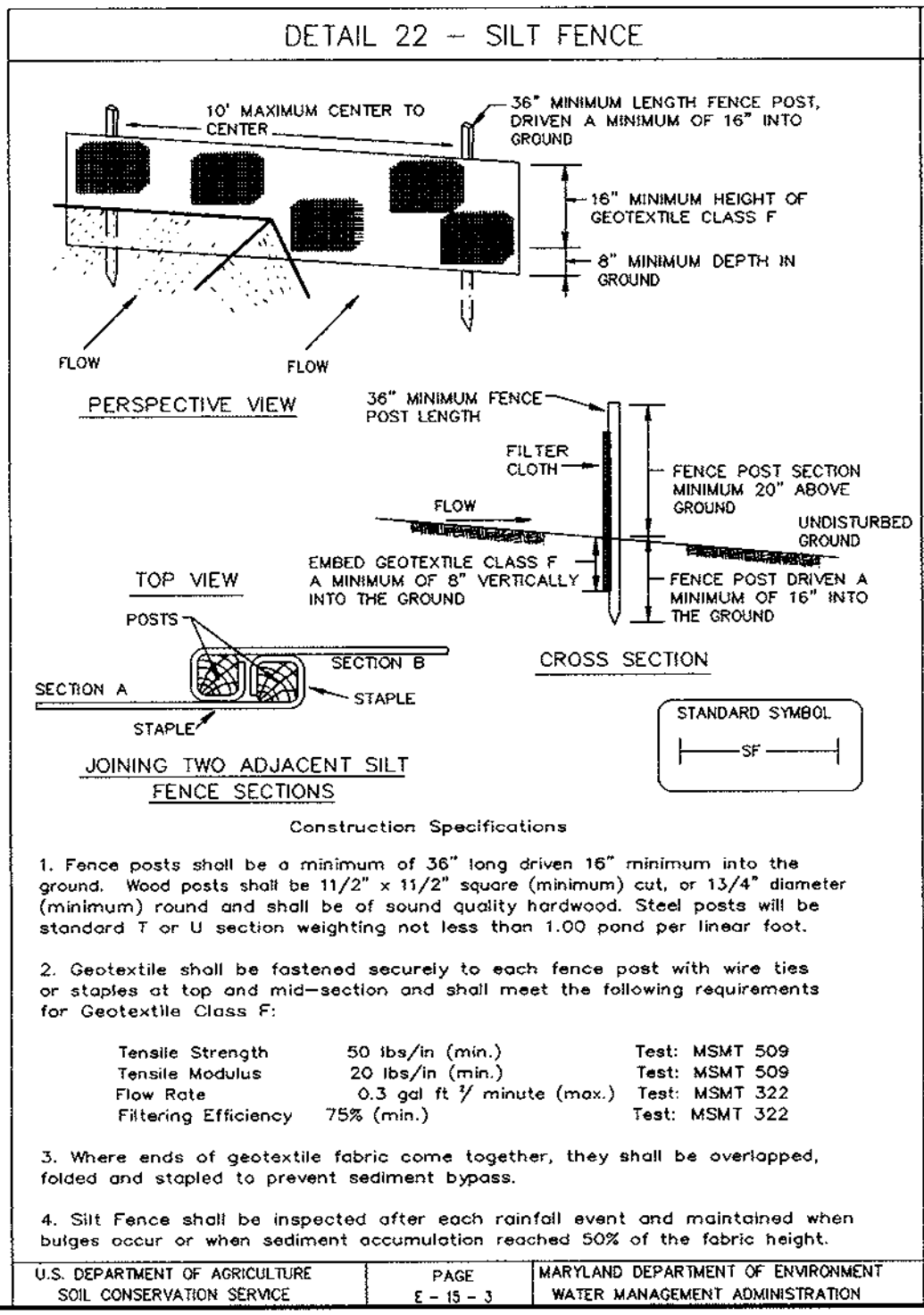
PROJECT  
CENTRE PARK 100  
OFFICE BUILDING

AREA  
COLUMBIA 100 OFFICE RESEARCH PARK  
PARCEL A-2 TAX MAP 30 ZONED FOR  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**DETAILS & NOTES**

RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

DATE: \_\_\_\_\_  
DESIGNED BY: CJR  
DRAWN BY: MAD  
PROJECT NO: 99029  
SDP4.DWG  
DATE: JUNE 23, 1999  
SCALE: AS SHOWN  
DRAWING NO. 4 OF 6

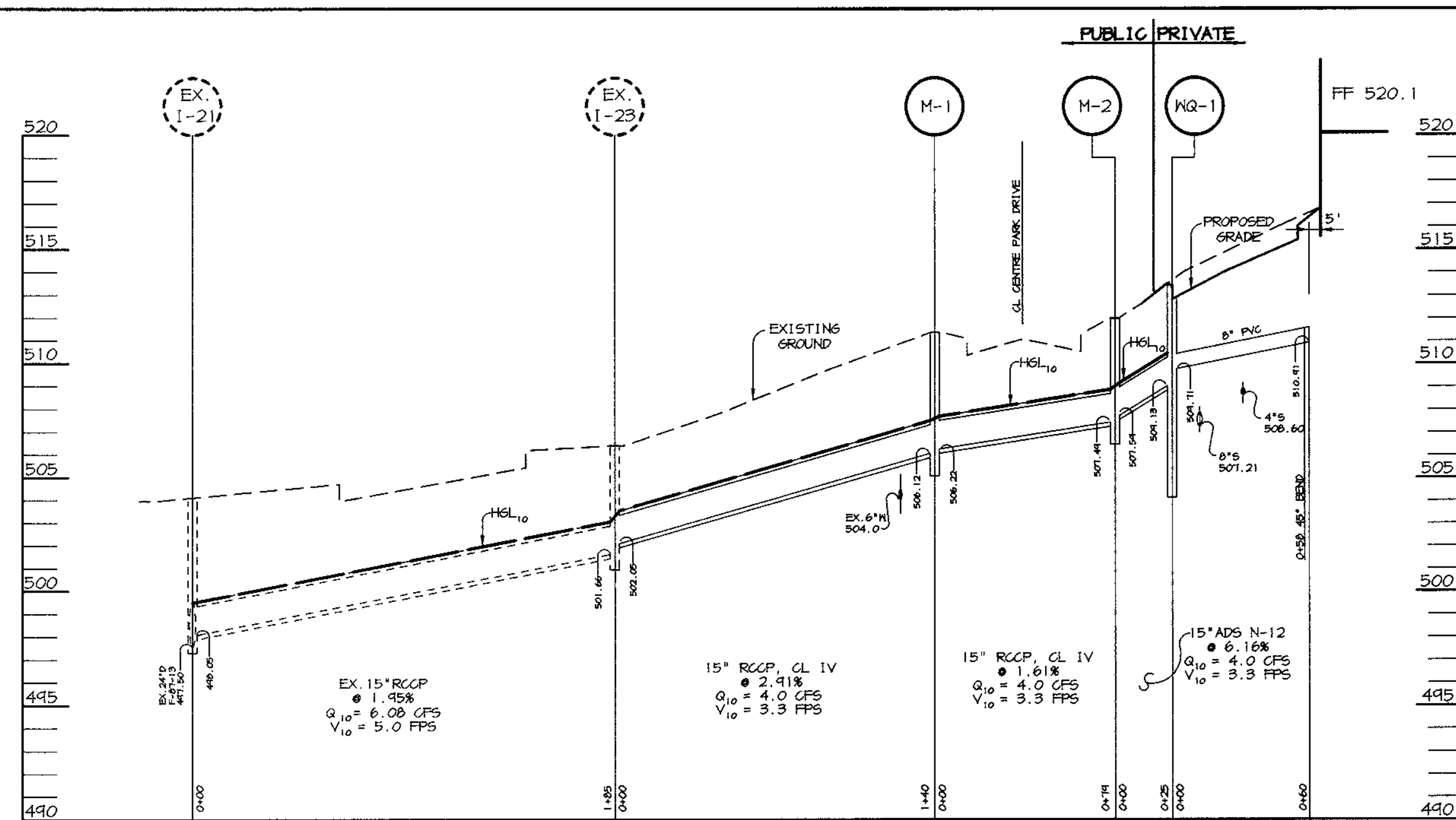


**TEMPORARY SEEDING NOTES**

- Apply to graded or cleared areas likely to be redistributed over a short-term vegetative cover is needed.
- Seeding Preparation** - Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
- Soil Amendments** - Apply 500 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 (3.2 lbs. per 1000 sq.ft.). For the period May 1 thru August 15, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
- Mulching** - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 5 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.
- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

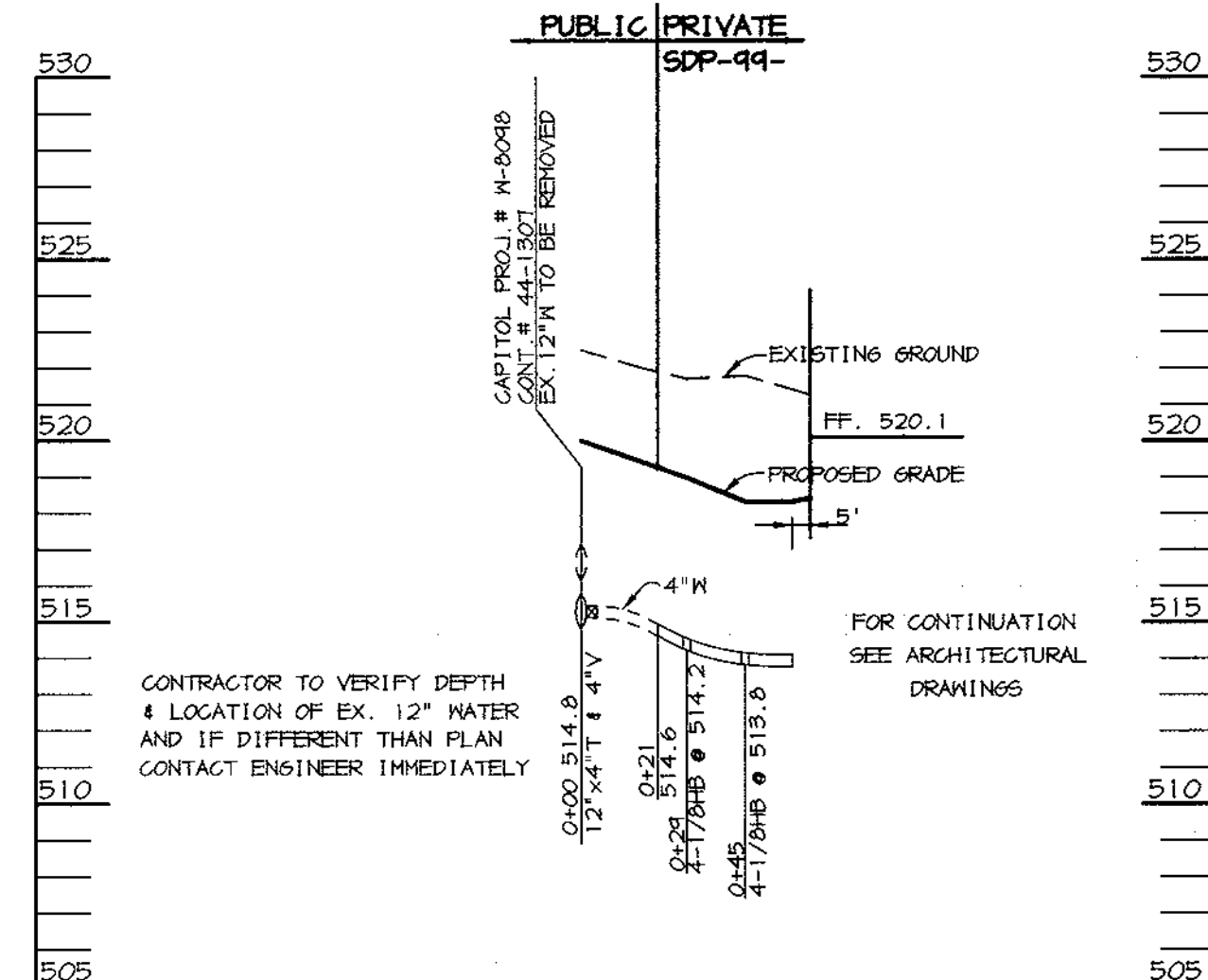
**PERMANENT SEEDING NOTES**

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeding Preparation** - Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
- Soil Amendments** - In lieu of soil test recommendations, use one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 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 (9 lbs. per 1000 sq.ft.).
  - Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 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 (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. 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.
- Mulching** - Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flat areas. On slopes, 5 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.
- Maintenance** - Inspect all seeded areas and make needed repairs, replacements and reseeding.



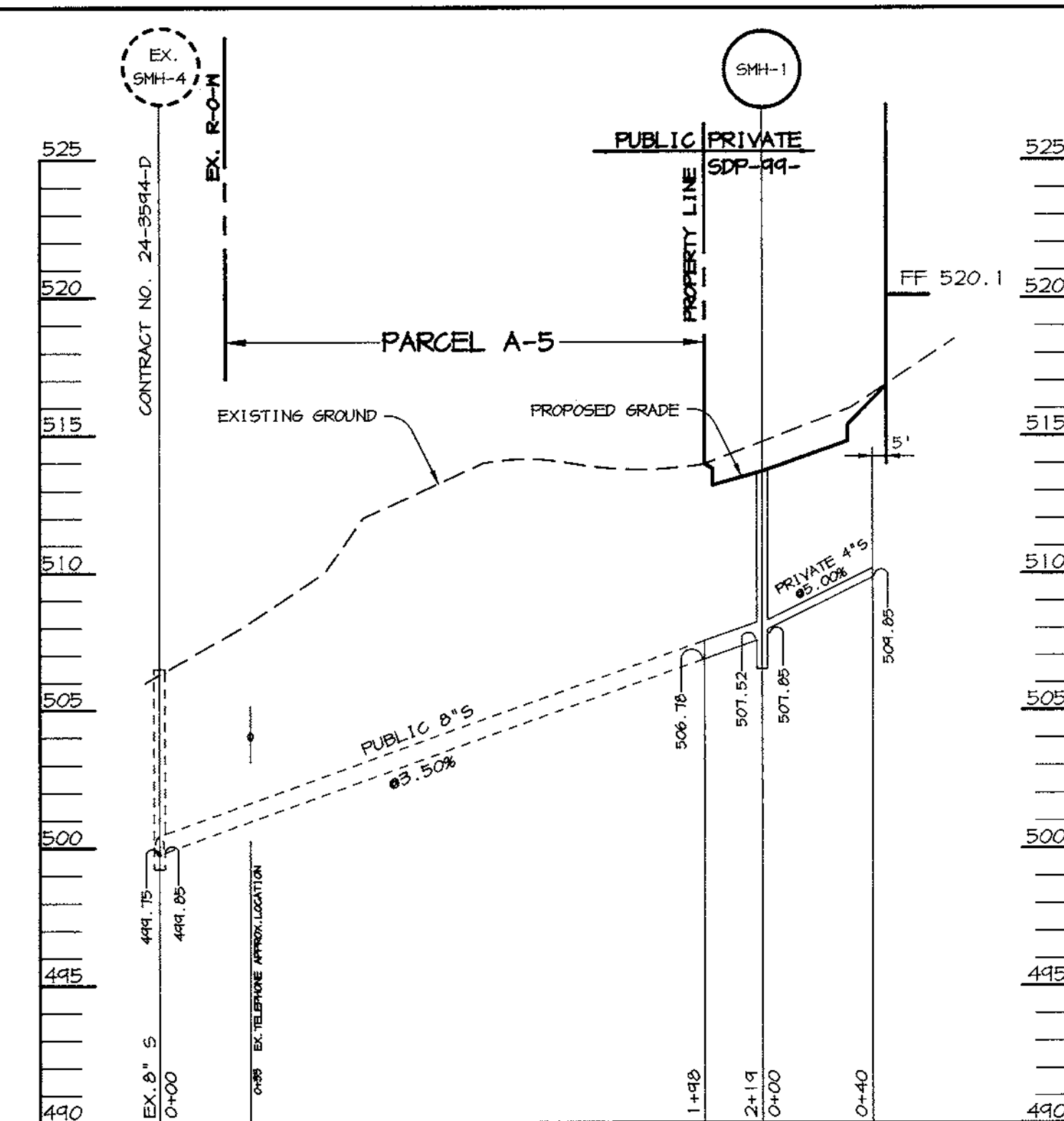
**CENTRE PARK DRIVE  
STORM DRAIN PROFILE**

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



**WATER PROFILE**

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



**SEWER PROFILE**

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

- CONTRACTOR INSTALLATION PROCEDURE FOR INLET STORMCEPTOR (STC4501)**
- 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.
  - 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.
  - SECURE INSPECTOR APPROVAL OF SUBGRADE AND SUBBASE.
  - 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).
  - INSTALL BYPASS CHAMBER OF INLET STORMCEPTOR WITH FACTORY INSTALLED INSERT. LIFT BYPASS SECTION, LUBRICATE BELL, AND INSTALL WHITE 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.
  - 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.
  - INSTALL INLET DOWN PIPE WITH HANDLE AND 4" VENT PIPE ACCORDING TO INSTALLATION INSTRUCTIONS FOR INLET STORMCEPTOR MODEL STC4501.
  - INSTALL RISER SECTION. ALIGN STEPS ABOVE INLET (12") DOWN PIPE. NOTE, FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED.
  - INSTALL FLATTOP WITH OPENING FOR STORMCEPTOR FRAME AND GRATE ORIENTED ABOVE THE STORMCEPTOR 12" INLET DOWN PIPE.
  - BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8" LIFTS. BACKFILL SHOULD BE COMPACTED TO LOCAL/STATE REQUIREMENTS.
  - INSTALL AND SET GRADE ADJUSTING RINGS, AS NEEDED.
  - INSTALL AND SET FRAME AND GRATE.
  - THE STORMCEPTOR SHOULD BE PUMPED OUT WHEN SEDIMENT CONTROL MEASURES ARE REMOVED (SITE PERMANENTLY STABILIZED).
  - FINAL INSPECTION.

FOR TECHNICAL INFORMATION CALL CSR HYDRO CONDUIT AT (703)971-1900 OR STORMCEPTOR CORPORATION AT 1-800-762-4703

**OPERATION AND MAINTENANCE SCHEDULE FOR INLET STORMCEPTOR STC4501**

- THE INLET 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 FLEXIGLAS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN SEDIMENT DEPTHS EXCEED SIX (6) INCHES, CLEANING OF THE UNIT IS REQUIRED.
- INLET AND OUTLET PIPES MUST BE CHECKED FOR ANY OBSTRUCTIONS AND IF ANY OBSTRUCTIONS ARE FOUND, THEY MUST BE REMOVED.
- THE INLET STORMCEPTOR MUST BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. CONTACT APPROPRIATE REGULATORY AGENCIES.
- 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.
- OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO MUNICIPALITY OFFICIALS UPON REQUEST.

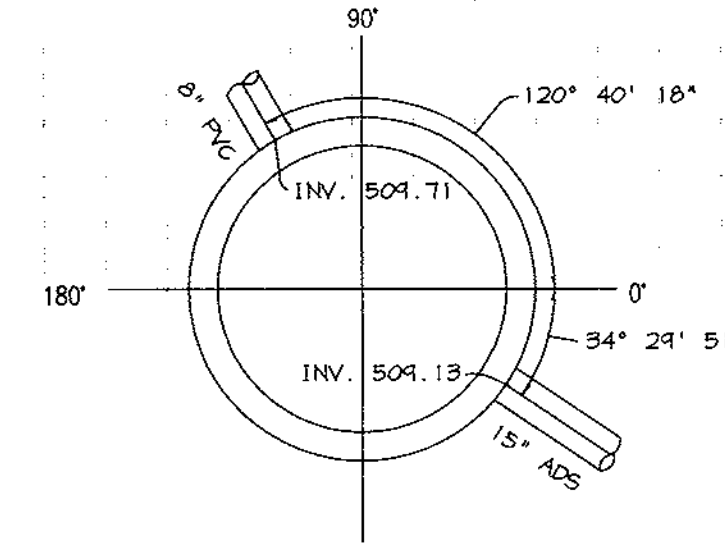
**Precast Concrete Order Request Form**

**CONTRACTOR INFORMATION**

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_  
 Zip Code \_\_\_\_\_  
 Contact \_\_\_\_\_  
 Phone \_\_\_\_\_  
 Fax \_\_\_\_\_

**OWNER INFORMATION**

Name M.F. ASSOCIATES LLLP  
 Phone (410) 730-9091  
 Fax \_\_\_\_\_



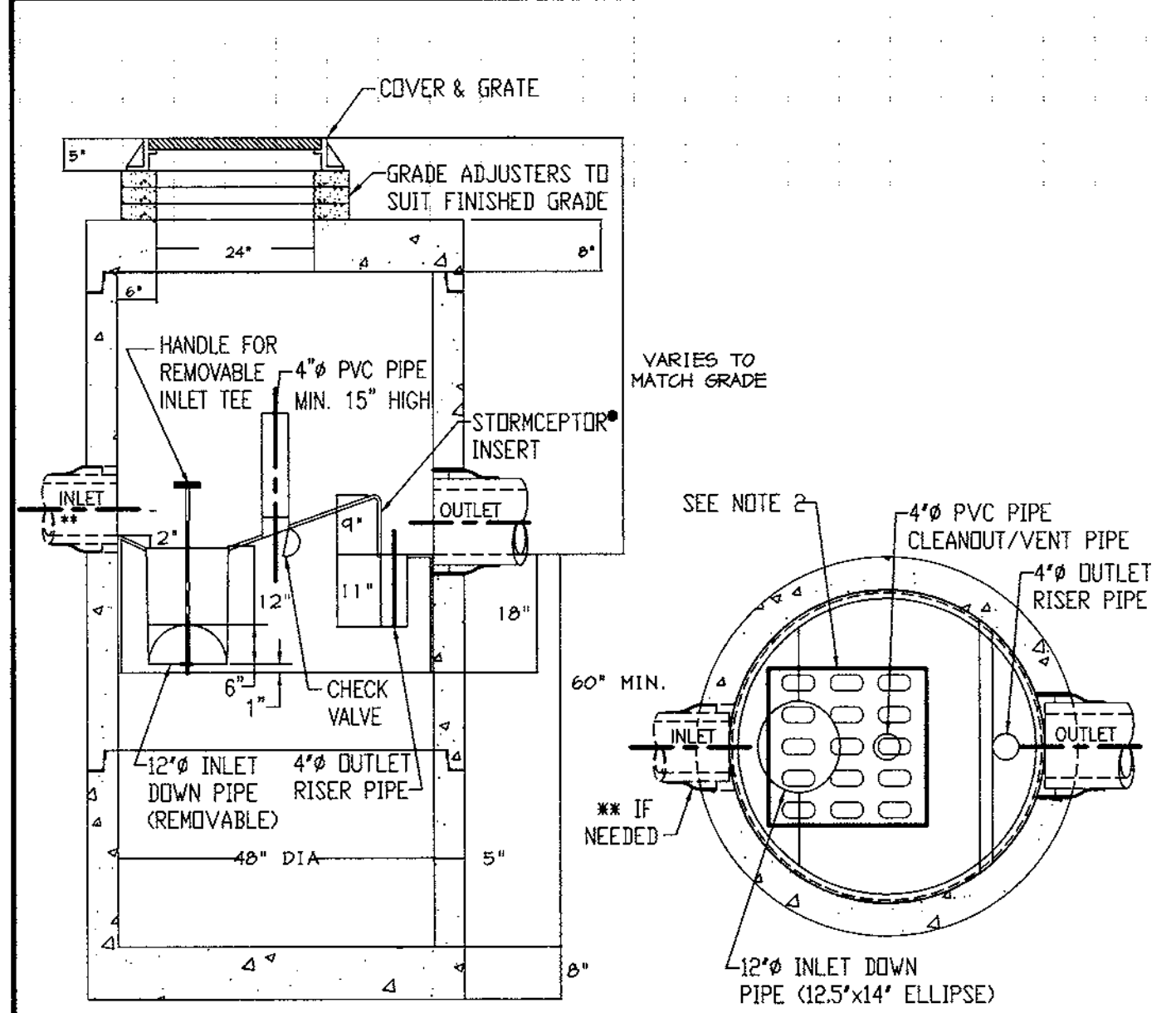
Please draw orientation of inlet and outlet pipes on diagram along with the pipe inside diameter (in), and invert elevation (ft). Clearly mark inlet pipes with an "I" and outlet pipes with an "O". Please provide the inlet/outlet pipe angle in degrees.

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT

Stormceptor Model	Insert Size
450i <input checked="" type="checkbox"/>	450i <input checked="" type="checkbox"/>
900 <input type="checkbox"/>	3600 <input type="checkbox"/>
1200 <input type="checkbox"/>	4800 <input type="checkbox"/>
1800 <input type="checkbox"/>	6000 <input type="checkbox"/>
2400 <input type="checkbox"/>	7200 <input type="checkbox"/>

Project Name COLUMBIA 100, PARCEL A-2  
 Approximate time frame of delivery (weeks) \_\_\_\_\_  
 Delivery Address: Street \_\_\_\_\_  
 City: COLUMBIA State: MARYLAND Zip Code 21228  
 Designer Company RIEMER MUEGGE AND ASSOCIATES, INC.  
 Designer Contact CHRIS REID Phone (410) 997-8400 Fax \_\_\_\_\_

**Hydro Conduit**  
 STC 4501 Precast Concrete Stormceptor®  
 (450 US Gallon Capacity)  
 PROJECT LOCATION \_\_\_\_\_



**SECTION THRU CHAMBER SECTION THRU PLAN VIEW**

- NOTE:
- THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
  - THE GRATE OPENING SHOULD BE POSITIONED OVER THE CLEANOUT/VENT PIPE.
  - THIS IS A GENERAL ARRANGEMENT DRAWING CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.

REV.	DESCRIPTION	BY	DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*John S. Smith* 7/14/99  
 DIRECTOR DATE

*Mike Damann* 7/14/99  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Cindy Harter* 7/14/99  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO. \_\_\_\_\_ REVISION \_\_\_\_\_

OWNER / DEVELOPER  
 M.F. ASSOCIATES LLLP  
 5550 STERRETT PLACE, SUITE 312  
 COLUMBIA, MARYLAND 21044  
 (410) 730-9091

PROJECT  
 CENTRE PARK 100  
 OFFICE BUILDING

AREA  
 COLUMBIA 100 OFFICE RESEARCH PARK  
 PARCEL A-2 TAX MAP 30 ZONED FOR  
 2nd ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

TITLE  
**DETAILS, NOTES & PROFILES**

**RIEMER MUEGGE & ASSOCIATES, INC.**  
 ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
 8818 Centre Park Drive, Columbia, Maryland 21045  
 tel 410.997.8900 fax 410.997.9282

DESIGNED BY: CJR  
 DRAWN BY: MAD  
 PROJECT NO: 99029\SDPS.DWG  
 DATE: JUNE 23, 1999  
 SCALE: AS SHOWN  
 DRAWING NO. 5 OF 6

*Arthur E. Muegge*  
 ARTHUR E. MUEGGE #8707  
 PROFESSIONAL ENGINEER

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR** Hydro Conduit  
 ATTN: DAN FALLON FAX: (703)922-3659. PHONE: (703)313-6389  
 FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)313-6399

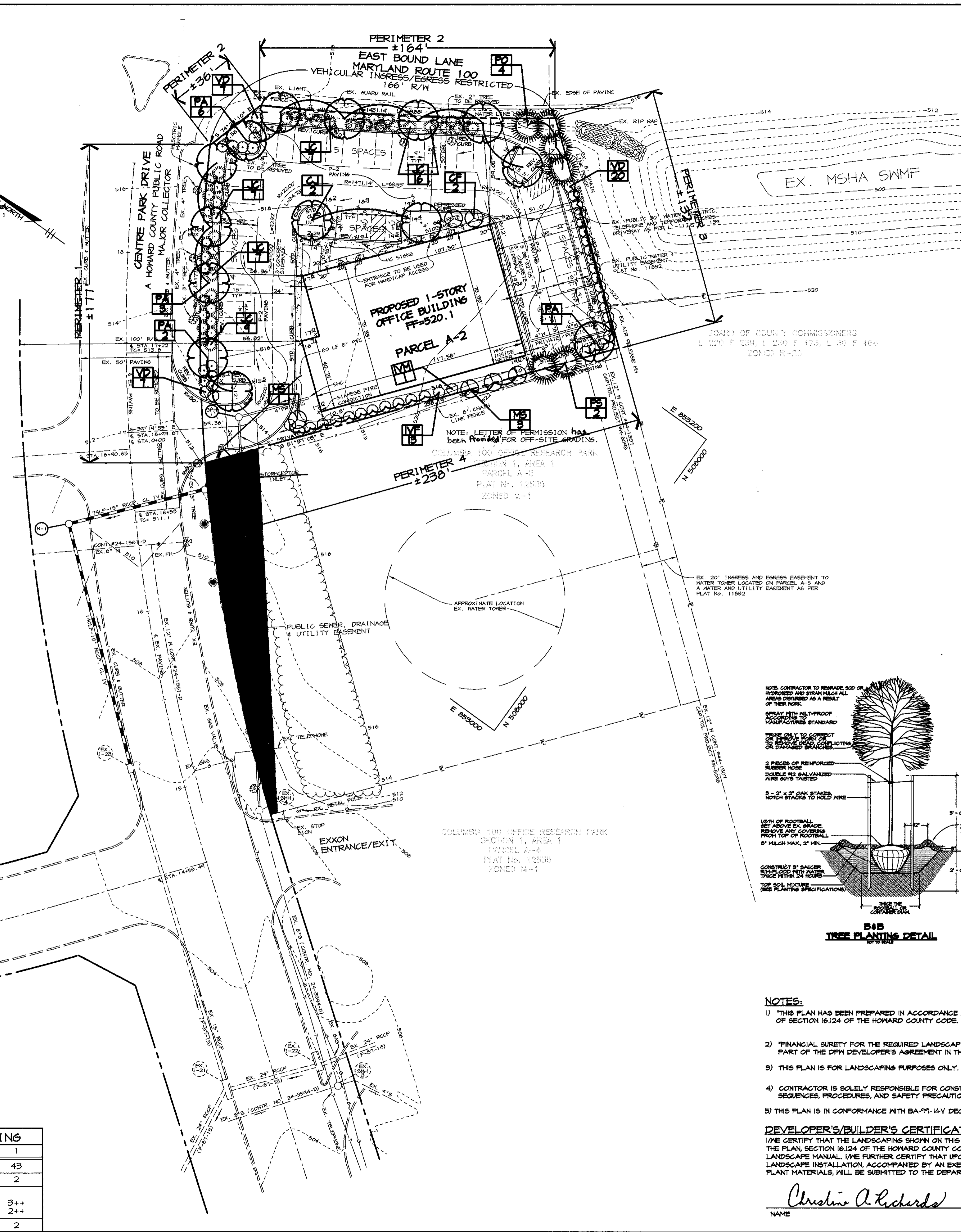
LANDSCAPE SCHEDULE "A"				
PERIMETER LANDSCAPED EDGES				
PERIMETER	ADJACENT TO PERIMETER PROPERTIES		ADJACENT TO ROADWAYS	
	3	4	1	2
LANDSCAPE TYPE	C++	A	E	E
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	±152'	±226'	±177'	±200'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	YES 3 SHADE	NO
CREDIT FOR WALL, FENCE OR BERR (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED	3	4**	1 (3 EXISTING)	3
SHADE TREES	1	-	44	50
EVERGREEN TREES	-	-	-	-
SHRUBS	-	-	-	-
NUMBER OF PLANTS PROVIDED	1*	0	2+	5
SHADE TREES	4**	2**	3**	5
EVERGREEN TREES	-	4**	3**	-
ORNAMENTAL TREES	-	14**	3**	-
SHRUBS	20*	14**	50*	50*

**SCHEDULE NOTES:**

- (\*) (20) SHRUBS SUBSTITUTED FOR (2) SHADE TREES WITHIN PERIMETER 3 FOR SCREENING OF SHM FROM PERIMETER 2.
- (\*\*) (3) ORNAMENTAL TREES SUBSTITUTED FOR (3) PERIMETER 3 EVERGREENS AND MOVED TO PERIMETER 1 TO PROVIDE VISUAL INTEREST.
- (\*\*\*) (2) EVERGREEN TREES, (4) ORNAMENTAL, (10) SHRUBS SUBSTITUTED FOR (4) SHADE TREES WITHIN PERIMETER 4 FOR SCREENING OF PARKING 4 VISUAL INTEREST FROM WITHIN BUILDING.
- (\*) (4) PERIMETER 1 SHRUBS MOVED TO PERIMETER 4 DUE TO LACK OF PLANTING AREA.
- (1) SHADE TREE SUBSTITUTED FOR (10) SHRUBS 4 PLANTED WITHIN PERIMETER 1.
- (2) ORNAMENTAL TREES AND (1) SHADE TREE SUBSTITUTED FOR (20) PERIMETER 2 SHRUBS AND PLANTED IN PARKING LOT DUE TO LACK OF SPACE.
- (\*) SHM FOND FOR HOWARD HIGH SCHOOL WITHIN RESIDENTIAL ZONE.

PLANTING LEGEND	
PROP. SHADE TREE	
PROP. ORNAMENTAL TREE	
PROP. EVERGREEN TREE	
CONIFERUS SHRUB	
BROADLEAF SHRUB	
EXISTING TREES	
EXISTING TREELINE	

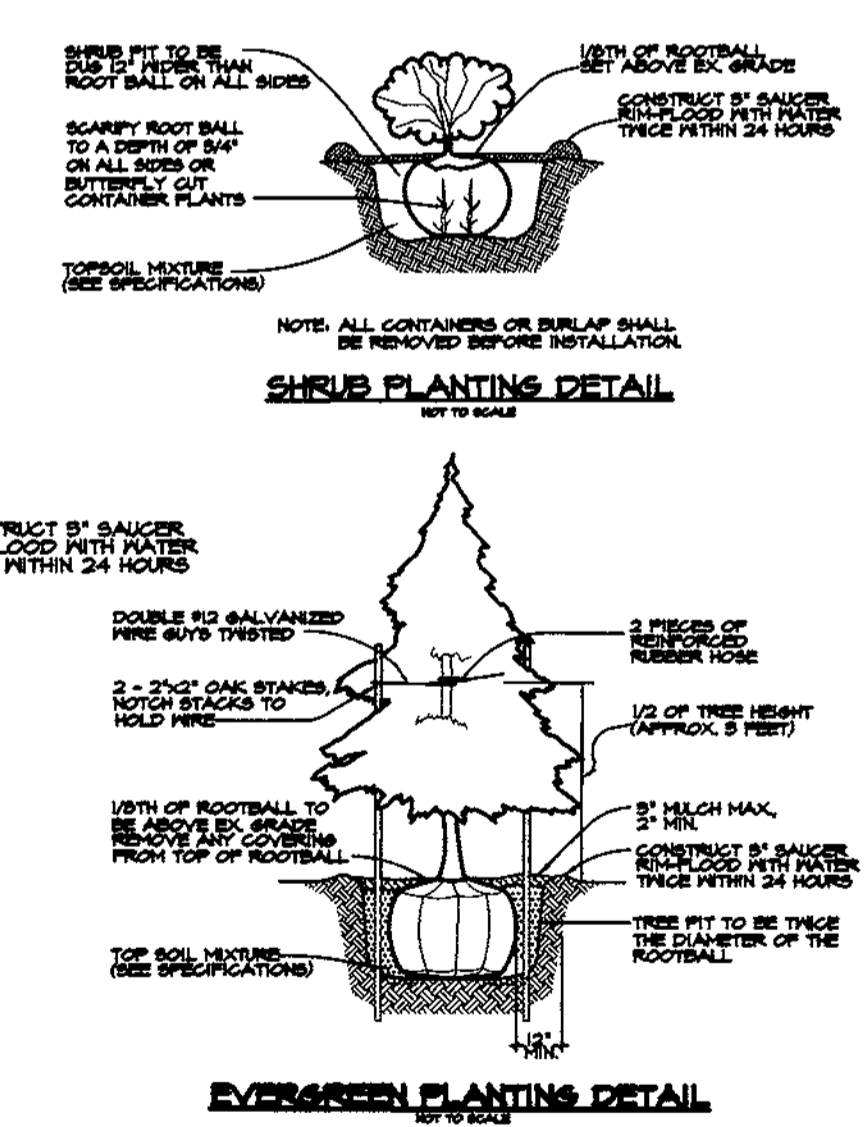
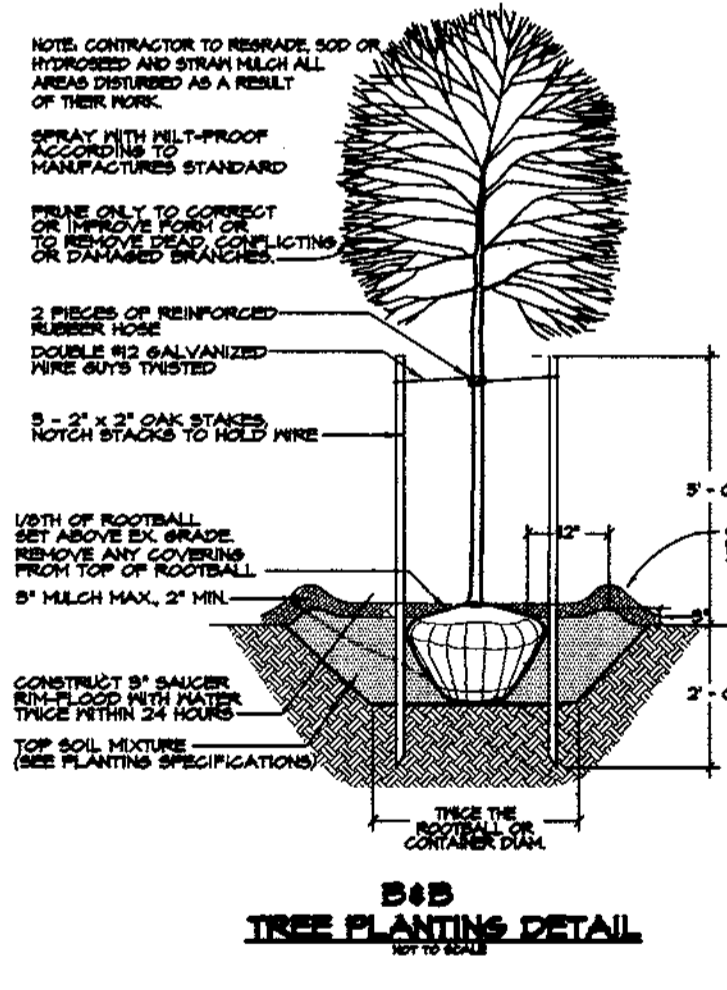
PARKING LOT INTERNAL LANDSCAPING	
PARKING LOT	1
NUMBER OF PARKING SPACES	43
NUMBER OF SHADE TREES/ISLANDS REQUIRED (1/20 SPACES)	2
NUMBER OF TREES PROVIDED	
SHADE TREES	3++
ORNAMENTAL TREES (2:1 SUBSTITUTION)	2++
NUMBER OF ISLANDS REQUIRED	2



PLANT LIST					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
PA	12	PLATANUS x ACERIFOLIA 'BLOODGOOD' / BLOODGOOD LONDA PLANE	3-3 1/2' CAL	B4B	-
CJ	2	CERCIDIPHYLLUM JAPONICUM / CATSKILL TREE	2 1/2-3' CAL	B4B	-
PO	4	PICEA OMORICA / SERBIAN SPRUCE	6-8'	B4B	PLANT 12' O.C.
PS	2	PINUS STROBUS / WHITE PINE	6-8'	B4B	PLANT 12' O.C.
MS	4	MAGNOLIA x SOULANGIANA / SAUCER MAGNOLIA	8-10'	B4B	MULTISTEMMED
CF	2	CARNUS FLORIDA / FLOWERING DOGWOOD	8-10'	B4B	WHITE FLOWERS
VD	34	VIBURNUM DILATATUM 'CATSKILL' / CATSKILL LINDEN VIBURNUM	30-36"	B4B	PLANT 6' O.C.
JC	46	JUNIPERUS CHINENSIS 'PFITZERIANA COMPACTA' / COMPACT PFITZER JUNIPER	30-36"	CONT.	PLANT 5' O.C.
IVF	13	ILEX x VERTICILLATA 'HARVEST RED' / 'HARVEST RED' WINTERBERRY	24-30"	CONT.	PLANT 6' O.C.
IVM	1	ILEX x VERTICILLATA 'APOLLO' / APOLLO WINTERBERRY HOLLY	24-30"	CONT.	MALE HOLLY

**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, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations on 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 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 Area" (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 amendments.
- Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance 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.
- 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.
- 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.
- All shrubs and groundcover areas shall be planted in continuous prepared planting beds mulched with composted hardwood mulch as detailed and specified except where noted on plans.
- Positive drainage shall be maintained in planting beds (minimum 2 percent slope).
- Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.
- Need control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated.
- Mulch: groundcover beds should be mulched with minimum 2 inches of shredded composted hardwood, or as specified on the details, whichever is greater.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded.
- This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.



- NOTES:**
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE.
  - FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING ONLY MUST BE POSTED AS PART OF THE DPM DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$8970.
  - THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
  - CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
  - THIS PLAN IS IN CONFORMANCE WITH BA-99-14-V DECISION AND ORDER CONDITIONS.

**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.

NAME: Christie A. Richards DATE: 6-28-99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 7/19/99  
DIRECTOR DATE

*[Signature]* 7/9/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 7/16/99  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE	NO.	REVISION

OWNER / DEVELOPER

MJF ASSOCIATES LLLP  
5550 STERRETT PLACE, SUITE 312  
COLUMBIA, MARYLAND 21044  
(410) 730-9091

PROJECT

CENTRE PARK 100  
OFFICE BUILDING

AREA

COLUMBIA 100 OFFICE RESEARCH PARK  
PARCEL A-2 TAX MAP 30 ZONED FOR  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE

LANDSCAPE PLAN

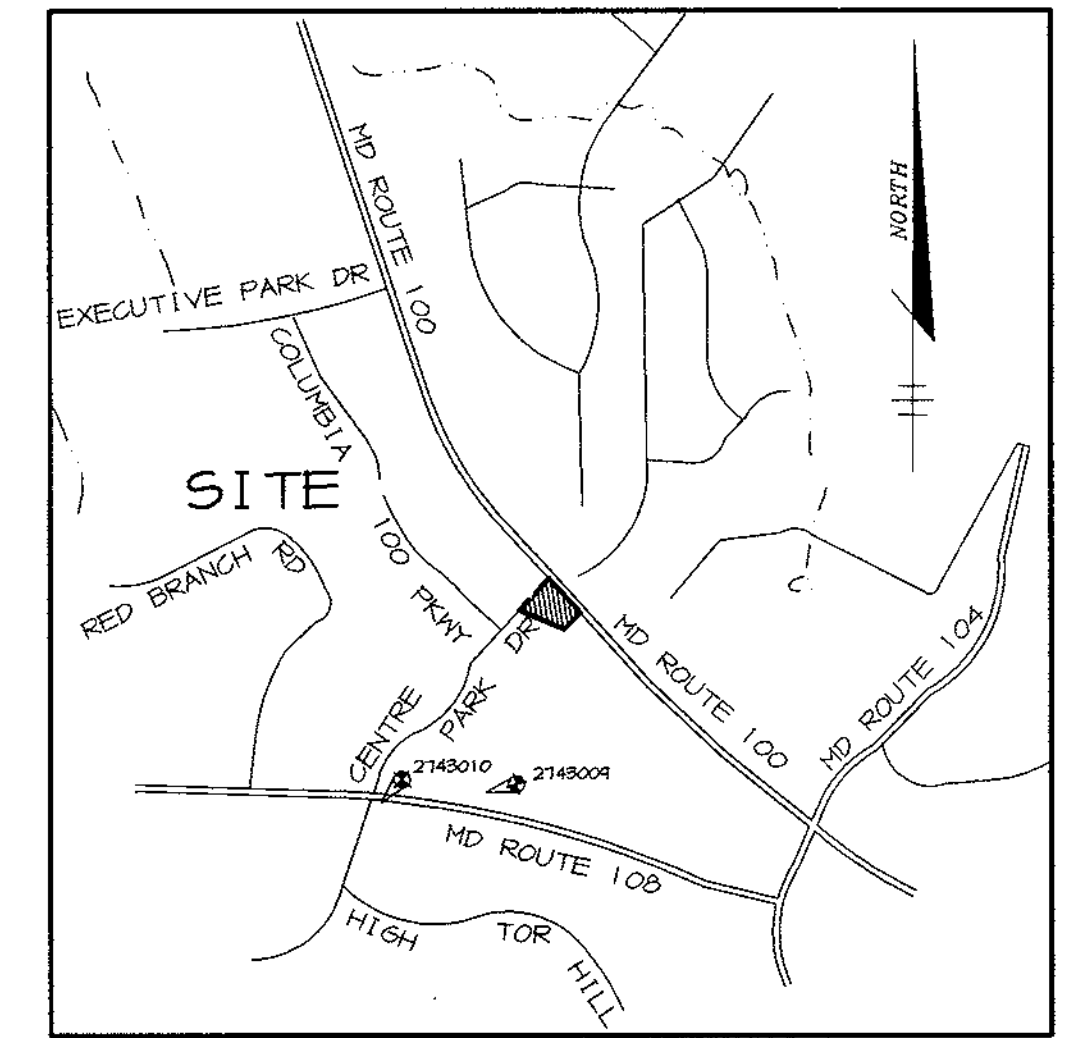
**RIEMER MUEGGE & ASSOCIATES, INC.**  
ENGINEERING ENVIRONMENTAL SERVICES PLANNING SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

DESIGNED BY: RAF  
DRAWN BY: AJL  
PROJECT NO. 99029\LSCP.DWG  
DATE: JUNE 23, 1999  
SCALE: 1" = 30'  
DRAWING NO. 6 OF 6

DAVID T. DOWS #830

SHEET INDEX	
No.	DESCRIPTION
1	TITLE SHEET
2	SITE DEVELOPMENT PLAN
3	GRADING, SEDIMENT CONTROL & DRAINAGE AREA MAP
4	DETAILS & NOTES
5	DETAILS, NOTES & PROFILES
6	LANDSCAPE PLAN

# SITE DEVELOPMENT PLAN CENTRE PARK 100



VICINITY MAP  
SCALE: 1"=2000'

### AS-BUILT CONTROL BENCHMARKS

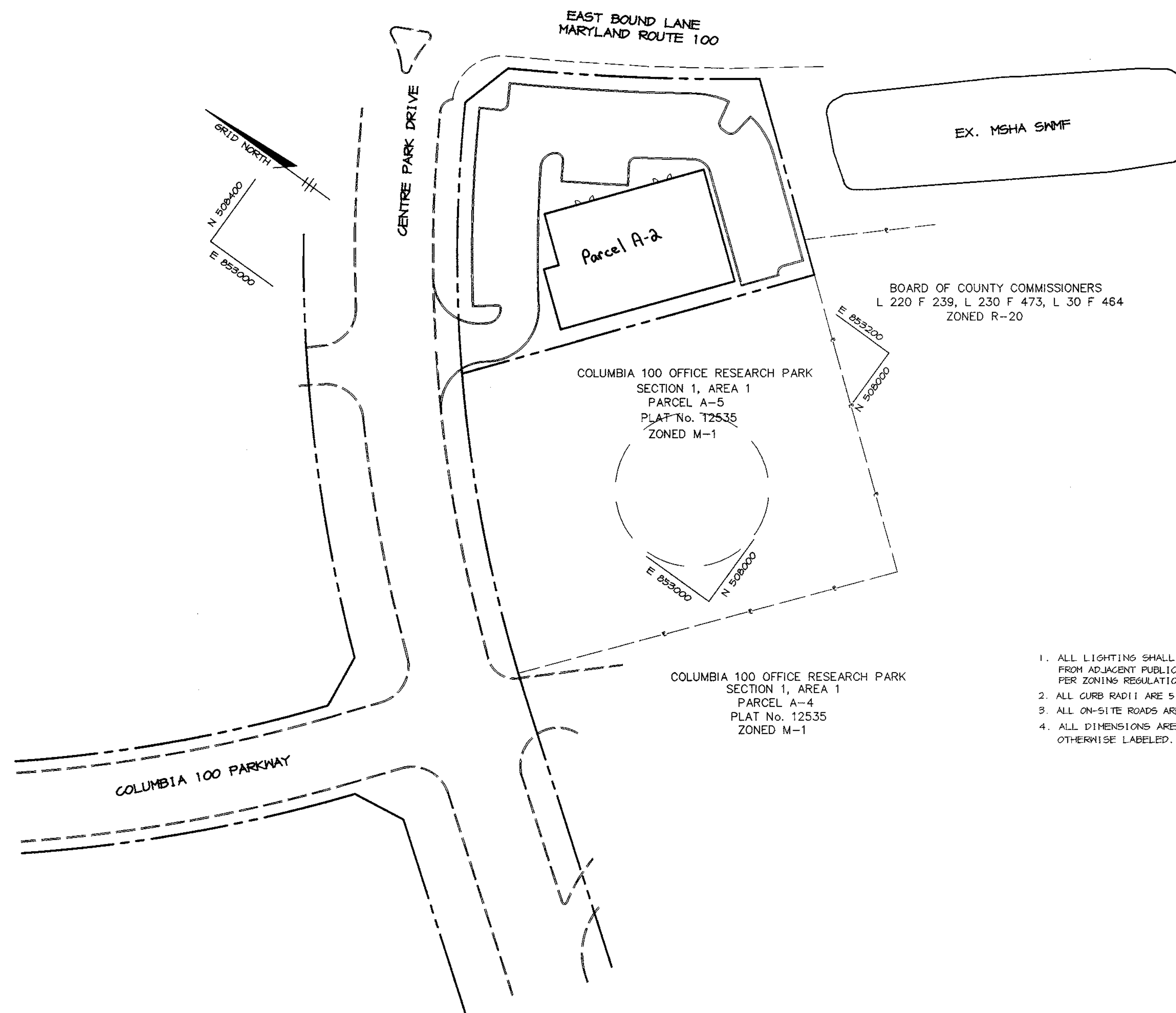
- ✓ HO. CO. SURVEY CONTROL STATION: 2743009 N 507,261 E 852,631
- ✓ HO. CO. SURVEY CONTROL STATION: 2743010 N 507,084 E 851,924

### SITE TABULATION

TOTAL AREA	0.799 AC. (34,805 SF)
CURRENT ZONING	POR
PROPOSED USE	OFFICE BUILDING
BUILDING FLOOR AREA	8,509 SQ. FT.
REQUIRED PARKING	3.3 SPACES PER/1000 SF* = 29 SPACES
PROPOSED PARKING	42 SPACES (INCLUDES 2 HC SPACES)
PAVED AREA	16,540 SF (48% OF SITE)
* PER HOWARD COUNTY ZONING REGULATIONS SECTION 133	

### GENERAL NOTES

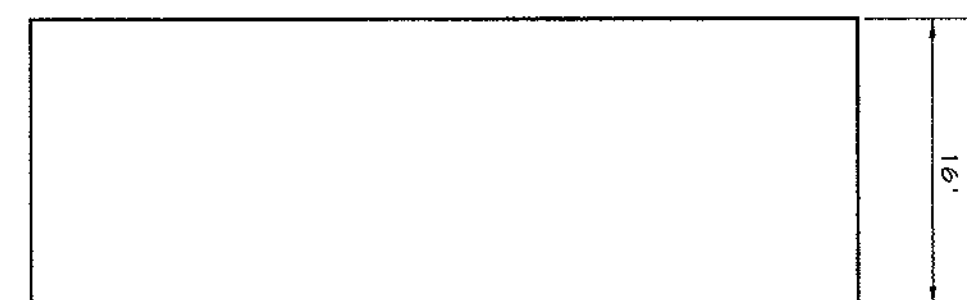
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST 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 UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC. DATED FEBRUARY 1999.
- 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. 2143009 AND 2143010 WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 24-3767-D
- SEWER IS PUBLIC. SEWER DRAINAGE AREA: PATUXENT CONTRACT NO. 24-3767-D
- THE STORMWATER MANAGEMENT QUANTITY FACILITY IS EXISTING OFFSITE, DESIGNED UNDER F-87-13. WATER QUALITY IS PROVIDED VIA A PRIVATE STORMWATER INLET.
- 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.
- NO 100-YEAR FLOODPLAIN STUDY IS REQUIRED FOR THIS PROJECT.
- NO WETLANDS ARE ON-SITE.
- NO APFO TRAFFIC STUDY FOR THIS PROJECT IS REQUIRED AS FAR RATIO IS ONLY 0.24.
- NO GEOTECHNICAL STUDY IS REQUIRED FOR THIS PROJECT.
- THE BOUNDARY FOR THIS PROJECT IS BASED ON PLAT #11832
- SUBJECT PROPERTY ZONED (POR) PER 10-18-98 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 NO'S. F-87-13, F-88-73 AND F-96-05
- 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, 1.0., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE 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 T100.
- BA-95-64V WAS GRANTED ON FEBRUARY 6, 1996 TO REDUCE 50 FOOT SETBACK TO 20 FEET. THE APPROVED VARIANCE IS NOW VOID DUE TO NO ACTION ON THE SITE.  
BA-98-14V APPROVED THE NEW VARIANCE ON JUNE 6, 1999. THE REQUEST WAS A VARIANCE TO TO REDUCE THE REQUIRED 50 FOOT USE SETBACK FROM A RESIDENTIAL DISTRICT TO 5 FEET FOR PARKING USES (SECTION 115.D.2.b.(1)). VARIANCE TO REDUCE THE REQUIRED 30 FOOT USE SETBACK FROM PUBLIC STREET RIGHTS-OF-WAY TO 10 FEET FOR PARKING USES (SECTION 115.D.2.b.(2)).  
Decision + Order dated July 15, 1999



BOARD OF COUNTY COMMISSIONERS  
L 220 F 239, L 230 F 473, L 30 F 464  
ZONED R-20

COLUMBIA 100 OFFICE RESEARCH PARK  
SECTION 1, AREA 1  
PARCEL A-4  
PLAT No. 12535  
ZONED M-1

- ALL LIGHTINGS SHALL BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES PER ZONING REGULATIONS SECTION 134.
- ALL CURB RADI ARE 5' UNLESS OTHERWISE SHOWN.
- ALL ON-SITE ROADS ARE PRIVATE.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE LABELED.



BUILDING ELEVATION  
NO SCALE

PLAN  
SCALE: 1"=50'

AS-BUILT CERTIFICATE

Christopher J. Reid #19949  
4.14.00  
DATE

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
A-2	8040 CENTRE PARK DRIVE
SUBDIVISION NAME: COLUMBIA 100 OFFICE RESEARCH PARK	
SECT./AREA: 1/1	PARCEL: A-2
PLAT #: 11832	BLOCK #: 23
ZONE: POR	TAX MAP NO.: 30
ELECT. DIST: 2nd	GENSUS TRACT: 6069.02
WATER CODE: 7000000	SEWER CODE: C04

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*John R. Keith* 7/19/99  
DIRECTOR 05 DATE

*Arthur E. Muegge* 7/16/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE

*Chris Hamilton* 7/16/99  
CHIEF, DIVISION OF LAND DEVELOPMENT & DATE

DATE	NO.	REVISION
OWNER / DEVELOPER		
M.J.F. ASSOCIATES L.L.P. 5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044 (410) 730-9091		
PROJECT		
CENTRE PARK 100 OFFICE BUILDING		
AREA		
COLUMBIA 100 OFFICE RESEARCH PARK PARCEL A-2 TAX MAP 30 ZONED POR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE		
TITLE SHEET		

RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

DATE: JUNE 23, 1999

DESIGNED BY: CJR

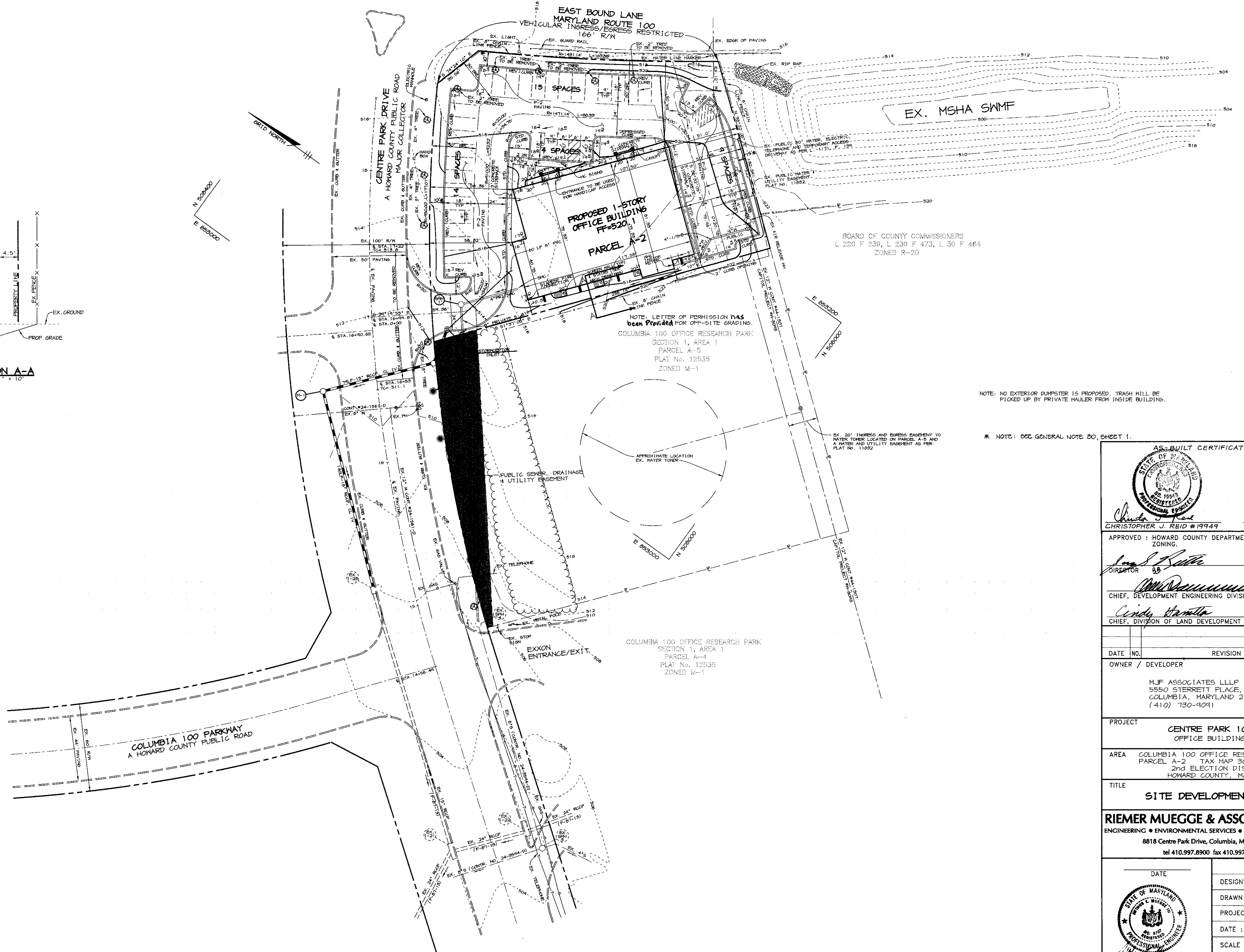
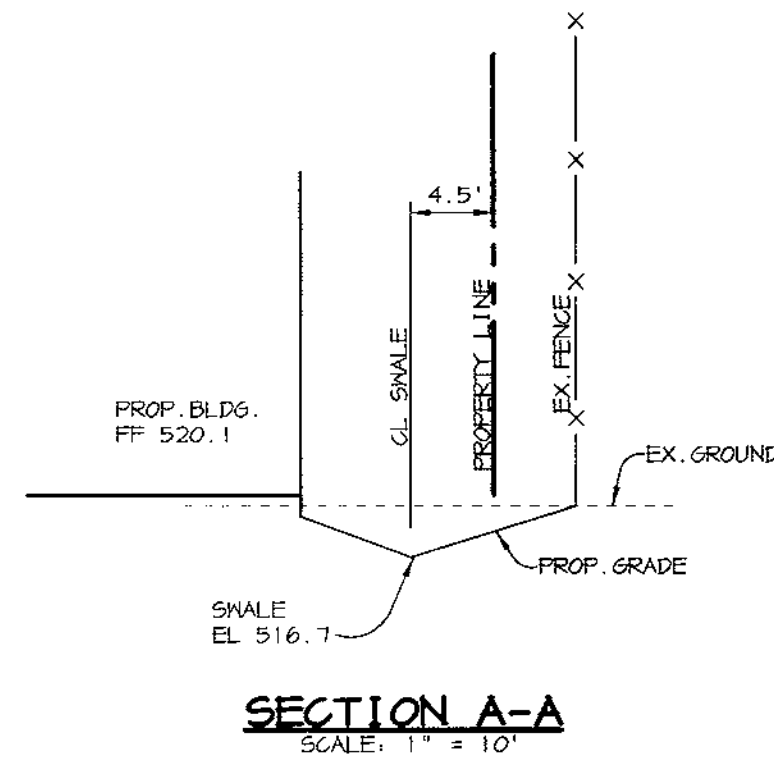
DRAWN BY: MAD

PROJECT NO: 99029\SDP1.DWG

SCALE: AS SHOWN

DRAWING NO. 1 OF 6

ARTHUR E. MUEGGE #8707



<b>AS-BUILT CERTIFICATE</b>	
	6.17.00
CHRISTOPHER J. REID #19949	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.	
	7/13/99
DIRECTOR	DATE
	7/16/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
	7/16/99
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DATE NO.	REVISION
OWNER / DEVELOPER	
M.J.F. ASSOCIATES LLLP 5550 STERRETT PLACE, SUITE 312 COLUMBIA, MARYLAND 21044 (410) 730-9091	
PROJECT	
CENTRE PARK 100 OFFICE BUILDING	
AREA	
COLUMBIA 100 OFFICE RESEARCH PARK PARCEL A-2 TAX MAP 30 ZONED FOR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
SITE DEVELOPMENT PLAN	
<b>RIEMER MUEGGE &amp; ASSOCIATES, INC.</b>	
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING	
8818 Centre Park Drive, Columbia, Maryland 21045 tel 410.997.8900 fax 410.997.9282	
DATE	DESIGNED BY: CJR
	DRAWN BY: MAD
	PROJECT NO: 99029\SDP2.DWG
	DATE: JUNE 23, 1999
	SCALE: 1" = 30'
	DRAWING NO. 2 OF 6



# DRAINAGE CHART

INLET	DRAINAGE AREA (AC)	%IMP	'C'
MQ-1	0.65	80%	0.72

NOTE: ALL ON-SITE SOILS ARE ASSUMED TYPE "C" DUE TO MASS GRADING.

## LEGEND

- LIMIT OF DISTURBANCE
- DRAINAGE AREA DIVIDE
- SILT FENCE
- SUPER SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE



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.

*Christine A. Richards* 6-28-99  
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.

*Arthur E. Muegge* 6-22-99  
ENGINEER DATE

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

*Charles Simmons* 7/7/99  
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

*John P. Robertson* 7/7/99  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*Frank J. Smith* 7/19/99  
DIRECTOR DATE

*William Dammann* 7/6/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*Cinda Hamilton* 7/16/99  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO.	REVISION

OWNER / DEVELOPER

MJF ASSOCIATES LLLP  
5550 STERRETT PLACE, SUITE 312  
COLUMBIA, MARYLAND 21044  
(410) 730-9091

PROJECT  
CENTRE PARK 100  
OFFICE BUILDING

AREA  
COLUMBIA 100 OFFICE RESEARCH PARK  
PARCEL A-2 TAX MAP 30 ZONED FOR  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE  
GRADING, SEDIMENT CONTROL &  
DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

<p>AS-BUILT CERTIFICATE</p> <p>CHRISTOPHER J. REID # 19949</p>	<p>DATE</p> <p>ARTHUR E. MUEGGE #8707</p>	DESIGNED BY : CJR
		DRAWN BY: MAD
<p>7-14-00</p>		PROJECT NO : 99029 SDP3.DWG
<p>DATE</p>		DATE : JUNE 23, 1999
<p>DATE</p>		SCALE : 1" = 30'
<p>DATE</p>		DRAWING NO. 3 OF 6

M:\PROJECT\99029\SDP3.DWG Mon Jun 21 14:11:17 1999 RIEMER MUEGGE & ASSOCIATES, INC.

### SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS 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 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL, AND REVISIONS THERE TO.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 37 CALENDAR DAYS FOR ALL PERMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERMETER SLOPES AND ALL SLOPES AND ALL SLOPES GREATER THAN 3:1, (B) 14 DAYS AS TO OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THE PERMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL AND EROSION CONTROL FOR PERMANENT SEEDINGS (SEC. 51), SO2 (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONG CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:
 

TOTAL AREA OF SITE	0.80 ACRES
AREA DISTURBED	0.98 ACRES
AREA TO BE ROOFED OR PAVED	0.62 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.36 ACRES
TOTAL CUT	1056 CU.YDS.
TOTAL FILL	892 CU.YDS.

 BORROW OF 3,000 CU.YDS. TO BE TAKEN FROM A SITE WITH AN OPEN 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.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERMETER 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 TPOSSIL, 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.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 AC., APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMETER EROSION AND SEDIMENT CONTROLS, 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 CAN BE BACKFILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

### TEMPORARY SEEDING NOTES

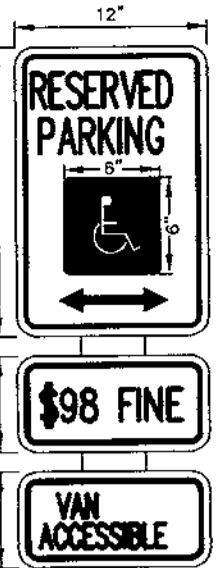
- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
- Soil Amendments:** Apply 600 lbs. per acre 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 rye (3.2 lbs. per 1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq. ft.) the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
- Mulching:** Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq. ft.) of unrutted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq. ft.) for anchoring.
- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

### PERMANENT SEEDING NOTES

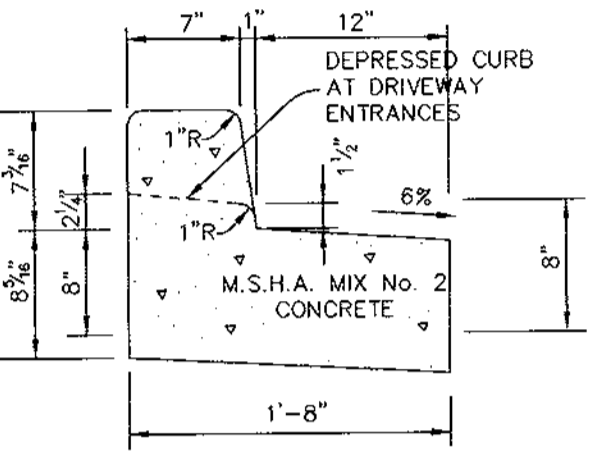
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
- Soil Amendments:** In lieu of soil test recommendations, use one of the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq. ft.) and 600 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 urea-form fertilizer (9 lbs. per 1000 sq. ft.).
  - Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 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 (1.4 lbs. per 1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq. ft.) of weeping lovegrass. 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.
- Mulching:** Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq. ft.) of unrutted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq. ft.) for anchoring.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseeds.

### 21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

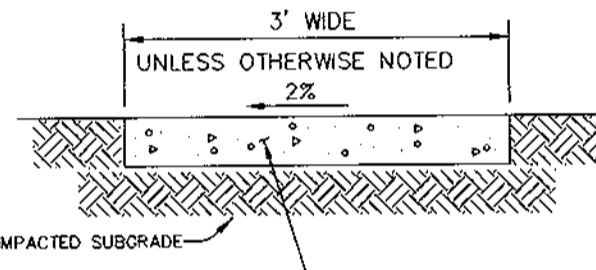
- Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.
- Purpose:** To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
- 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 continuing 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-SCS in cooperation with Maryland Agricultural Experiment 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 clinders, 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, nutgrass, poison ivy, thistle, or others as specified.
    - 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 I - 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 6.0 or higher.
            - Organic content of topsoil shall not be 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.
          - Topsoil substitutes to amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority may be used in lieu of natural topsoil.
        - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
    - Topsoil Application
      - When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.
      - Grades on the areas to be topsoiled, which have been previously established, shall be maintained, about 4" - 8" higher in elevation.
      - Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
      - Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
  - Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
    - Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to provide recommendations and for site having disturbed areas under 5 acres shall conform to the following requirements:
      - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
      - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
      - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
      - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.
- References: Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1975.



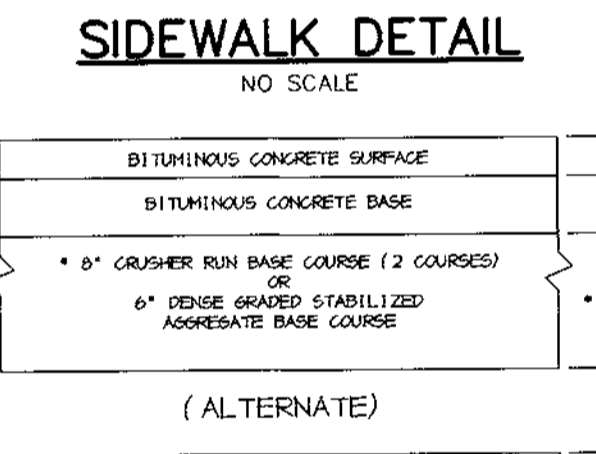
HANDICAP SIGN DETAIL  
NO SCALE



REVERSE 7" COMBINATION CURB AND GUTTER  
NO SCALE



SIDEWALK DETAIL  
NO SCALE



P-2 PAVING  
NO SCALE

### SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT FOR SITE PLAN.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCES AND SILT FENCE. (1 DAY)
- ROUGH GRADE SITE AND BEGIN BUILDING CONSTRUCTION. (4 DAYS)
- AS SUBGRADE ELEVATIONS ARE ESTABLISHED, INSTALL STORM DRAINS, WATER AND SEWER. PROVIDE INLET PROTECTION.
- INSTALL CURB AND GUTTER, THEN PAVE. (1 WEEK)
- FINE GRADE SITE. (2 DAYS)
- STABILIZE DISTURBED AREAS AS NECESSARY AND COMPLETE REMAINING CONSTRUCTION. (4 WEEKS)
- INSTALL LANDSCAPING AND COMPLETE BUILDING CONSTRUCTION.
- UPON APPROVAL OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR, REMOVE TEMPORARY SEDIMENT CONTROL DEVICES AND STABILIZE REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 DAYS)

STRUCTURE SCHEDULE						
STRUCTURE	TYPE	LOCATION	INV. IN	INV. OUT	REMARKS	
N0-1	N2 STRUCTURE	* N 509, 219.02 E 859, 037.01	509.9	509.3	513.00	HYDRO CONEULT. S1G. 4501. PRECAST CONCRETE STRUCTURE 18" X 24" X 30" SERIES 2" X 2" SQUARE FRAME 4 GRATE
H-1	4'-0" HANKLE	* N 509, 258.34 E 852, 954.37	506.07	505.97	511.5	HOCO STD. DETAIL 6.5.12
H-2	4'-0" HANKLE	* N 509, 209.60 E 859, 013.80	507.58	507.44	512.0	HOCO STD. DETAIL 6.5.12
SH-1	4'-0" HANKLE	* N 509, 211.00 E 859, 037.94	507.85	507.92	515.15 5.48	HOCO STD. DETAIL 6.5.12

NOTES: \* LOCATION OF NO FACILITY INLETS IS AT CENTER OF TOP CURB  
LOCATION OF HANKLES IS AT CENTER OF TOP COVER.

AS-BUILT CERTIFICATE

STATE OF MARYLAND  
PROFESSIONAL ENGINEER

Christopher J. Reid #19949  
DATE 4.14.00

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.

Christina A. Richards  
DEVELOPER  
DATE 6.28.99

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.

Arthur E. Muegge  
ENGINEER  
DATE 6.22.99

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

Deaf Simmons  
NATURAL RESOURCES CONSERVATION SERVICE  
DATE 7/1/99

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

John R. Robertson  
HOWARD SOIL CONSERVATION DISTRICT  
DATE 7/1/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Leah B. Smith  
DIRECTOR  
DATE 7/19/99

William A. ...  
CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE 7/19/99

Cindy ...  
CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE 7/19/99

DATE	NO.	REVISION

OWNER / DEVELOPER  
M/JF ASSOCIATES LLLP  
3550 STERRETT PLACE, SUITE 312  
COLUMBIA, MARYLAND 21044  
(410) 730-0091

PROJECT  
CENTRE PARK 100  
OFFICE BUILDING

AREA  
COLUMBIA 100 OFFICE RESEARCH PARK  
PARCEL A-2 TAX MAP 30 ZONED FOR  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE  
DETAILS & NOTES

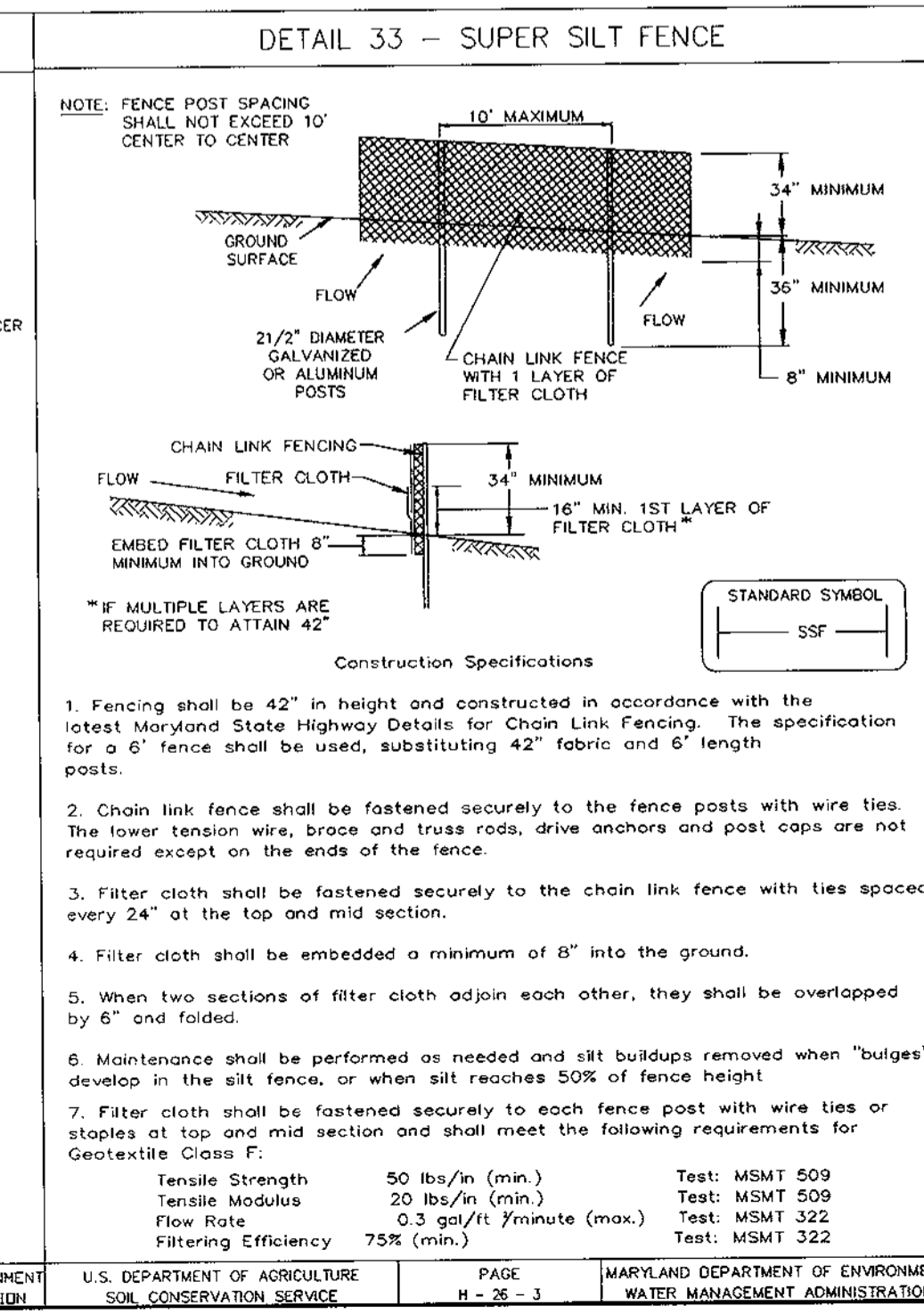
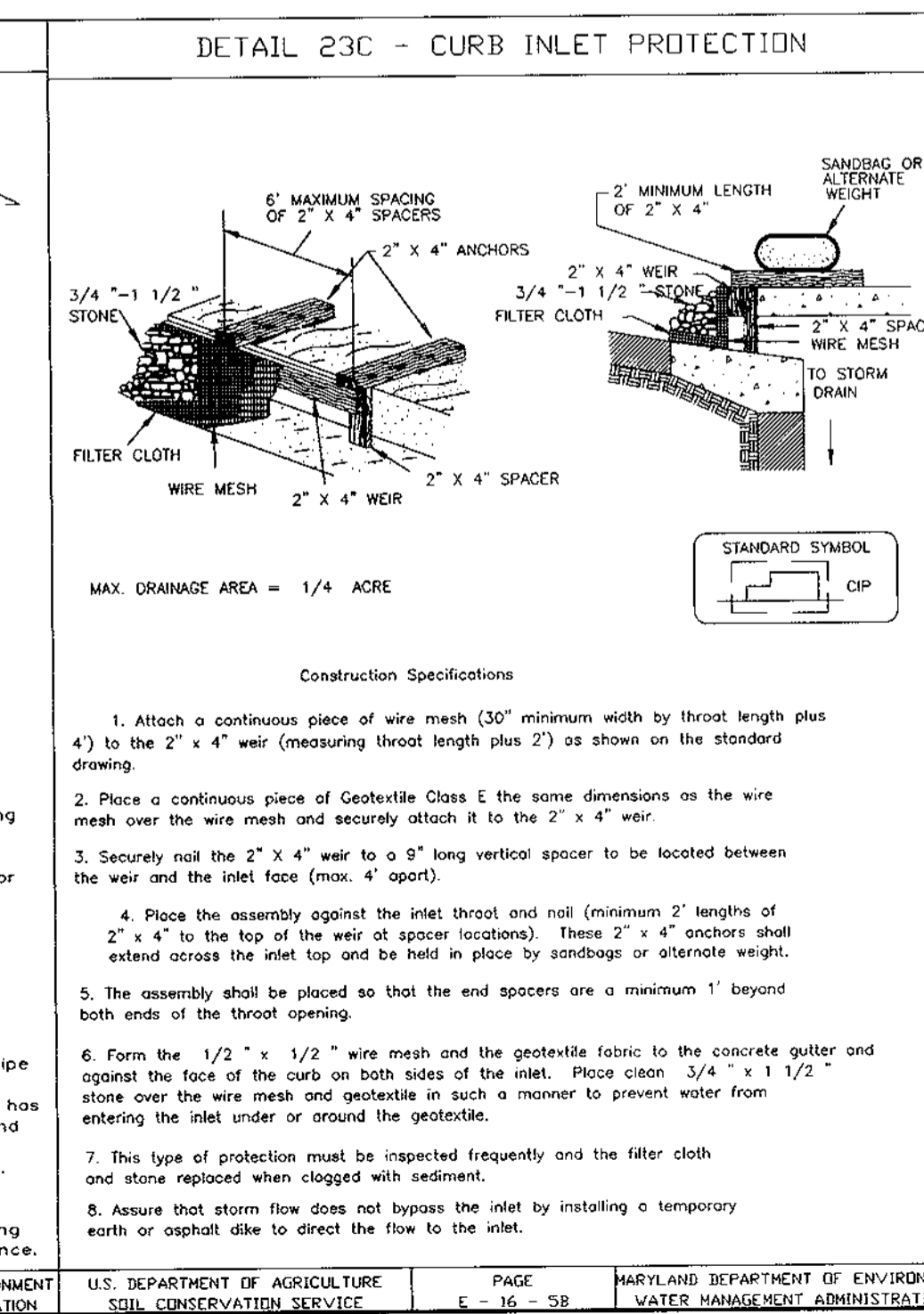
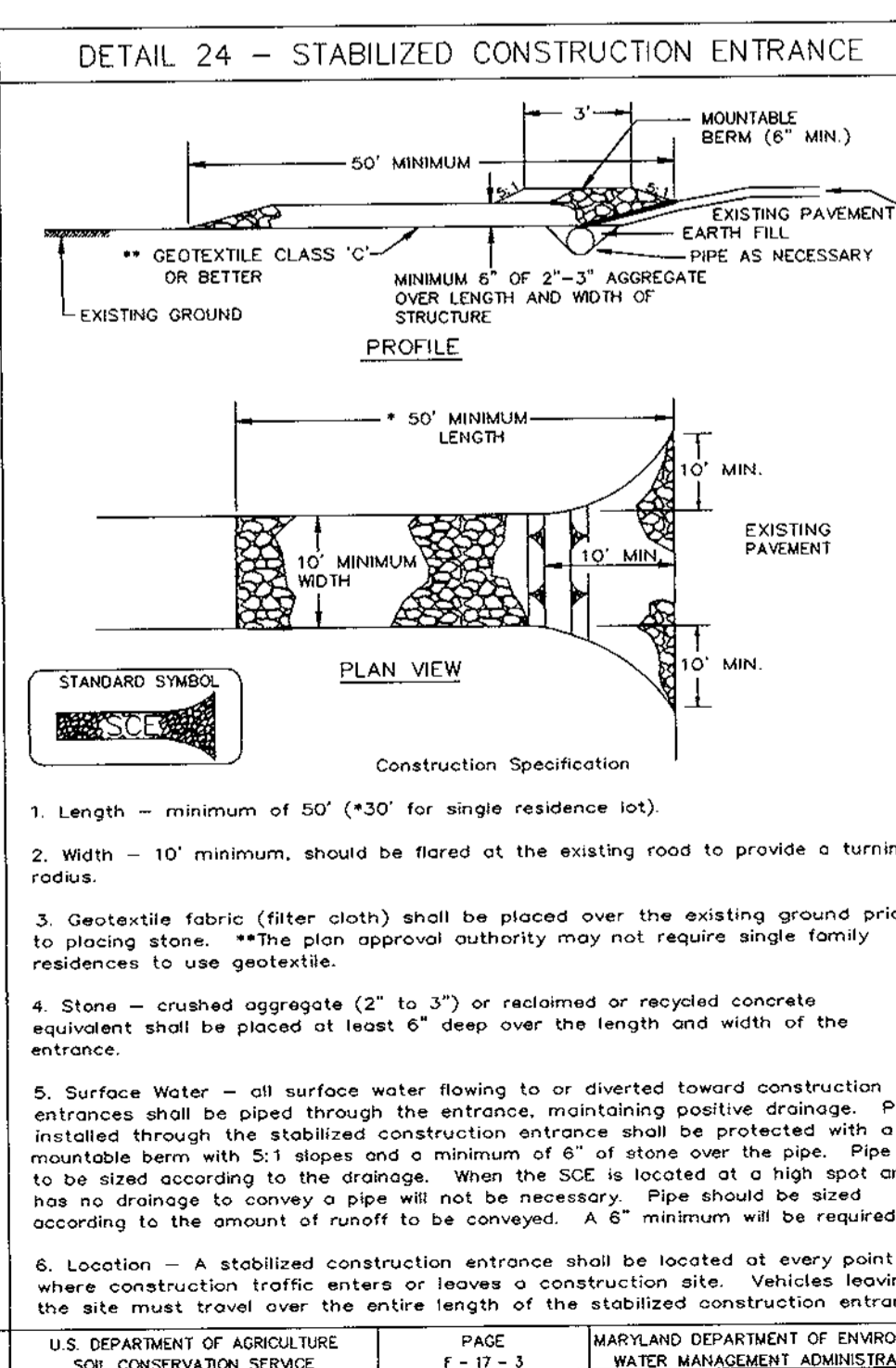
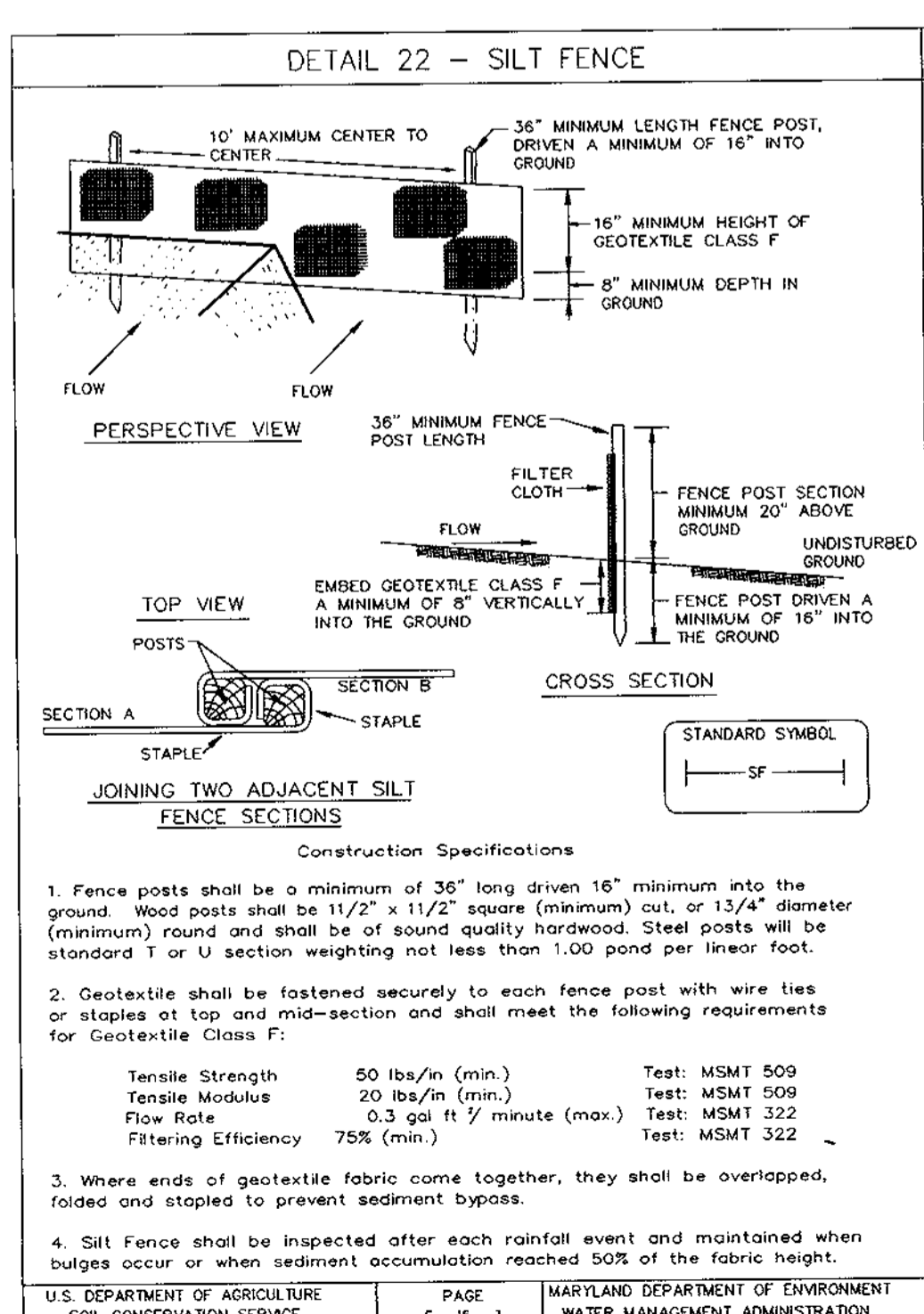
RIEMER MUEGGE & ASSOCIATES, INC.  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

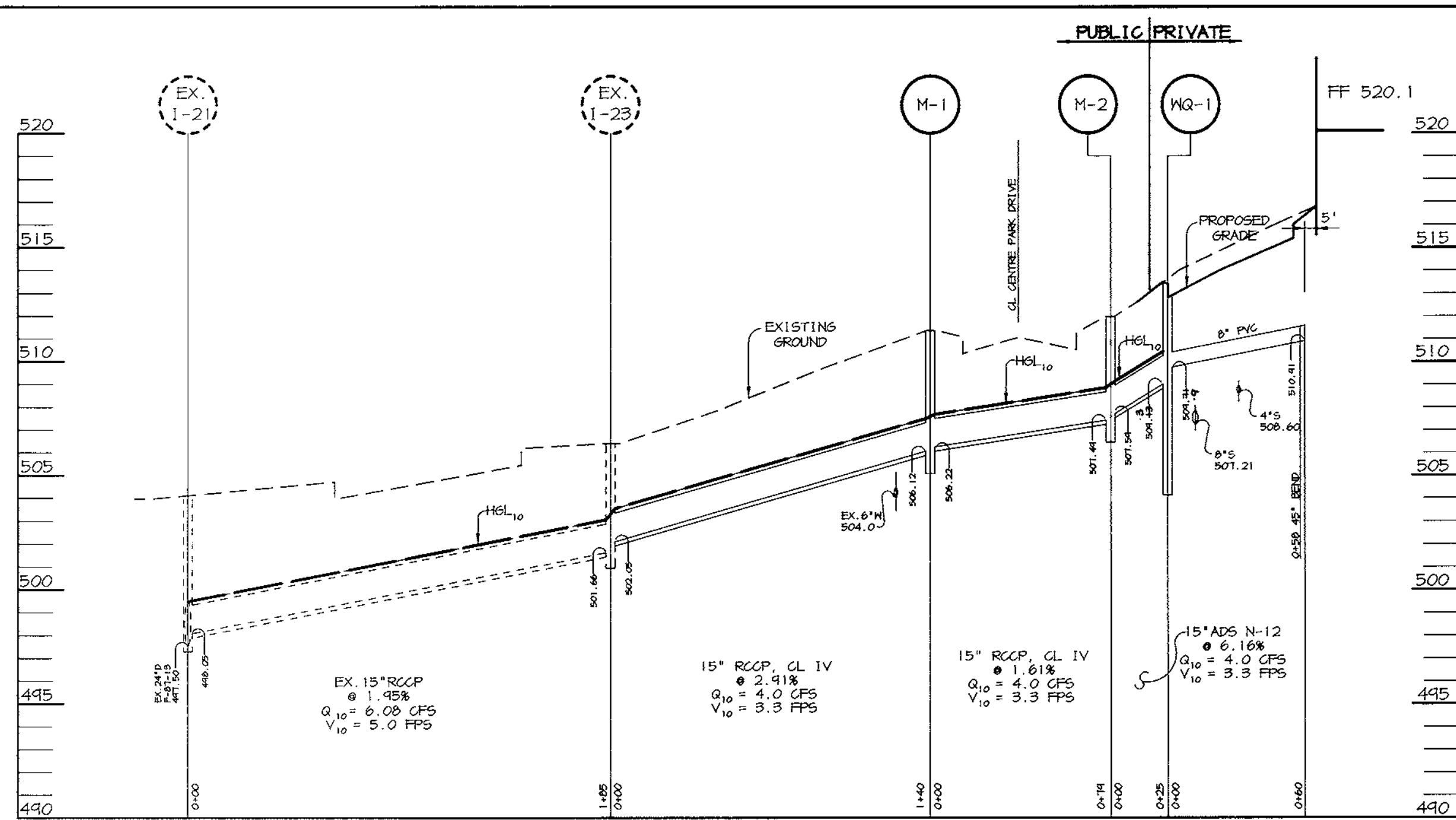
DATE DESIGNED BY: CJR

DRAWN BY: MAD

PROJECT NO. 99029  
SDP4.DWG  
DATE: JUNE 23, 1999

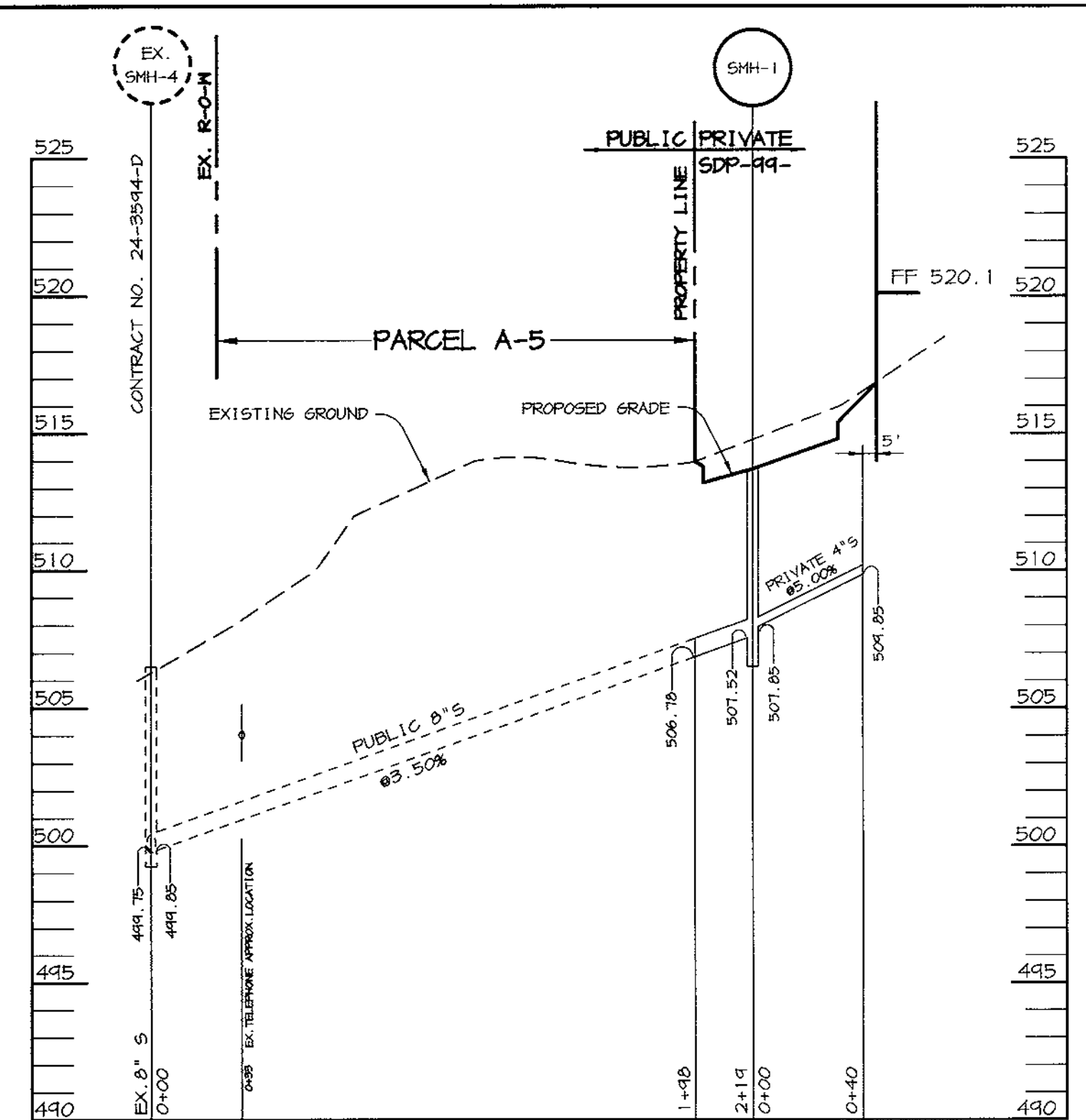
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DRAWING NO. 4 OF 6





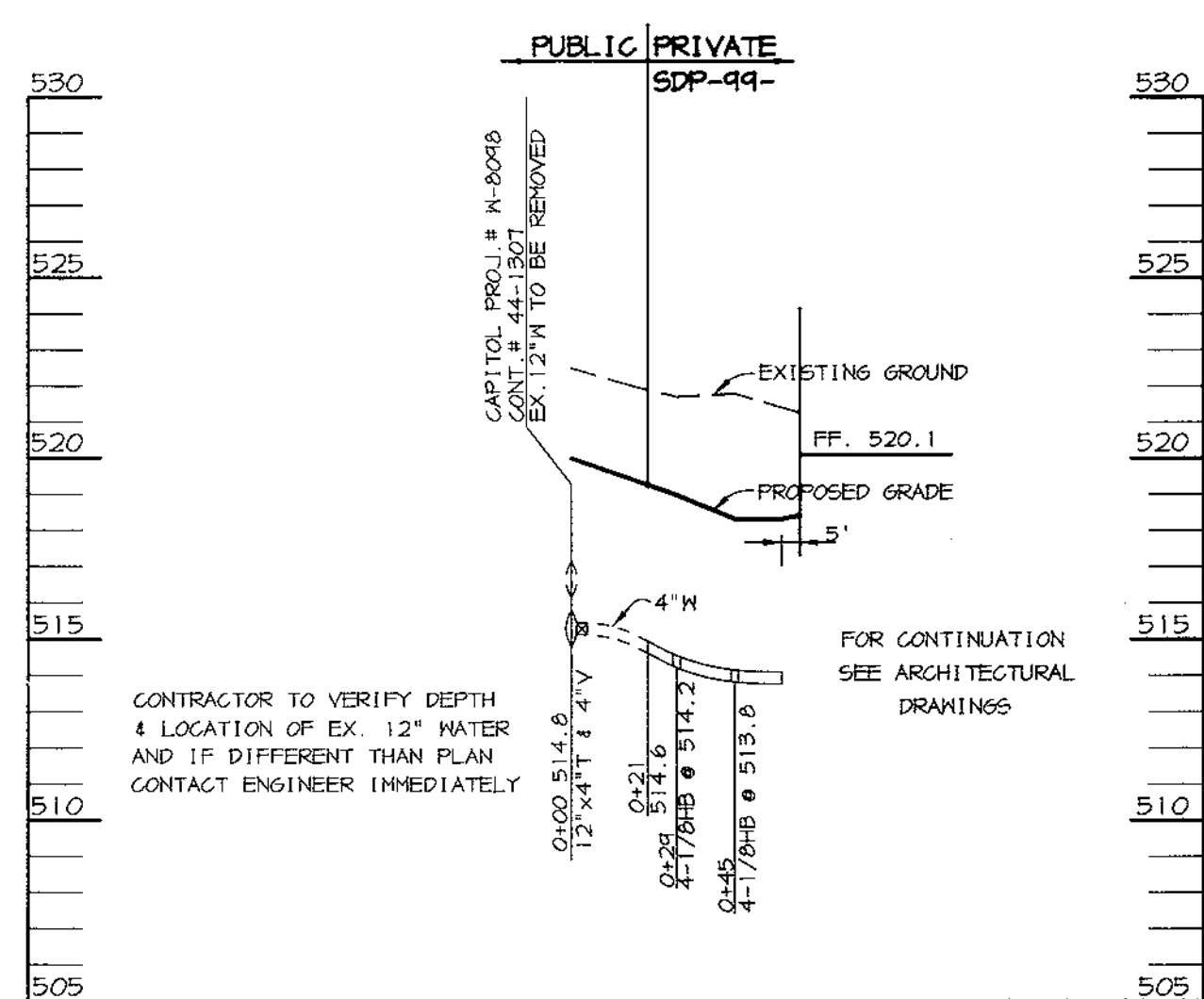
**CENTRE PARK DRIVE  
STORM DRAIN PROFILE**

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



**SEWER PROFILE**

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



**WATER PROFILE**

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

**CONTRACTOR INSTALLATION PROCEDURE FOR  
INLET STORMCEPTOR (STC4501)**

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 STC4501.
8. INSTALL RISER SECTION. ALIGN STEPS ABOVE INLET (12") DOWN PIPE. NOTE, FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED.
9. INSTALL FLATTOP WITH OPENING FOR STORMCEPTOR FRAME AND GRATE ORIENTED ABOVE THE STORMCEPTOR 12" INLET DOWN PIPE.
10. BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8" 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 (703)971-1900 OR STORMCEPTOR CORPORATION AT 1-800-762-4703

**OPERATION AND MAINTENANCE SCHEDULE FOR INLET STORMCEPTOR STC4501**

1. THE INLET 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 FLEXIGLAS TUBE ("SLUDGE JUDGE") TO EXTRACT A WATER COLUMN SAMPLE. WHEN SEDIMENT DEPTHS EXCEED SIX (6) 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 INLET 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 MJF ASSOCIATES LLLP  
Phone (410) 730-9091  
Fax \_\_\_\_\_

IMPERVIOUS DRAINAGE AREA FOR THIS UNIT \_\_\_\_\_

Stormceptor® Model	Insert Size
<input checked="" type="checkbox"/> 450i	<input type="checkbox"/> SINGLE INLET DISC
<input type="checkbox"/> 900	<input type="checkbox"/> MULTIPLE INLET DISC
<input type="checkbox"/> 1200	<input type="checkbox"/> 450i DISC
<input type="checkbox"/> 1800	<input type="checkbox"/> 6000 DISC
<input type="checkbox"/> 2400	<input checked="" type="checkbox"/> 450i DISC

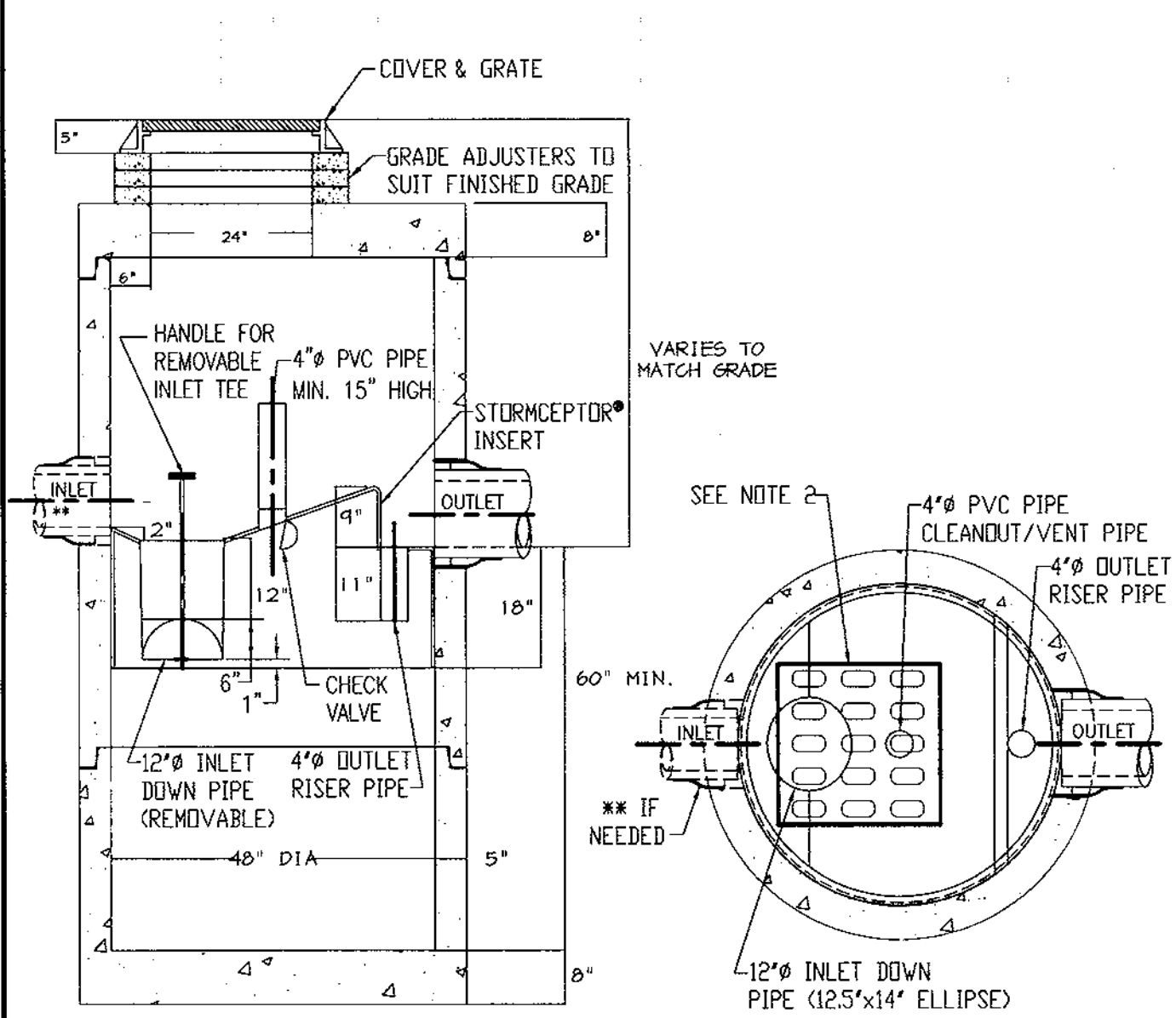
Manhole Number HQ-1  
Top Elevation (ft) TC 513.4  
Inlet Pipe Invert (ft) \_\_\_\_\_  
Outlet Pipe Invert (ft) 509.13  
Pipe Type ADS N-12  
Inlet Pipe Inside Diameter (ID) \_\_\_\_\_  
Inlet Pipe Outside Diameter (OD) \_\_\_\_\_  
Outlet Pipe Inside Diameter (ID) 15"  
Outlet Pipe Outside Diameter (OD) 21"

Project Name COLUMBIA 100, PARCEL A-2  
Approximate time frame of delivery (weeks) \_\_\_\_\_  
Delivery Address: Street \_\_\_\_\_  
City: COLUMBIA State: MARYLAND Zip Code: 21228  
Designer Company RIEMER MUEGGE AND ASSOCIATES, INC.  
Designer Contact CHRIS REID Phone (410) 997-8400 Fax \_\_\_\_\_

PLEASE FILL OUT COMPLETELY AND FAX TO: **CSR** Hydro Conduit  
ATTN: DAN FALLON FAX: (703)922-3659, PHONE: (703)313-6389  
FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)313-6399

**CSR Hydro Conduit**  
STC 4501 Precast Concrete Stormceptor®  
(450 US Gallon Capacity)

DR. BY: E.J. JACKSON  
CK. BY: E.CARRASCO  
DATE: DEC. 8, 1998  
SCALE: N.T.S.  
DWG.# A400-CE-99



- NOTE:
1. THE USE OF FLEXIBLE CONNECTIONS IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
  2. THE GRATE OPENING SHOULD BE POSITIONED OVER THE CLEANOUT/VENT PIPE.
  3. THIS IS A GENERAL ARRANGEMENT DRAWING CONSULT LOCAL REPRESENTATIVE FOR SPECIAL CONDITIONS.
- | REV. | DESCRIPTION | BY | DATE |
|------|-------------|----|------|
|      |             |    |      |

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

*[Signature]* 7/19/99  
DIRECTOR DD DATE

*[Signature]* 7/16/99  
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 7/16/99  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO.	REVISION

OWNER / DEVELOPER

MJF ASSOCIATES LLLP  
5550 STERRETT PLACE, SUITE 312  
COLUMBIA, MARYLAND 21044  
(410) 730-9091

PROJECT **CENTRE PARK 100  
OFFICE BUILDING**

AREA COLUMBIA 100 OFFICE RESEARCH PARK  
PARCEL A-2 TAX MAP 30 ZONED POR  
2nd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE **DETAILS, NOTES & PROFILES**

**RIEMER MUEGGE & ASSOCIATES, INC.**  
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING  
8818 Centre Park Drive, Columbia, Maryland 21045  
tel 410.997.8900 fax 410.997.9282

DESIGNED BY: CJR

DRAWN BY: MAD

PROJECT NO 99029  
SDPS.DWG

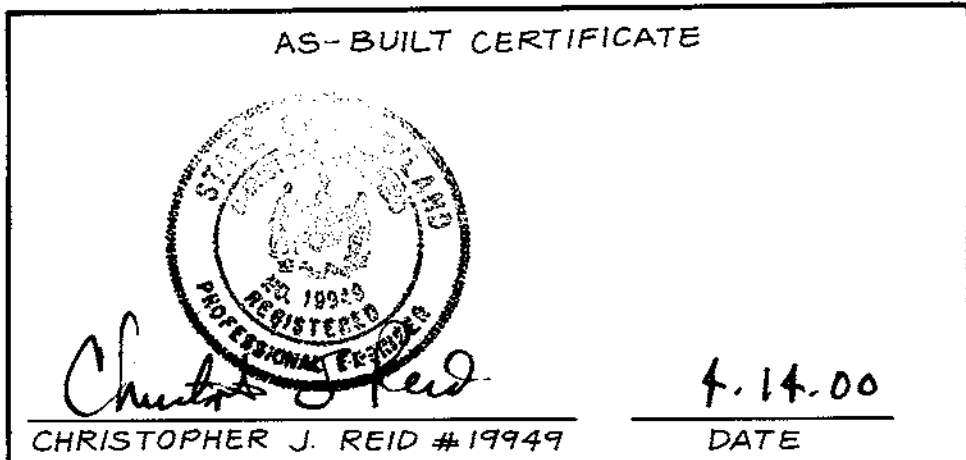
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DRAWING NO. 5 OF 6

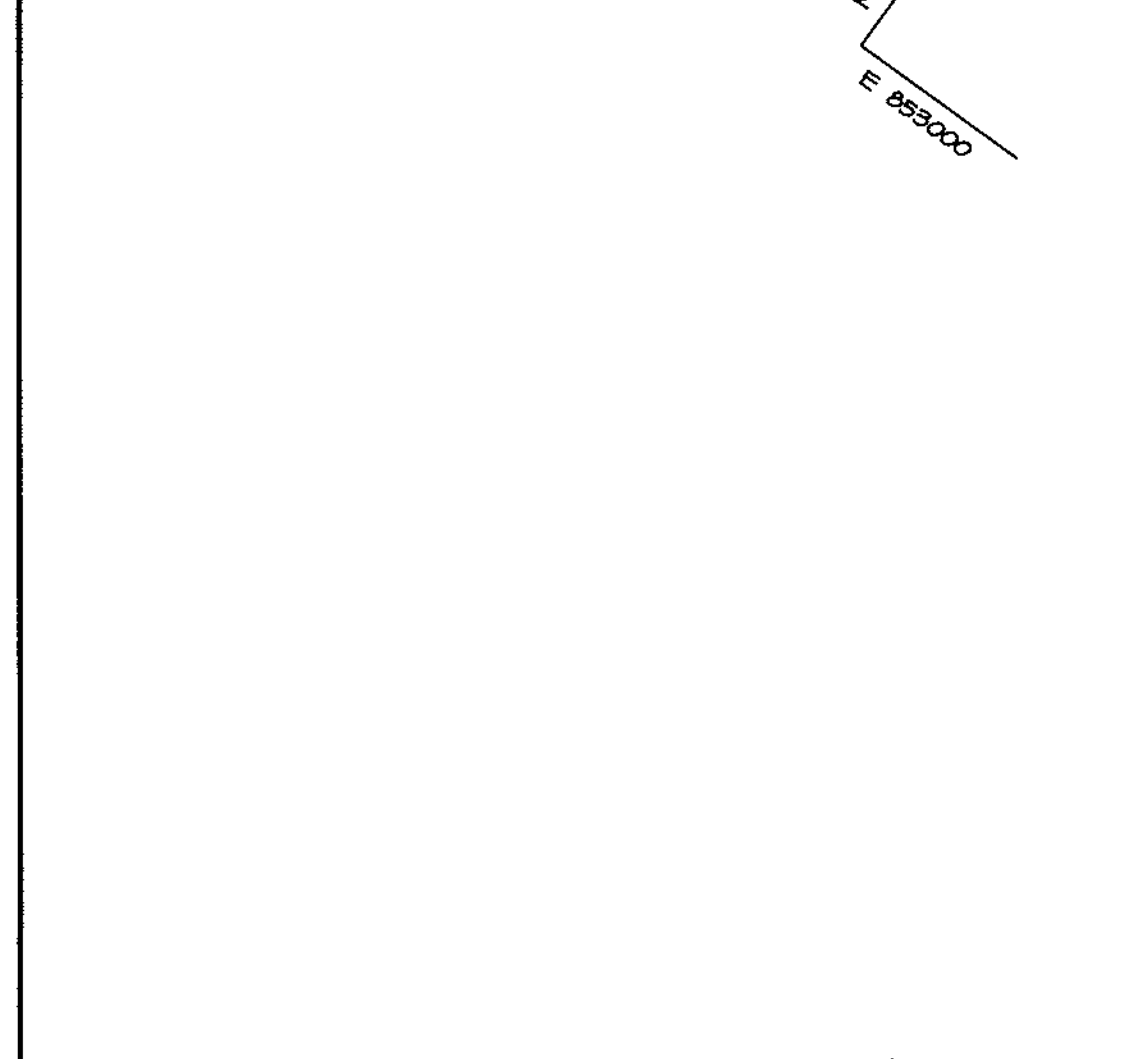
*[Signature]*  
ARTHUR E. MUEGGE #8707

**AS-BUILT** 4/14/00 **SDP-99-110**

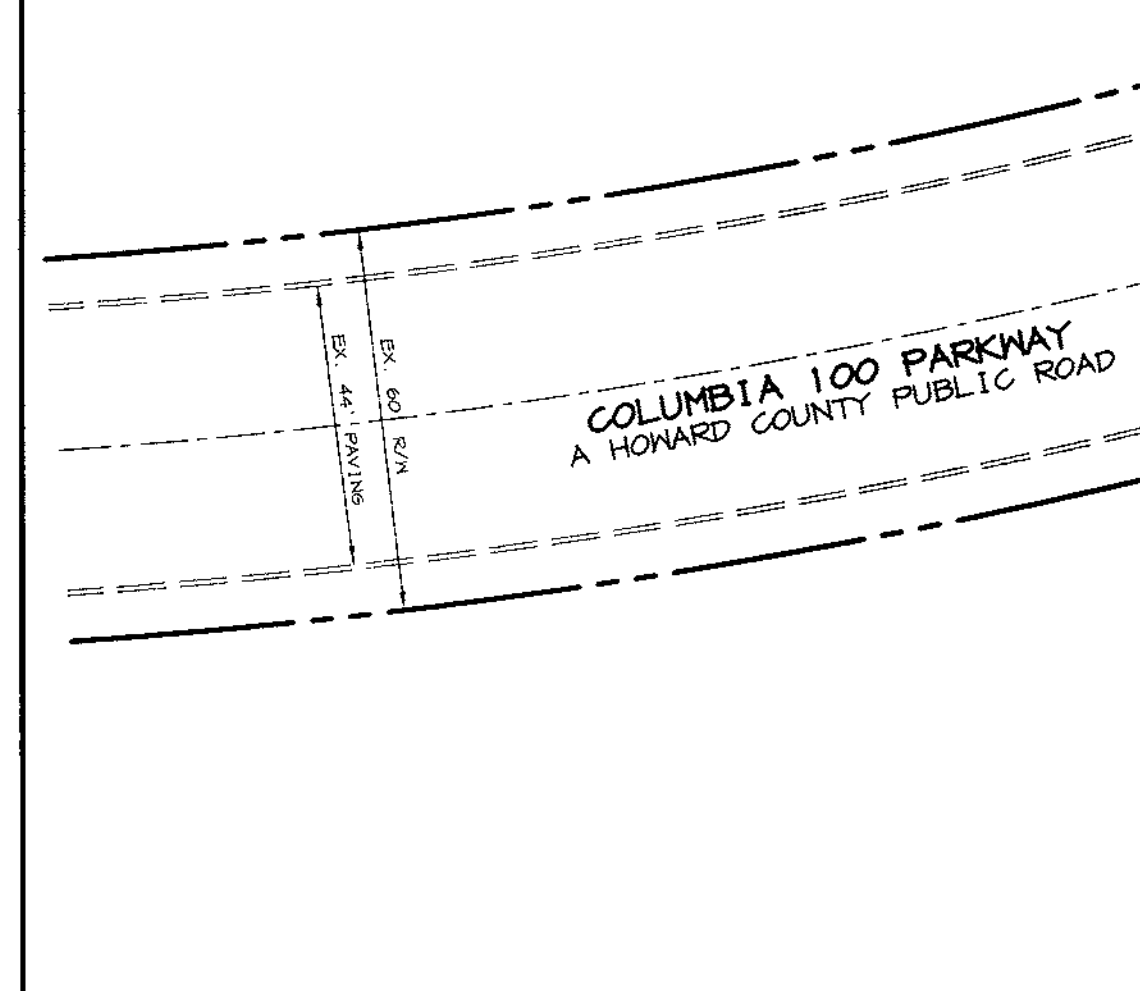


LANDSCAPE SCHEDULE "A"	PERIMETER LANDSCAPED EDGES			
	ADJACENT TO PERIMETER PROPERTIES		ADJACENT TO ROADWAYS	
PERIMETER	3	4	1	2
LANDSCAPE TYPE	G+++	A	E	E
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER	±192'	±236'	±171'	±200'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	YES 5 SHADE	NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO
NUMBER OF PLANTS REQUIRED	5	4+++	1 (3 EXISTING)	5
EVERGREEN TREES	-	-	-	50
SHRUBS	-	-	44	-
NUMBER OF PLANTS PROVIDED	1*	0	2*	5
SHADE TREES	4**	2***	-	-
EVERGREEN TREES	-	-	8**	-
ORNAMENTAL TREES	2**	1****	3**	50**
SHRUBS	-	-	30*	-

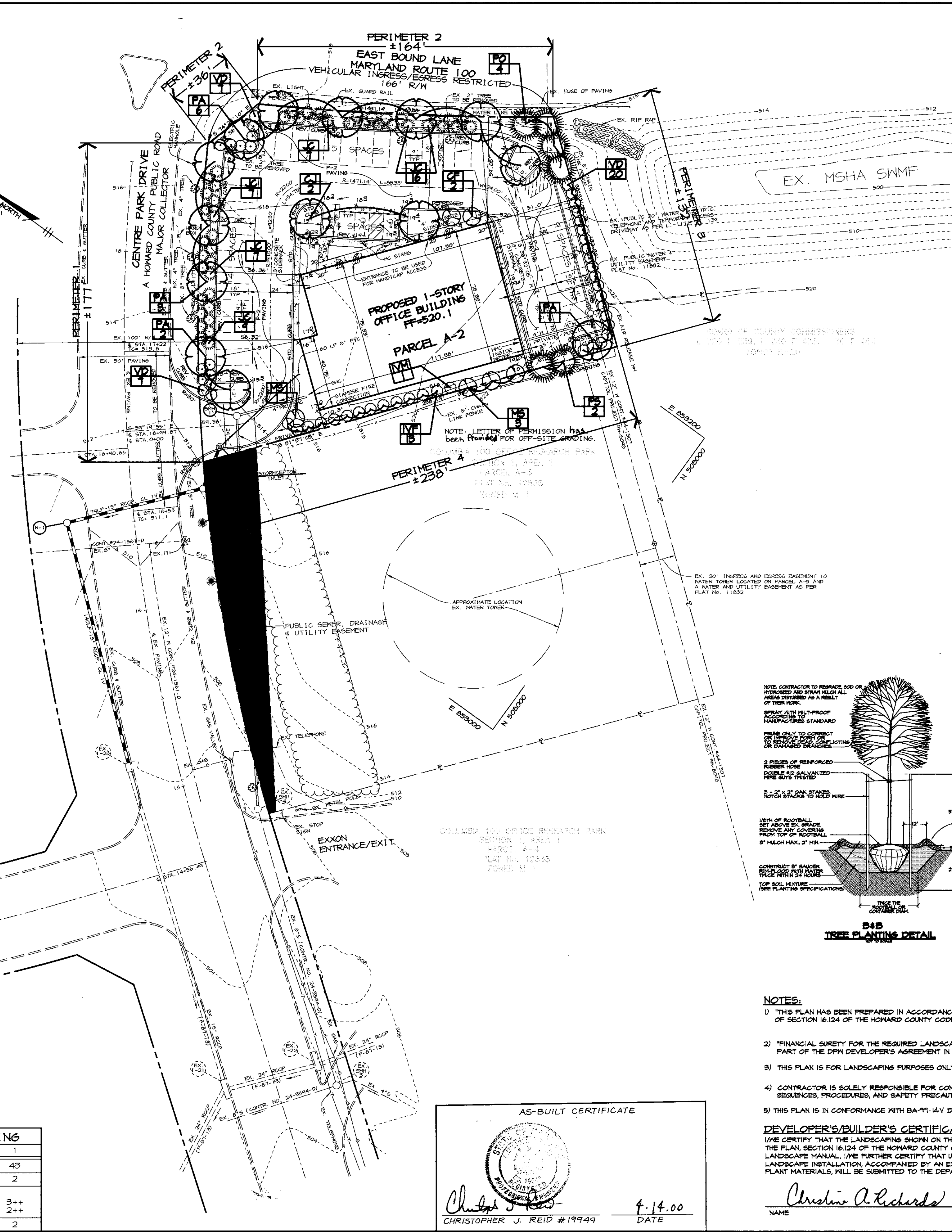
**SCHEDULE NOTES:**  
 \* (2) SHRUBS SUBSTITUTED FOR (2) SHADE TREES WITHIN PERIMETER 3 FOR SCREENING OF SHM POND NORTH.  
 \*\* (3) ORNAMENTAL TREES SUBSTITUTED FOR (3) PERIMETER 3 EVERGREENS AND MOVED TO PERIMETER 1 TO PROVIDE VISUAL INTEREST.  
 \*\*\* (2) EVERGREEN TREES, (4) ORNAMENTAL, (10) SHRUBS SUBSTITUTED FOR (4) SHADE TREES WITHIN PERIMETER 4 FOR SCREENING OF PARKING & VISUAL INTEREST FROM WITHIN BUILDINGS.  
 (4) PERIMETER 1 SHRUBS MOVED TO PERIMETER 4 DUE TO LACK OF PLANTING AREA.  
 (1) SHADE TREE SUBSTITUTED FOR (10) SHRUBS 4 PLANTED WITHIN PERIMETER 1.  
 \*\* (2) ORNAMENTAL TREES AND (1) SHADE TREE SUBSTITUTED FOR (20) PERIMETER 2 SHRUBS AND PLANTED IN PARKING LOT DUE TO LACK OF SPACE.  
 \*\*\*\* SHM POND FOR HOWARD HIGH SCHOOL WITHIN RESIDENTIAL ZONE.



PLANTING LEGEND	
PROP. SHADE TREE	
PROP. ORNAMENTAL TREE	
PROP. EVERGREEN TREE	
CONIFERUS SHRUB	
BROADLEAF SHRUB	
EXISTING TREES	
EXISTING TREELINE	



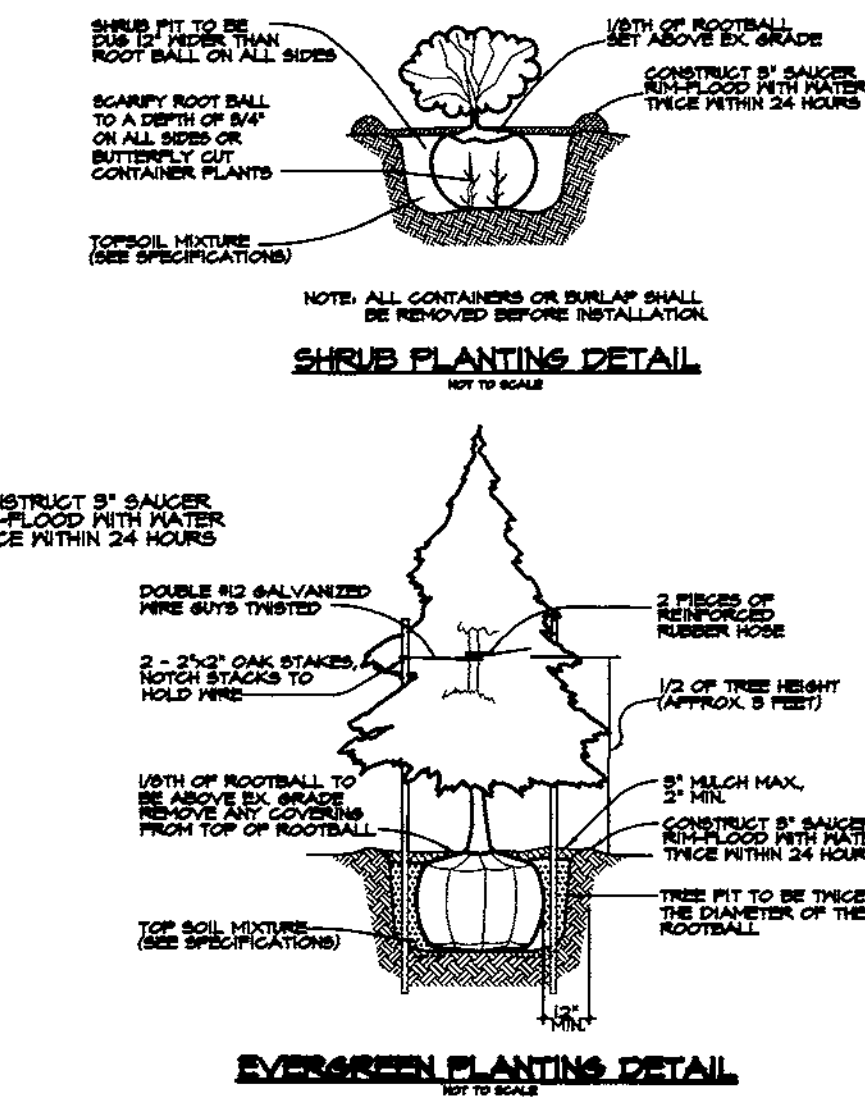
PARKING LOT INTERNAL LANDSCAPING	
PARKING LOT	1
NUMBER OF PARKING SPACES	43
NUMBER OF SHADE TREES/ISLANDS REQUIRED (1/20 SPACES)	2
NUMBER OF TREES PROVIDED	
SHADE TREES	3**
ORNAMENTAL TREES (2:1 SUBSTITUTION)	2**
NUMBER OF ISLANDS REQUIRED	2



PLANT LIST					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
PA	12	PLATANUS x ACERIFOLIA 'BLOODGOOD' / BLOODGOOD LONCHITIS PLANE	3-3 1/2' CAL	B4B	-
CJ	2	CERODIFHYLLUM JAPONICUM / KATSURATREE	2 1/2-3' CAL	B4B	-
PO	4	PICEA OMORIKA / SERBIAN SPRUCE	6-8'	B4B	PLANT 12' O.C.
PS	2	PINUS STROBUS / WHITE PINE	6-8'	B4B	PLANT 12' O.C.
MS	4	MAGNOLIA x SOULANGIANA / SAUCER MAGNOLIA	8-10'	B4B	MULTISTEMMED
CF	2	CARNUS FLORIDA / FLOWERING DOGWOOD	8-10'	B4B	WHITE FLOWERS
VD	34	VIBURNUM DILATATUM 'GATSKILL' / GATSKILL LINDEN VIBURNUM	30-36"	B4B	PLANT 6' O.C.
JC	46	JUNIFERUS CHINENSIS 'FEITZERIA' / COMPACT JUNIFER	30-36"	CONT.	PLANT 5' O.C.
IVF	13	ILEX x VERTICILLATA 'HARVEST RED' / HARVEST RED WINTERBERRY	24-30"	CONT.	PLANT 6' O.C.
IVM	1	ILEX x VERTICILLATA 'APOLLO' / APOLLO WINTERBERRY HOLLY	24-30"	CONT.	MALE HOLLY

**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 (AAU) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, spruce-like injuries, abrasions 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 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 Guidelines for Baltimore-Washington Metropolitan Area (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 appendices.
- Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance 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.
- 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.
- 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.
- All shrubs and groundcover areas shall be planted in continuous prepared planting beds mulched with composted hardwood mulch as detailed and specified except where noted on plans.
- Positive drainage shall be maintained in planting beds (minimum 2 percent slope).
- Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.
- Seed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific groundcover to be treated.
- Mulch: Groundcover beds should be mulched with minimum 2 inches of shredded composted hardwood, or as specified on the details, whichever is greater.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded.
- This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.



**NOTES:**

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE.
- FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING ONLY MUST BE POSTED AS PART OF THE DPM DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$8570.
- THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- THIS PLAN IS IN CONFORMANCE WITH BA-71-14-V DECISION AND ORDER CONDITIONS.

**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.

Christine A. Richards  
 NAME DATE 6-28-99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*[Signature]* 7/19/99  
 DIRECTOR DATE

*[Signature]* 7/9/99  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

*[Signature]* 7/16/99  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

DATE NO. REVISION

OWNER / DEVELOPER

MJF ASSOCIATES L.L.P.  
 5550 STERRETT PLACE, SUITE 312  
 COLUMBIA, MARYLAND 21044  
 (410) 730-9041

PROJECT CENTRE PARK 100 OFFICE BUILDING

AREA COLUMBIA 100 OFFICE RESEARCH PARK PARCEL A-2 TAX MAP 30 ZONED POR 2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE LANDSCAPE PLAN

**RIEMER MUEGGE & ASSOCIATES, INC.**  
 ENGINEERING ENVIRONMENTAL SERVICES PLANNING SURVEYING  
 8818 Centre Park Drive, Columbia, Maryland 21045  
 tel 410.997.8900 fax 410.997.9282

DESIGNED BY: RAF  
 DRAWN BY: AJL  
 PROJECT NO: 99029 / LSCP.DWG  
 DATE: JUNE 23, 1999  
 SCALE: 1" = 30'  
 DRAWING NO. 6 OF 6

AS-BUILT 4/14/00 SDP-99-110

AS-BUILT CERTIFICATE

*[Signature]*  
 CHRISTOPHER J. REID #19949

4-14-00  
 DATE