SITE DEVELOPMENT PLAN

COLUMBIA 100
OFFICE RESEARCH PARK
PARCEL N
SECTION 1, AREA2

2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

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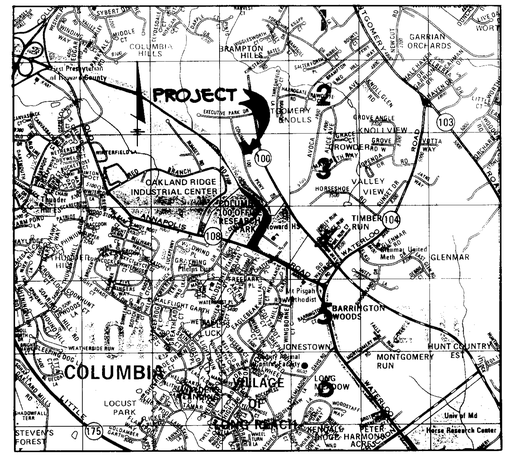


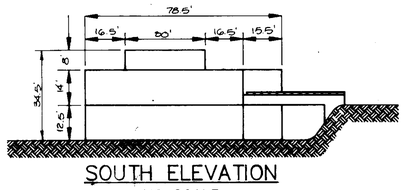
VICINITY MAP
SCALE : 1"=2000'

GENERAL NOTES

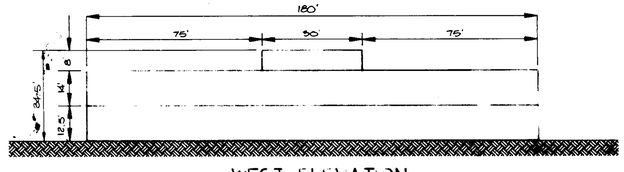
1. ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
2. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, i.e., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
3. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FROM BEST AVAILABLE INFORMATION. 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.
4. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
5. CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:

MISS UTILITY	1-800-257-7777
C&P TELEPHONE COMPANY	725-9976
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATION DIVERSION	393-3553
BALTIMORE GAS & ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	992-7272

6. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
7. ALL PIPE ELEVATIONS SHOWN ARE INVERT (I) ELEVATIONS.
8. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
9. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
10. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
11. TOPO TAKEN FROM FIELD RUN SURVEY DATED JUNE, 1989 BY: RIEMER MUEGGE & ASSOCIATES, INC.
12. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
13. ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
14. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
15. THE OWNER SHALL PROVIDE A SEPARATE AND INDEPENDENT SEWER CONNECTION FOR EACH TENANT OR OCCUPANT OF ANY BUILDING, SHOWN ON THIS SITE DEVELOPMENT PLAN, WHO WILL DISCHARGE NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM IF THIS WASTE IS REGULATED UNDER SECTION 18.122A OF THE HOWARD COUNTY CODE. EACH SEPARATE AND INDEPENDENT SEWER CONNECTION SHALL INCLUDE A STANDARD MANHOLE AND OTHER WASTE PRETREATMENT DEVICES AS REQUIRED AND APPROVED BY HOWARD COUNTY. WASTE LINES ON THE INTERIOR OF THE BUILDING SHALL BE DESIGNED, CONSTRUCTED OR MODIFIED SUCH THAT NON-DOMESTIC WASTE WILL BE DISCHARGED TO THE SEPARATE AND INDEPENDENT SEWER CONNECTION. NO TENANT OR OCCUPANT OF ANY BUILDING SHOWN ON THIS SITE DEVELOPMENT PLAN SHALL DISCHARGE REGULATED NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM PRIOR TO INSTALLATION OF THE SEPARATE AND INDEPENDENT SEWER CONNECTION AND RELATED INTERIOR WASTE LINES. THE ABOVE REQUIREMENTS SHALL APPLY TO ALL INITIAL AND FUTURE OCCUPANTS OR TENANTS.
16. STORMWATER MANAGEMENT FOR THIS DEVELOPMENT IS PROVIDED UNDER F-87-82. THE FACILITY IS A RETENTION POND.
17. THE OWNER SHALL PROVIDE MAINTENANCE FOR THE WATER QUALITY STRUCTURES PROVIDED FOR THIS DEVELOPMENT.
18. PREVIOUS OFFICE OF PLANNING AND ZONING FILE NOS.- F-87-82

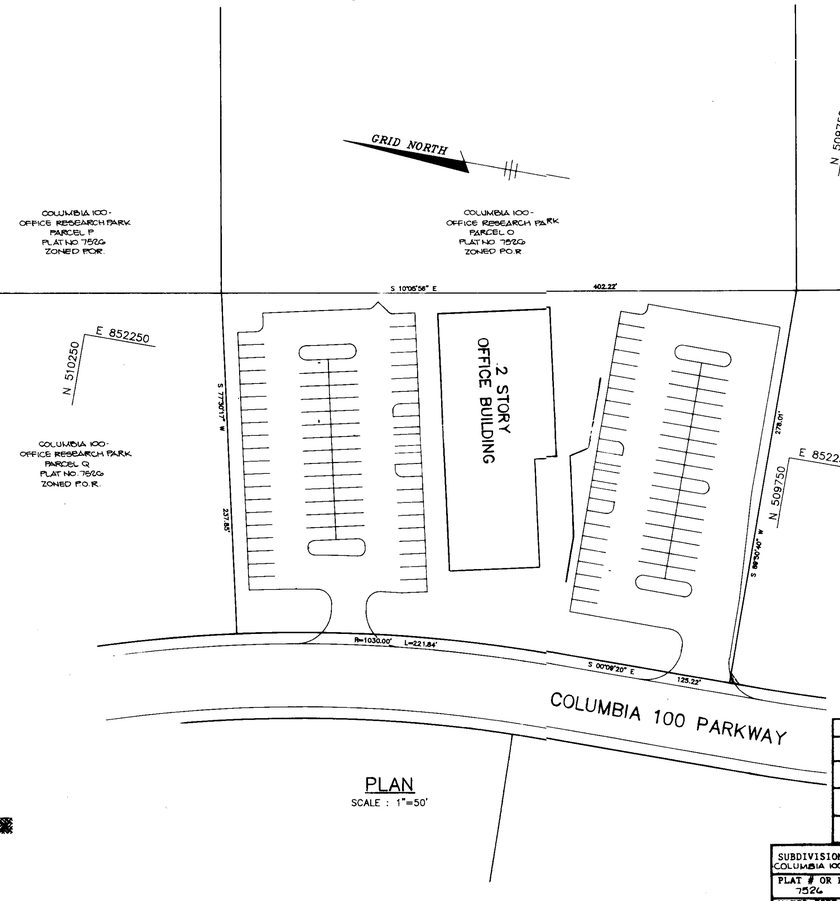


SOUTH ELEVATION
NO SCALE



WEST ELEVATION
NO SCALE

NOTE: 30'x30' STRUCTURE ON ROOF IS FOR SCREENING OF MECHANICAL EQUIPMENT



PLAN
SCALE : 1"=50'

SITE TABULATION

AREA OF PARCEL:	2.145 ACRES 93,425 SQ.FT.
PRESENT ZONING:	P.O.R.
PROPOSED USE:	2 STORY OFFICE BUILDING
BUILDING COVERAGE ALLOWED:	32,699 SQ.FT. (35% OF TOTAL SITE AREA)
PROPOSED BUILDING COVERAGE:	12,952 SQ.FT. (13.86% OF TOTAL SITE AREA)
PROPOSED TOTAL SQUARE FOOTAGE OF OFFICE: 1ST FLOOR - 2ND FLOOR -	12,952 SQ.FT. 12,952 SQ.FT.
TOTAL BUILDING AREA:	25,904 SQ.FT.
NUMBER OF PARKING SPACES REQUIRED: OFFICE @ 7/10 EMPLOYEES WORKING AT ONE TIME	119 SPACES (170 EMPLOYEES)
NUMBER OF PARKING SPACES PROVIDED:	121 SPACES
NUMBER OF HANDICAP SPACES REQUIRED:	5 SPACES
NUMBER OF HANDICAP SPACES PROVIDED:	6 SPACES
OPEN SPACE REQUIRED: (INCLUDING INTERNAL LANDSCAPED ISLANDS)	18,685 SQ.FT. (20% OF TOTAL SITE AREA)
OPEN SPACE PROVIDED:	26,136 SQ.FT. (28% OF TOTAL SITE AREA)
LANDSCAPED ISLANDS REQUIRED:	2,172 SQ.FT. (5% OF PARKING AREA)
LANDSCAPED ISLANDS PROVIDED:	2,700 SQ.FT. (6.2% OF PARKING AREA)
AREA OF PARKING:	43,440 SQ.FT.

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
PARCEL N	8880 COLUMBIA 100 PARKWAY

SUBDIVISION NAME COLUMBIA 100 OFFICE RESEARCH PARK			SECT./AREA 1/2	LOT/PARCEL # PARCEL N	
PLAT # OR L/F 7526	BLOCK # 12 & 18	ZONE P.O.R	TAX/ZONE MAP 30	ELEC. DIST. 2ND	CENSUS TR 6023.02
WATER CODE G02			SEWER CODE 3687400		

8-30-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 10-11-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING.

DIRECTOR — DATE 10.23.89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/19/89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 9.29.89

CHIEF, BUREAU OF ENGINEERING — DATE 9.29.89

DATE	NO	REVISION

OWNER/DEVELOPER
PARCEL N ASSOCIATES
10320 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21045

PROJECT: COLUMBIA 100 OFFICE RESEARCH PARK
PARCEL N
SECTION 1, AREA 2
A TWO STORY OFFICE BUILDING

AREA TAX MAP 30 ZONED P.O.R. PLAT NO 7526
COLUMBIA 100 OFFICE RESEARCH PARK SECT 1, AREA 2 PARCEL N
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: TITLE SHEET

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

9.13.89
DATE

ARTHUR E. MUEGGE #6107

DESIGNED BY: W.C.W.	
DRAWN BY: G.D.H.	
PROJECT NO. 50002	
DATE: MAY 18, 1989	
SCALE: AS SHOWN	
DRAWING NO. 1 OF 6	

SDP-89-230

LEGEND

- P-1 PAVING
- P-3 PAVING
- BRICK PAVERS (SEE DETAIL SHEET 4)
- CONCRETE SIDEWALK OR PAVING
- ST'D C&G — STANDARD 7" COMBINATION CURB & GUTTER
- REV. C&G — REVERSE 7" COMBINATION CURB & GUTTER
- BIT. CURB — BITUMINOUS CURB
- DOUBLE FIXTURE LIGHT POLE
- SINGLE FIXTURE LIGHT POLE

NOTES:
1. ALL RADII 5' UNLESS OTHERWISE NOTED.
2. ALL DIMENSIONS TO FACE OF BUILDING, FACE OF CURB OR CENTERLINE.

COLUMBIA 100-
OFFICE RESEARCH PARK
PARCEL R
PLAT NO. 7526
ZONED P.O.R

COLUMBIA 100
OFFICE RESEARCH PARK
PARCEL L
PLAT NO. 7526
ZONED P.O.R

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 10-11-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING.

DIRECTOR — DATE 10.23.89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/13/89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 9.29.89

CHIEF, BUREAU OF ENGINEERING — DATE 9-29-89

DATE	NO.	REVISION

OWNER/DEVELOPER
PARCEL N ASSOCIATES
10320 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21045

PROJECT: COLUMBIA 100 OFFICE RESEARCH PARK
PARCEL N
SECTION 1, AREA 2
A TWO STORY OFFICE BUILDING

AREA: TAX MAP 30 ZONED P.O.R. PLAT NO. 7526
COLUMBIA 100 OFFICE RESEARCH PARK SEC. 1, AREA 2 PARCEL N
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE: SITE DEVELOPMENT PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

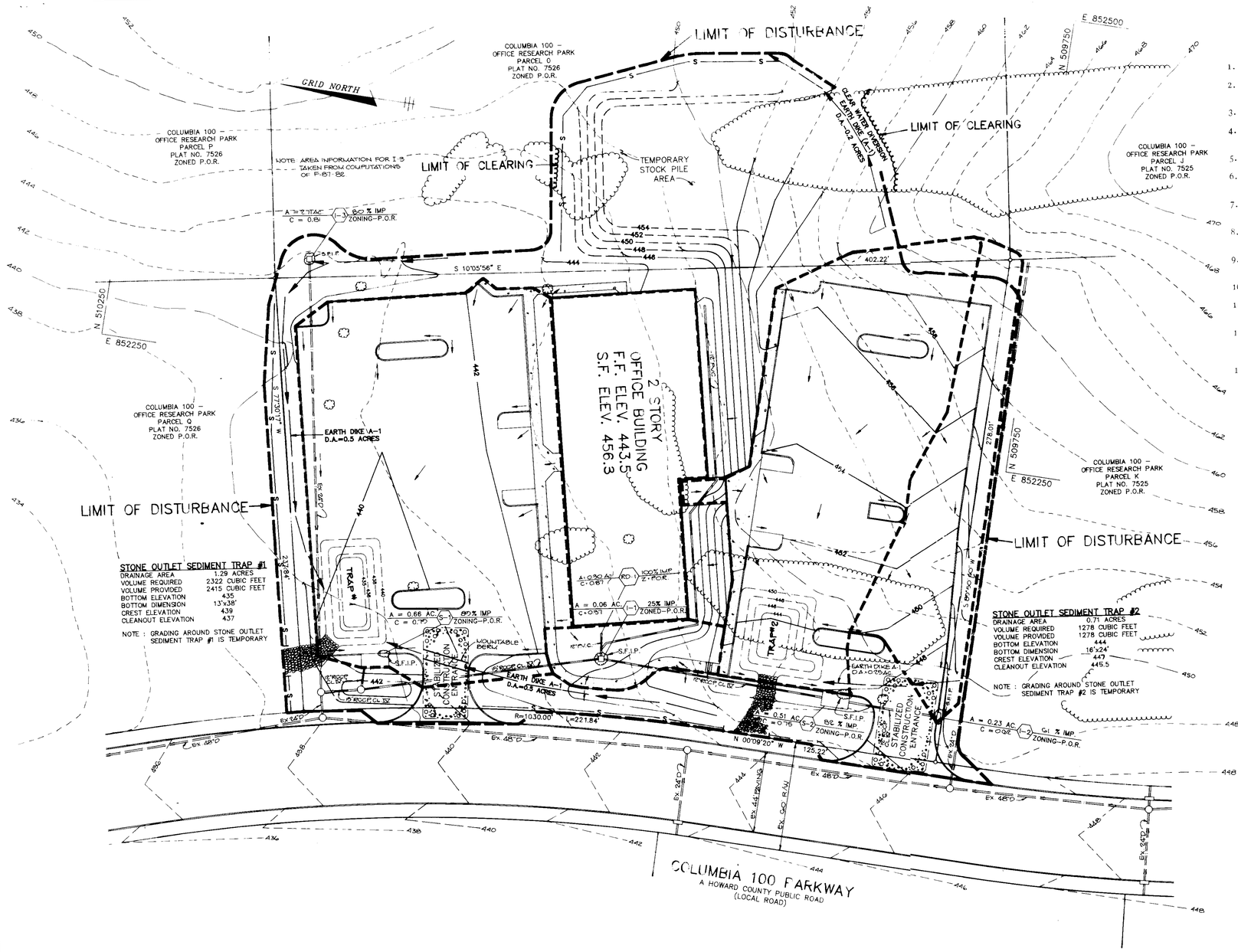
8-30-89

9.13.89
DATE

ARTHUR E. MUEGGE #8707

DESIGNED BY:	W.C.W.
DRAWN BY:	C.A.D. /M.A.D.
PROJECT NO.	55502
DATE	MAY 18, 1989
SCALE:	1"=30'
DRAWING NO.	2 OF 6

SDP-89-230



STONE OUTLET SEDIMENT TRAP #1

DRAINAGE AREA	1.29 ACRES
VOLUME REQUIRED	2322 CUBIC FEET
VOLUME PROVIDED	2415 CUBIC FEET
BOTTOM ELEVATION	435
BOTTOM DIMENSION	13'x38'
CREST ELEVATION	439
CLEANOUT ELEVATION	437

NOTE : GRADING AROUND STONE OUTLET SEDIMENT TRAP #1 IS TEMPORARY

STONE OUTLET SEDIMENT TRAP #2

DRAINAGE AREA	0.71 ACRES
VOLUME REQUIRED	1278 CUBIC FEET
VOLUME PROVIDED	1278 CUBIC FEET
BOTTOM ELEVATION	444
BOTTOM DIMENSION	16'x24'
CREST ELEVATION	447
CLEANOUT ELEVATION	445.5

NOTE : GRADING AROUND STONE OUTLET SEDIMENT TRAP #2 IS TEMPORARY

LEGEND

- S—S—S SILT FENCE
- EARTH DIKE
- DRAINAGE AREA LINES
- LIMIT OF DISTURBANCE
- S.F.I.P. STONE FILTER INLET PROTECTION

NOTE: LETTERS OF PERMISSION TO GRADE IN PARCEL K, PARCEL O AND PARCEL Q TO BE OBTAINED BY THE DEVELOPER.

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
2. Install stabilized construction entrance at the southern entrance by removing the existing curb and gutter as necessary----------(½ day)
3. Install all sediment control devices----------(2 days)
4. Rough grade site maintaining positive flow to the sediment traps in the designated area on Parcel 'O'----------(10 days)
5. Begin construction of the retaining wall and the other utilities.
6. As soon as the retaining wall is constructed, backfill the wall and rough grade area in the upper parking lot----------(4 days)
7. Remove curb and gutter at the northern entrance and install a stabilized construction entrance----------(½ day)
8. Block all the inlets with stone filter inlet protection and remove the two sediment traps----------(3 days)
9. Stabilize the disturbed area in accordance with temporary seeding notes.
10. Begin building and curb and gutter construction.
11. Upon completion of curb and gutter installation, fine grade the site and begin paving.
12. Once the paving is completed, upon approval of the Howard County Department of Public Works Sediment Control Inspector, remove all sediment control devices----------(1 day)
13. Stabilize all the disturbed area in accordance with permanent seeding notes.

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 NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER — DATE 7.12.89

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."

ENGINEER — DATE 9.13.89

REVIEWED FOR HOWARD (NAME) S.C.D.
AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 9/21/89

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

HOWARD S.C.D. — DATE 9/21/89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 10-11-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 10.23.89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 9/12/89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 9.29.89

CHIEF, BUREAU OF ENGINEERING — DATE 9.29.89

DATE	NO	REVISION

OWNER/DEVELOPER
PARCEL N ASSOCIATES
10320 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21045

PROJECT COLUMBIA 100 OFFICE RESEARCH PARK
PARCEL N
SECTION 1, AREA 2
A TWO STORY OFFICE BUILDING

AREA TAX MAP 30 ZONED P.O.R. PLAT NO. 7526
COLUMBIA 100 OFFICE RESEARCH PARK SECT. 1, AREA 2 PARCEL N
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE GRADING, SEDIMENT CONROL AND DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

9.13.89
DATE

ARTHUR E. MUEGGE #5107

DESIGNED BY	W.C.W.
DRAWN BY	C.A.D.
PROJECT NO	50008
DATE	MAY 18, 1989
SCALE	1" = 30'
DRAWING NO	3 OF 6

8-30-89

SDP-89-230

SEDIMENT CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction (992-2437)
2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
3. For any initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:

Total Area of Site	2.16 acres
Area Disturbed	2.16 acres
Area to be roofed or paved	1.72 acres
Area to be vegetatively stabilized	0.00 acres
Total Cut	5165 Cu. yds.
Total Fill	2987 Cu. yds.

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
10. Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
11. Sediment will be removed from traps when its depth reaches the clean out elevation shown on the plans.

TEMPORARY SEEDING NOTES

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

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

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

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2½ bushel per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Or use sod.

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.

Refer to the 1983 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:

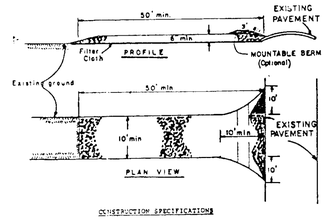
1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).

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

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

Mulching: Apply 1½ to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

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

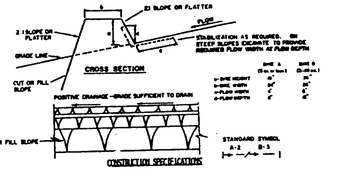


CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 1" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE

NO SCALE



CONSTRUCTION SPECIFICATIONS

1. ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
2. ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
3. TOP WIDTH MAY BE REDUCED AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
4. FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF ERODING. RUNOFF SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT ADEQUATELY STABILIZED.
6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN BORDERING REGIONS. (B) FLOW CHANNEL AS PER THE CHART BELOW.

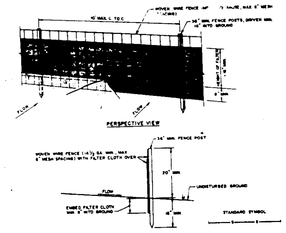
FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1	.5-5.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	5.1-5.0%	SEED AND STRAW MULCH	SEED USING JUTE, OR EXCELSIOR, SOD, 2" STONE
3	5.1-8.0%	SEED WITH JUTE, OR SOD; 2" STONE	LINED RIP-RAP 6-8"
4	8.1-20%	LINED RIP-RAP 6-8"	ENGINEERING DESIGN

A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
B. RIP-RAP TO BE 6-8 INCHES IN A LAYER AT LEAST 8 INCHES THICKNESS AND PRESSED INTO THE SOIL.
C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

EARTH DIKE

NO SCALE



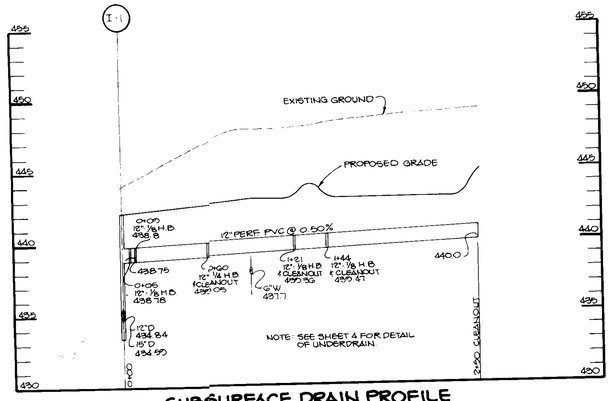
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

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

POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE (14½ GA. MINIMUM) 6' MAX. SPACING
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL

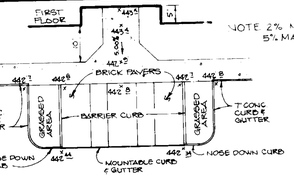
SILT FENCE

NO SCALE



SUBSURFACE DRAIN PROFILE

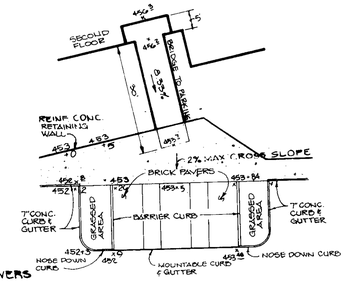
SCALE HOR. 1"=50'
VERT. 1"=5'



NOTE 2% MAX CROSS SLOPE
5% MAX. FORWARD SLOPE ON ALL ACCESS SIDEWALKS

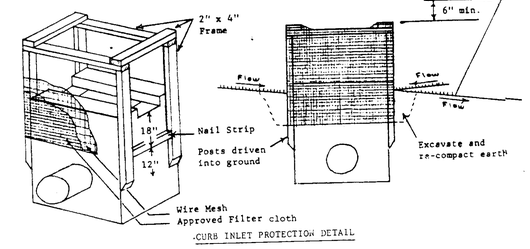
ENTRANCE #1 DETAIL

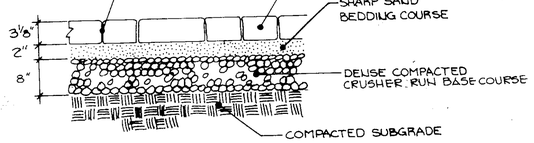
NO SCALE



ENTRANCE #2 DETAIL

NO SCALE

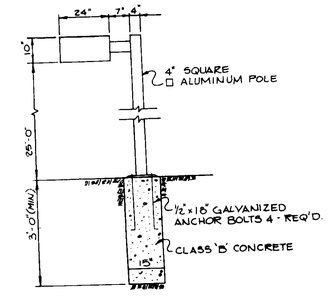




UNISTONE PAVING SECTION

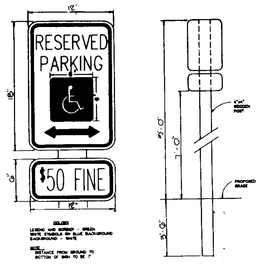
NO SCALE

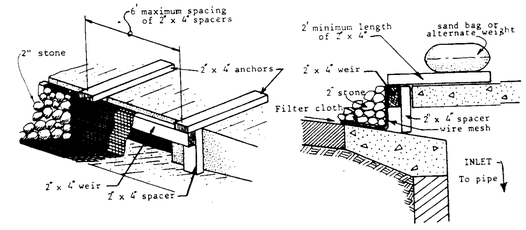
1. ALL LIGHT FIXTURES TO BE SINGLE LUMINARE 400 WATT MERCURY TYPE WITH METAL POLES AND DIRECTED DOWNWARD.
2. LOCATIONS OF LIGHT FIXTURES ARE ON THE PLAN AND ARE SHOWN THUS ⊕
3. LIGHTS TO BE MODULE II TYPE AS MANUFACTURED BY MOLDCAST OR APPROVED EQUAL.
4. POLE AND FIXTURE TO HAVE BLACK POLYESTER ENAMEL FINISH.
5. POLE TO BE LOCATED 3' BACK FROM BACK OF CURB.



LIGHT POLE DETAIL

NO SCALE





Construction Specifications

I. Materials

A. Wooden frame is to be constructed of 2" x 4" construction grade lumber.

B. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.

C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, EOS, 40-85, to allow sufficient passage of water and removal of sediment.

4. Stone is to be 2" in size and clean, since fines would clog the cloth.

II. Procedure

A. A swale, ditchline or yard inlet protection.

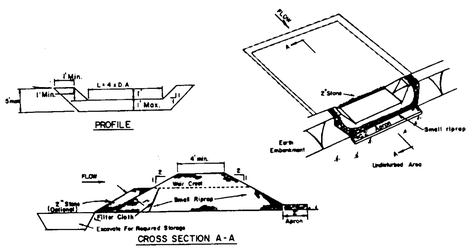
1. Excavate completely around inlet to a depth of 18" below notch elevation.
2. Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
3. Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
4. Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
5. Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
6. If the inlet is not in a low point, construct a compacted earth dike in the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
7. This structure must be inspected frequently and the filter fabric replaced when clogged.

B. Curb Inlet Protection.

1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4') to the 2" x 4" weir (measuring throat length plus 2') as shown on the standard drawing.
2. Place a piece of approved filter cloth (40-85 sieve) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" weir.
3. Securely nail the 2" x 4" weir to 9" long vertical spacers to be located between the weir and inlet face (max. 6' apart).
4. Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations. These 2" x 4" anchors shall extend across the throat and be held in place by sandbags or alternate weight. inlet top and be held in place by sandbags or alternate weight.
5. The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place a clear 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.

STONE FILTER INLET PROTECTION

NO SCALE



OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth.

CONSTRUCTION SPECIFICATIONS FOR ST-V

1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap on embedded filter cloth in the riprap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to ½ the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner than erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

Maximum Drainage Area: 5 Acres

STONE OUTLET SEDIMENT TRAP

NO SCALE

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 NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

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 — ENGINEER — 9-13-89 DATE

REVIEWED FOR HOWARD — NAME — S.C.D.
AND MEETS TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE — 9/21/89 DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Roberts — HOWARD S.C.D. — 9/21/89 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.
COUNTY HEALTH OFFICER — 10-11-89 DATE

APPROVED: HOWARD COUNTY DEPT OF PLANNING AND ZONING.
DIRECTOR — 10.22.89 DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — 10/19/89 DATE

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR — 9.29.89 DATE
CHIEF, BUREAU OF ENGINEERING — 9-29-89 DATE

DATE	NO	REVISION

OWNER/DEVELOPER
PARCEL N ASSOCIATES
10320 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21045

PROJECT COLUMBIA 100 OFFICE RESEARCH PARK
PARCEL N
SECTION 1, AREA 2
A TWO STORY OFFICE BUILDING

AREA TAX MAP 30 ZONED POR PLAT NO 7592
COLUMBIA 100 OFFICE RESEARCH PARK SEC 1, AREA 2 PARCEL N
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE
SEDIMENT CONTROL NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

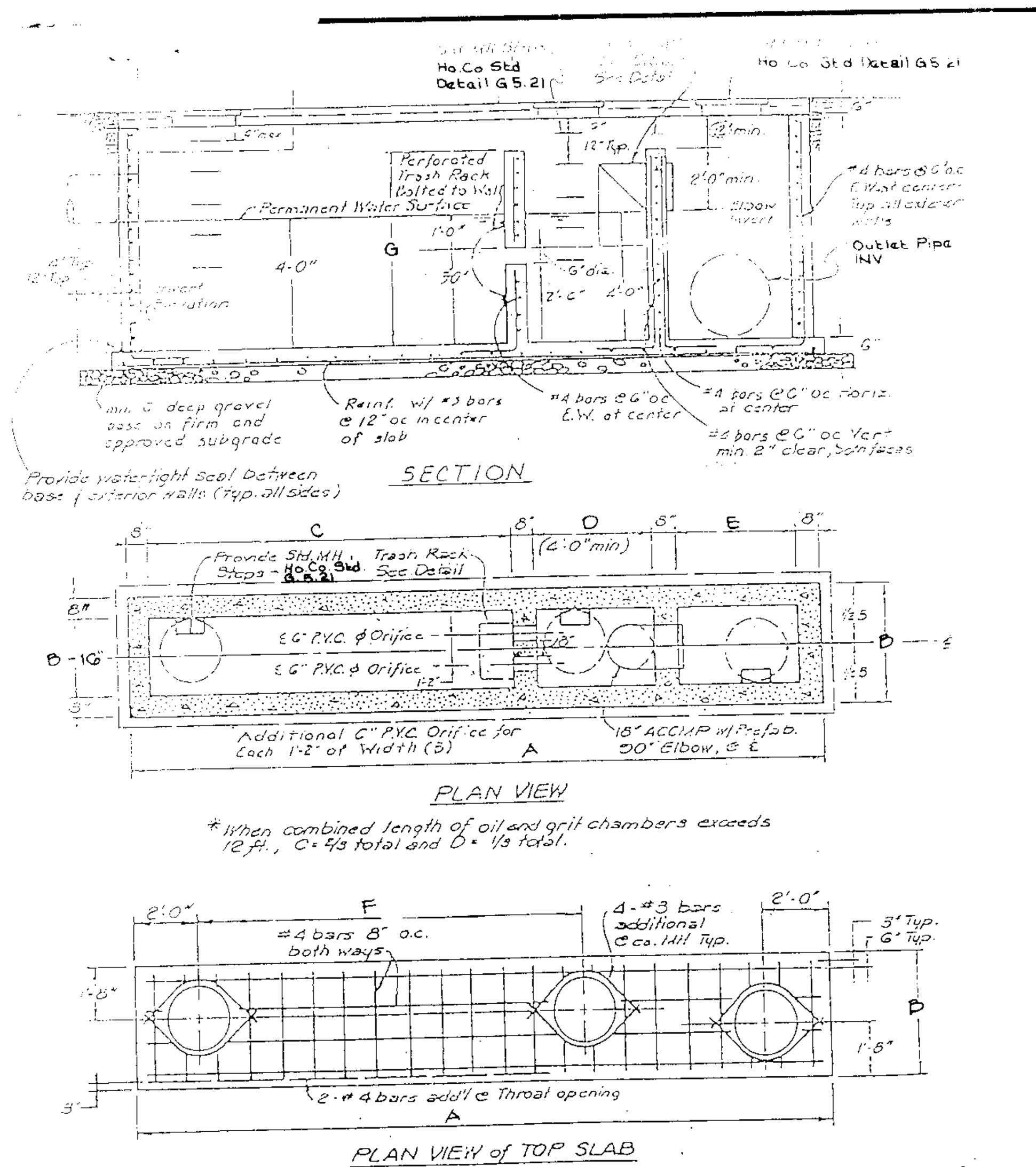
7-13-89 DATE
Arthur E. Muegge #8159

DESIGNED BY	W.C.W.
DRAWN BY	M.A.D.
PROJECT NO	90002
DATE	MAY 18, 1989
SCALE	AS SHOWN
DRAWING NO	4 OF

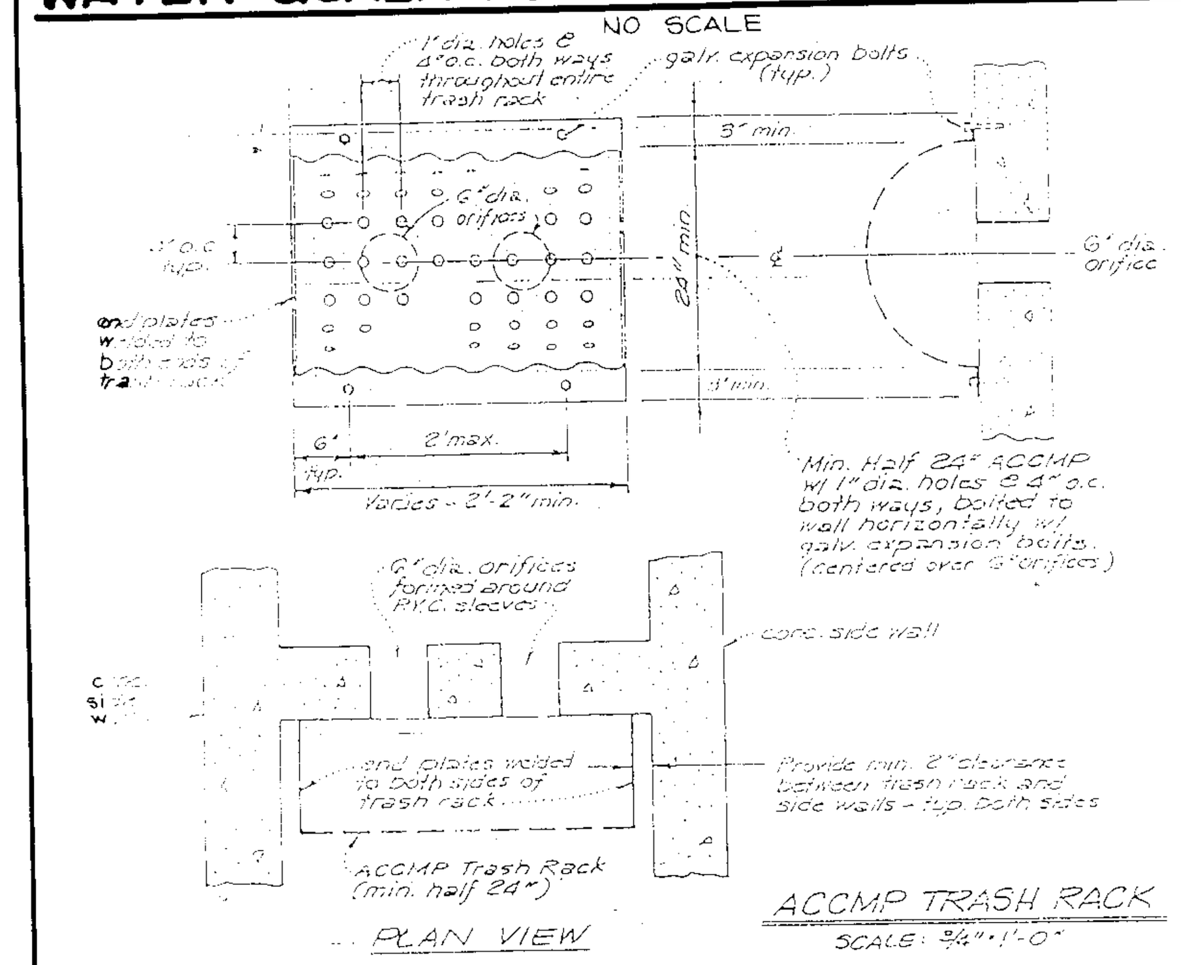
8-30-89

SDP-89-230

MARYLAND BLUEPRINT CO., INC.

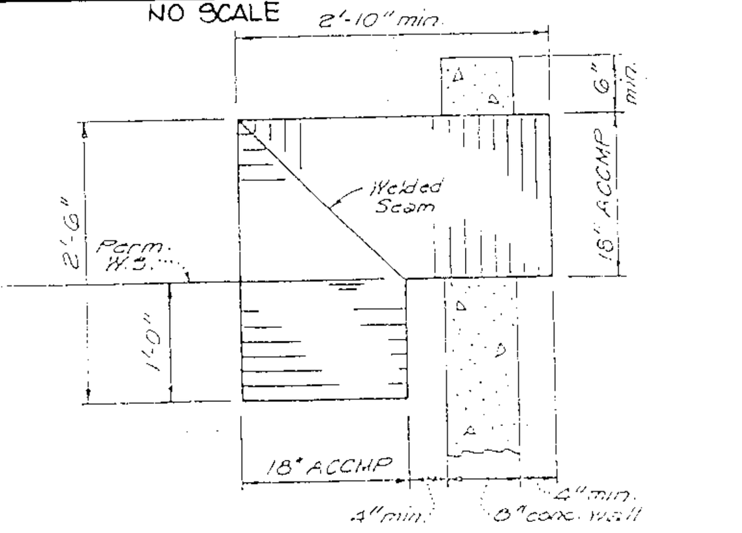


WATER QUALITY CONTROL STRUCTURE S-1 & S-2



ACCMP TRASH RACK S-1 & S-2

NO SCALE



90°-ACCMP ELBOW S-1 & S-2

NO SCALE

STRUCTURE NO.	DIMENSIONS A	B	C	D	E	F	G	FLOOR SLAB ELEV.	18" ACCMP ELBOW INV.	OUTLET PIPE INV.
S-1	14.17'	7.33'	3.50'	4.00'	4.00'	4.17'	5.90'	431.1	435.1	431.1
S-2	14.17'	7.33'	3.50'	4.00'	4.00'	4.17'	6.60'	436.08	440.08	436.08

DESIGN AND GENERAL NOTES:

1. Use poured-in place concrete for the entire structure.
2. Refer to Maryland State Highway Administration for materials and methods of construction.
3. Wall thickness shall be as follows:

   Minimum 8 inches thick for the first 8'-0" of depth, 12 inch thick walls between 8'-0" and 12'-0" of depth and 16 inch thick walls for depth greater than 12'-0". Depth to be measured from top of top slab to crown of outgoing pipe.
4. f'c = 3,500 psi at 28 days.
5. All reinforcing steel to be ASTM A615, GR.60.
6. For details concerning throat openings, refer to Howard County Standard Detail SD.4.01.
7. For details not noted in this standard, refer to Howard County Standard Detail SD.4.01.
8. The top 4 inches of walls may be brick masonry for leveling, if required. Brick masonry shall comply with the latest SHA specification.
9. When grate opening is used, refer to the appropriate SHA Standard for details. Details shall be shown on the plans.
10. When inside width of structure is greater than 4'-0", reinforcing shall be revised as needed.
11. When structure is subject to traffic loading, reinforcing shall be designed for the appropriate traffic loads. Design loads shall be indicated on the plan.
12. All inlets and incoming pipes shall be checked for possible backwater or tailwater problems.

CONSTRUCTION NOTES:

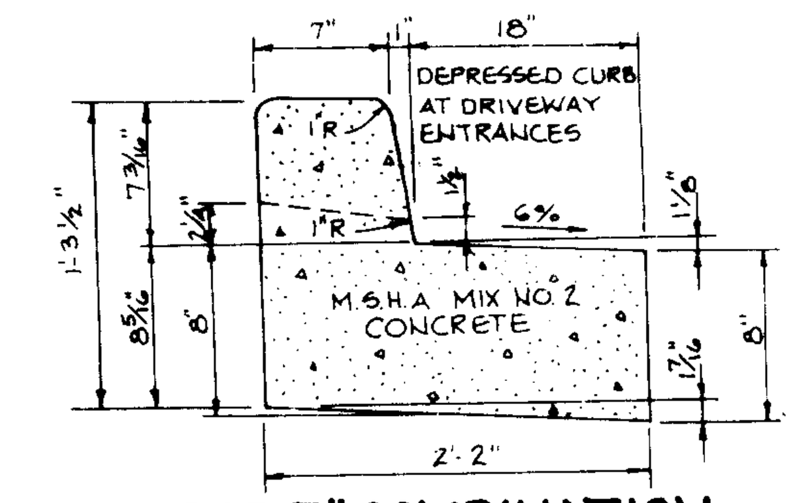
1. Silt and debris shall not be allowed to enter the structures until contributing drainage areas have been permanently stabilized.
2. All openings to structures shall be protected with the appropriate sediment control measures during construction.

INSPECTION NOTES:

1. Prior to start of construction on water quality structures, the Howard County Department of Public Works inspector must be called 48 hours in advance at 792-2630.
2. The Howard County Department of Public Works inspector must be notified (792-2630) at each of the following stages:
   - A. Approval of subgrade for footings.
   - B. Footing formed and steel set prior to pouring.
   - C. Structure sides formed and steel set prior to pouring.
   - D. Prior to top slab and manholes being set, Howard County Department of Public Works inspector must check structure and all debris and silt in structure removed.
   - E. When site is permanently stabilized and sediment control measures to protect inlet are to be removed.

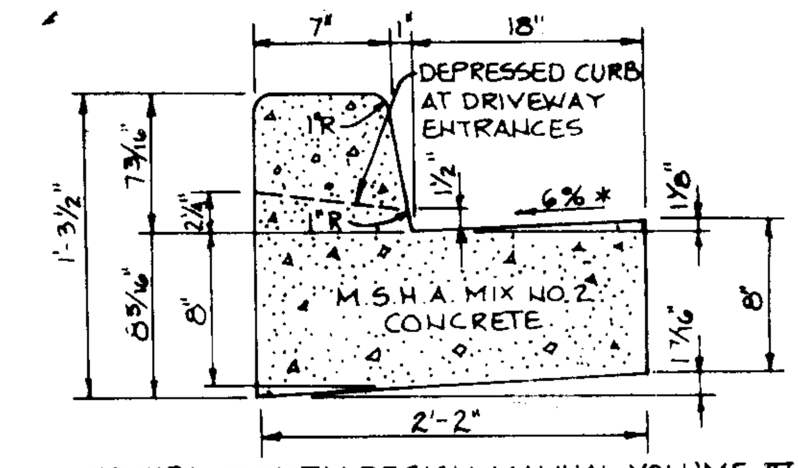
MAINTENANCE NOTES (WATER QUALITY STRUCTURE WASTE)

1. Water Quality Structures will require periodical cleaning. Owners of these facilities will have to clean them as needed or on a frequency that the County determines is appropriate. Owners of water quality structures will be notified by the County of the frequency of maintenance.
2. Maintenance of these facilities will consist of cleaning out the separator and disposal of the waste and the repair of the facility as needed. Periodic inspections of these facilities will be made by the County Stormwater Management group.
3. The disposal of the liquid and solid matter should be as follows:
   - A. All liquid material in the separator inlet shall be pumped into a suitable tank truck and disposed of at an approved sanitary district discharge manhole or be taken to an approved sewage treatment plant for discharge.
   - B. The solid material shall be landfilled in an approved sanitary landfill.
4. The inlet pipes, trash racks, grates, and structural parts shall be repaired as needed.



REVERSE 7" COMBINATION CURB AND GUTTER

NO SCALE

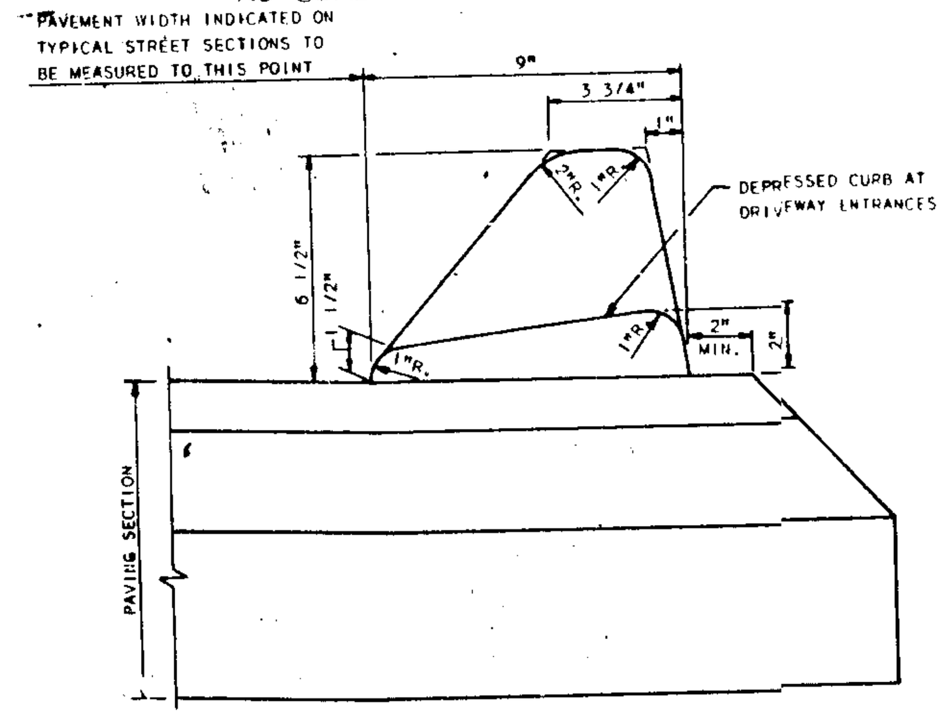


HOWARD COUNTY DESIGN MANUAL VOLUME IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-3.01)

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.

STANDARD 7" COMBINATION CURB AND GUTTER

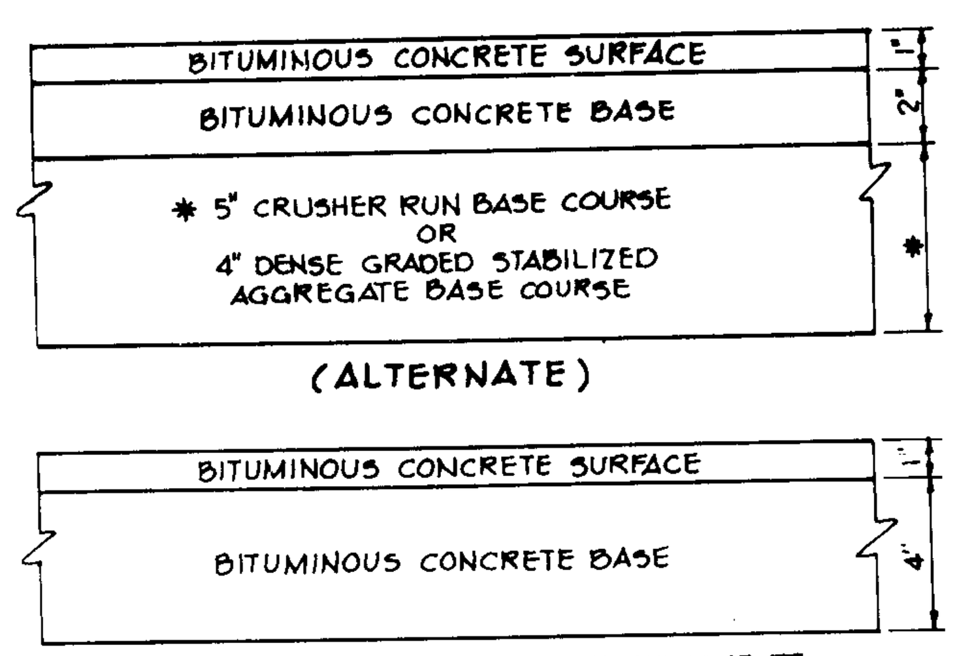
NO SCALE



BITUMINOUS CURB

NO SCALE

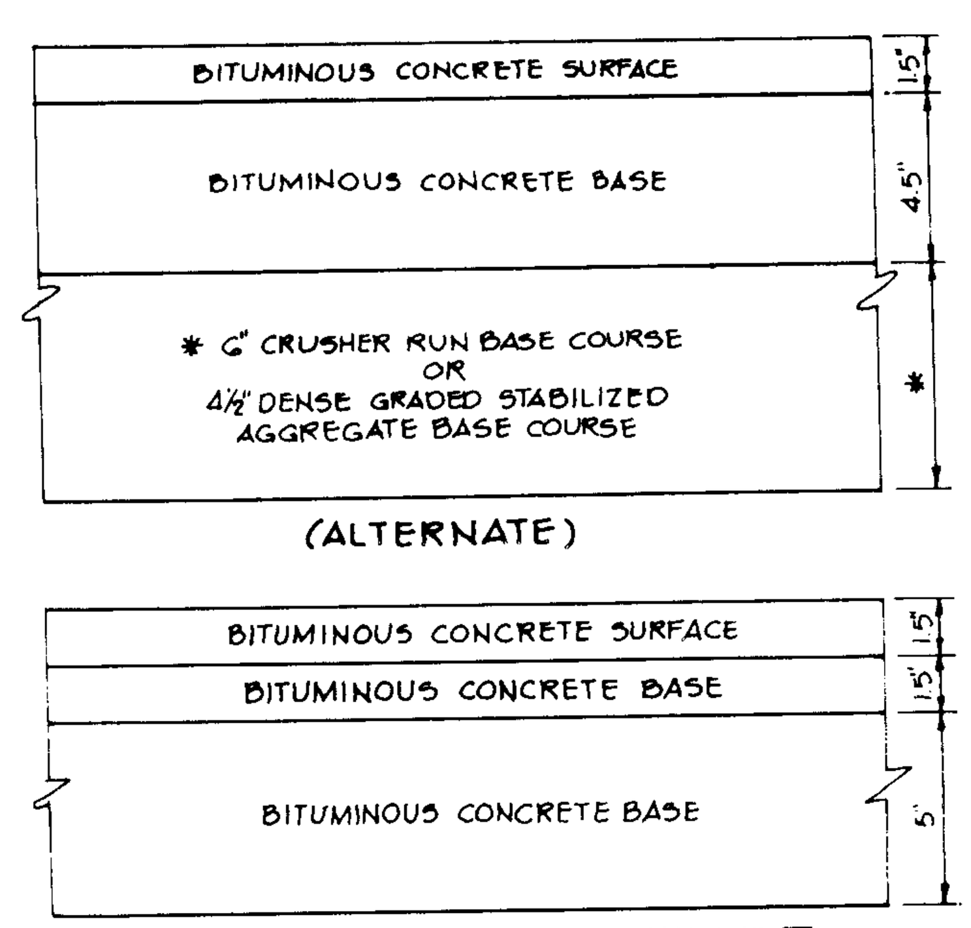
NOTE: TO BE USED IN VICINITY OF EXISTING ACCESS ESMT. AS SHOWN ON SHEET 2 OF 6



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

P-1 PAVING

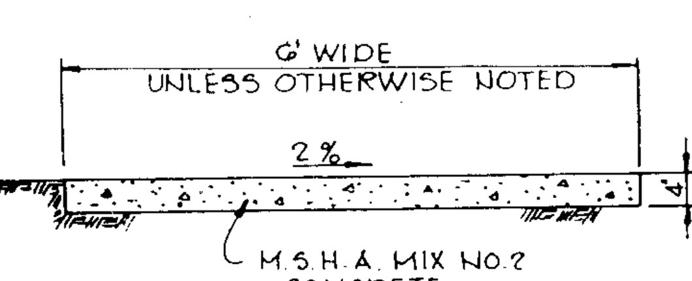
NO SCALE



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

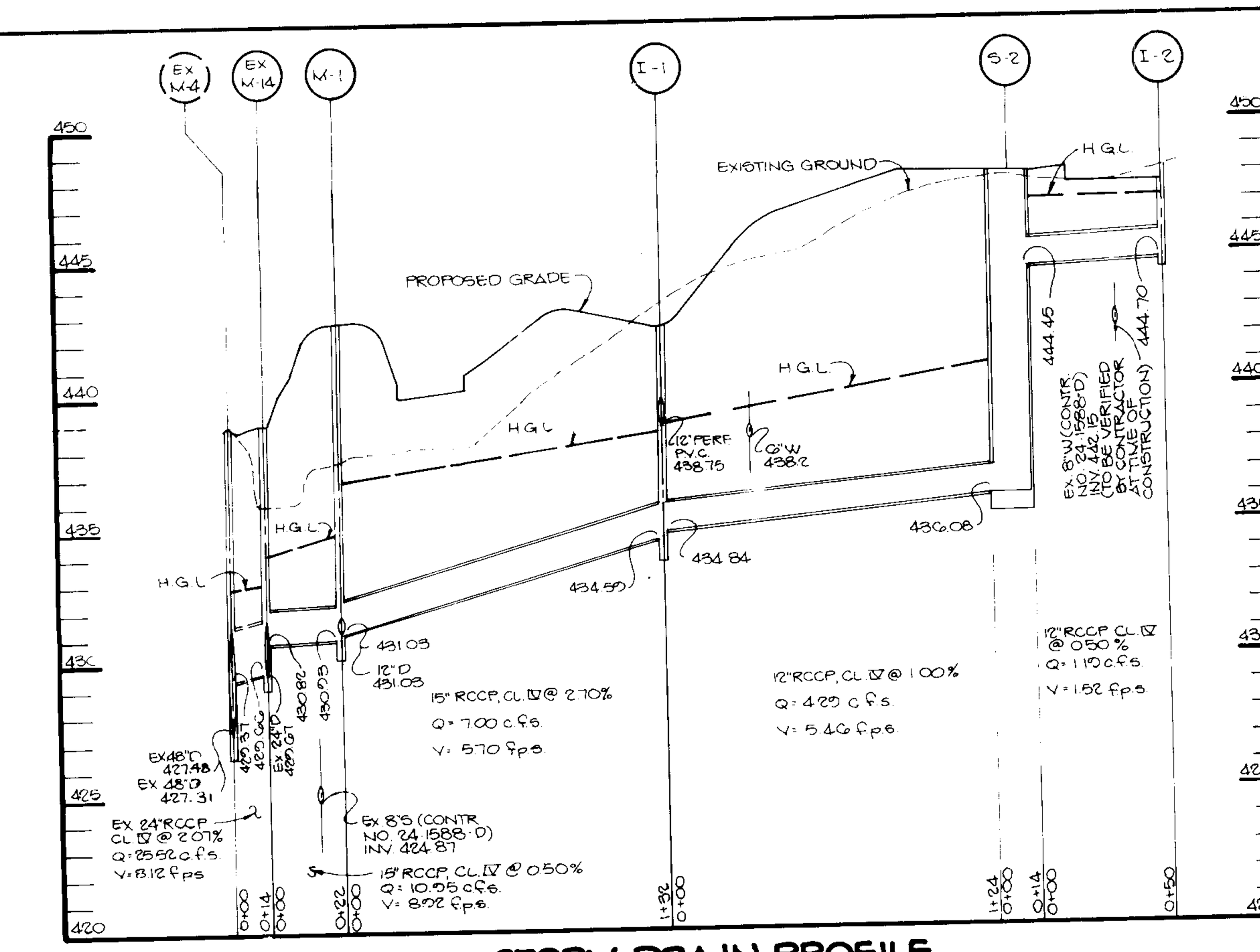
P-3 PAVING

NO SCALE



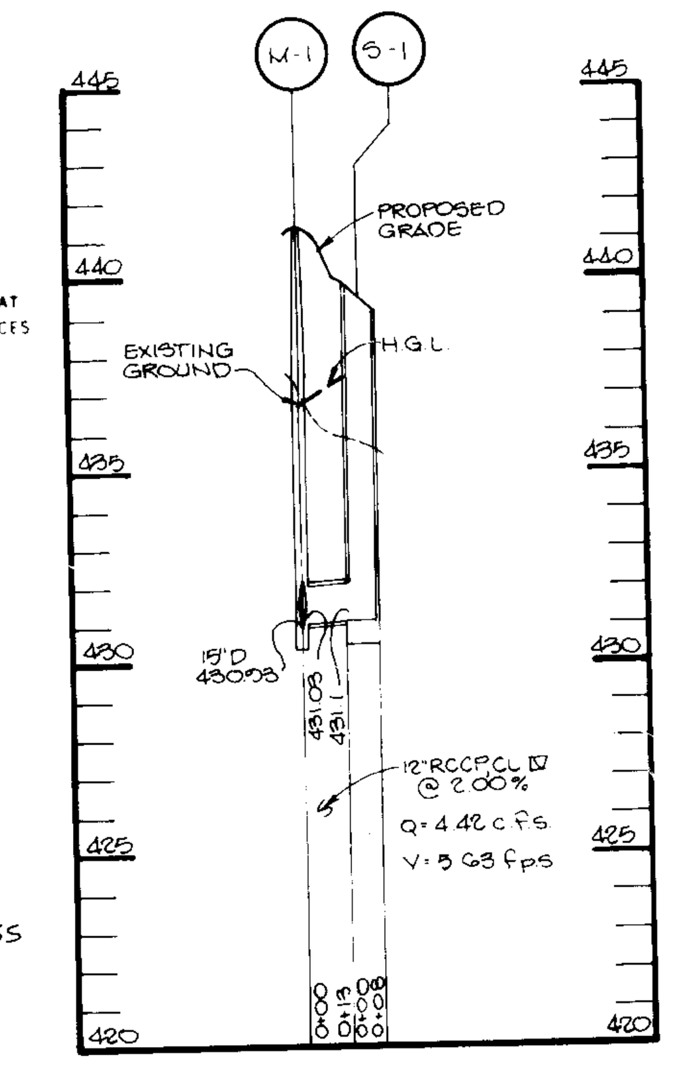
SIDEWALK

NO SCALE



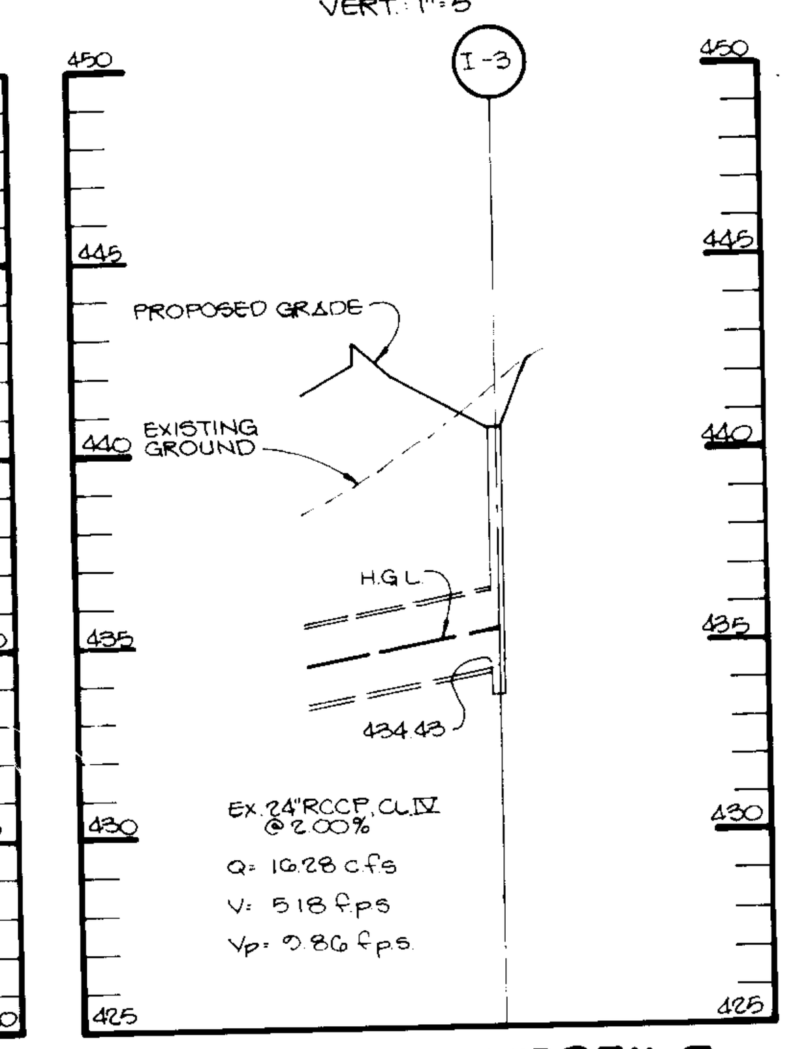
STORM DRAIN PROFILE

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



STORM DRAIN PROFILE

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



STORM DRAIN PROFILE

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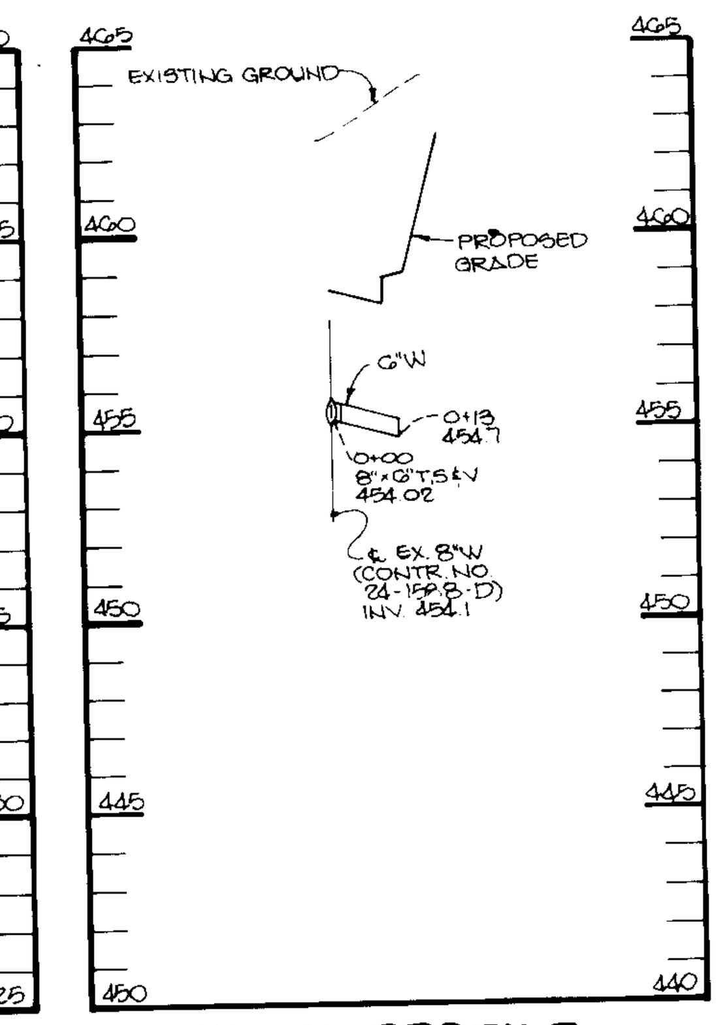
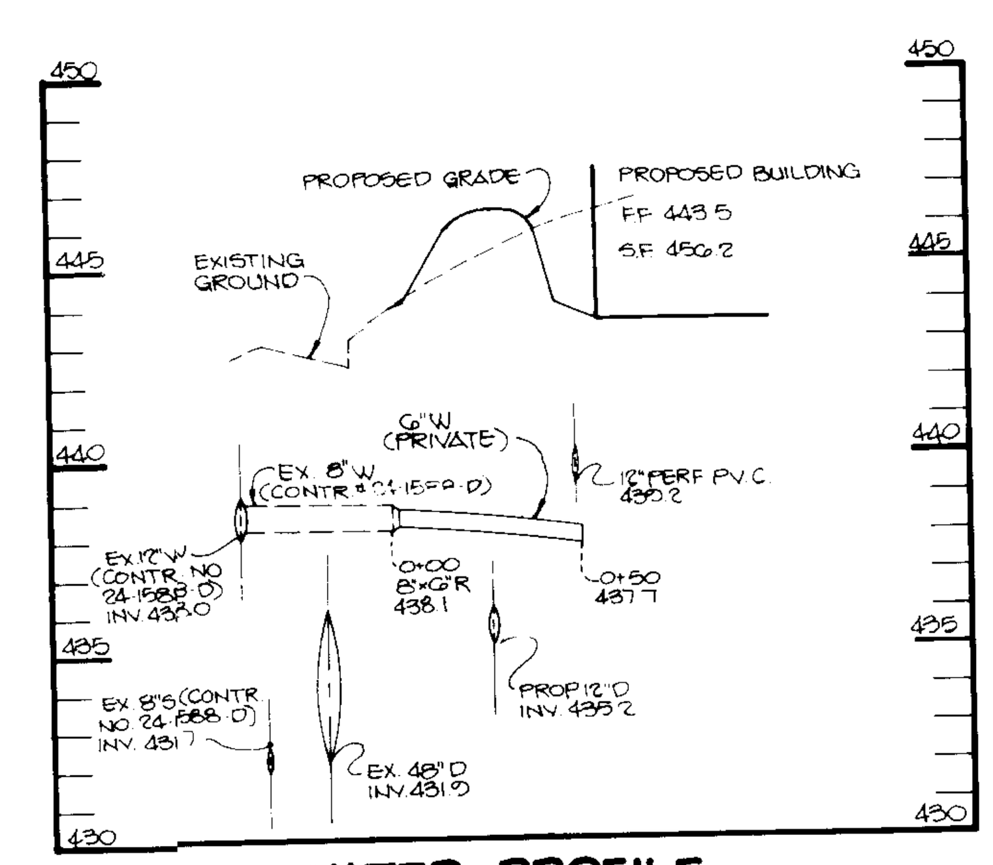


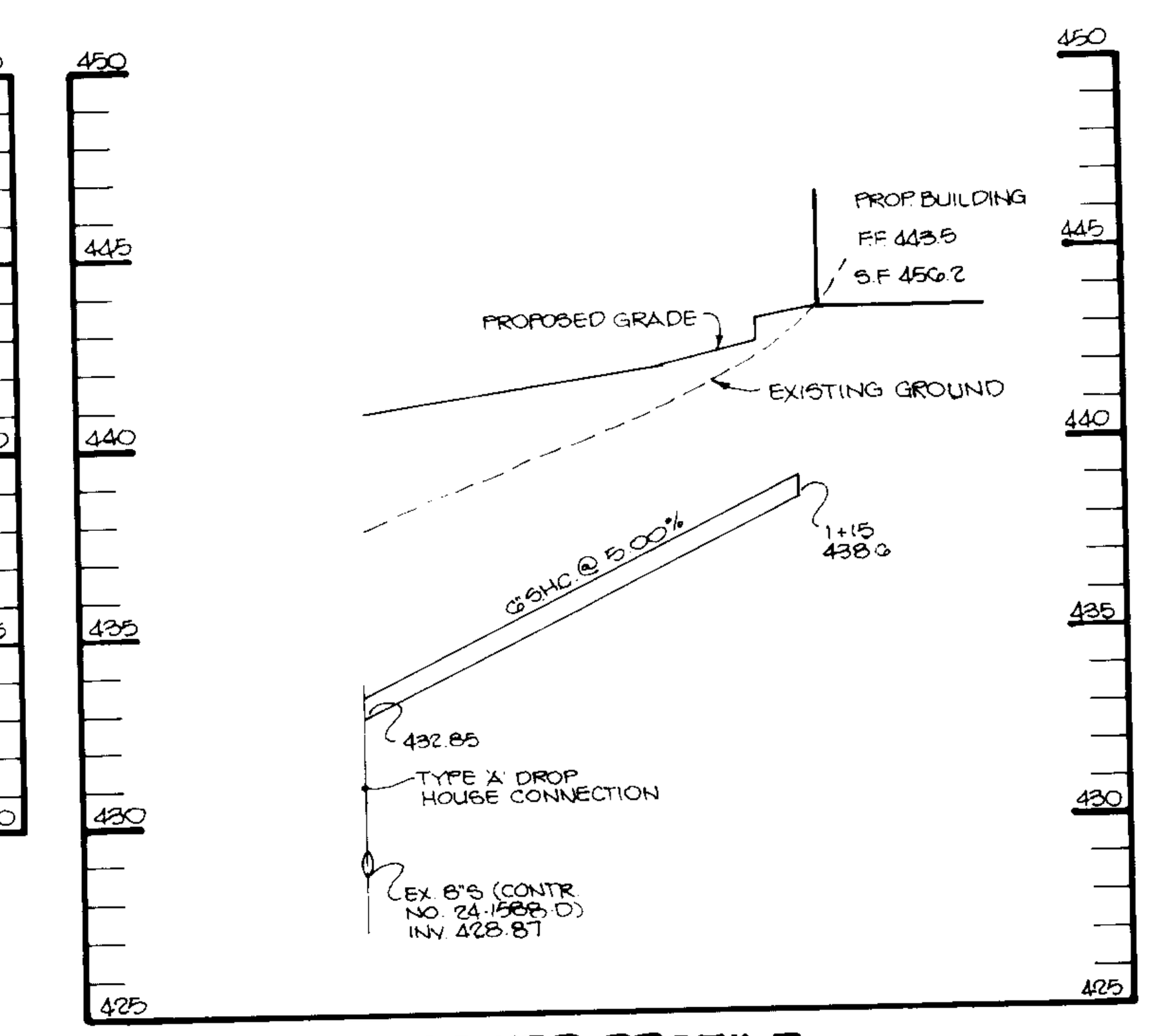
WATER PROFILE

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



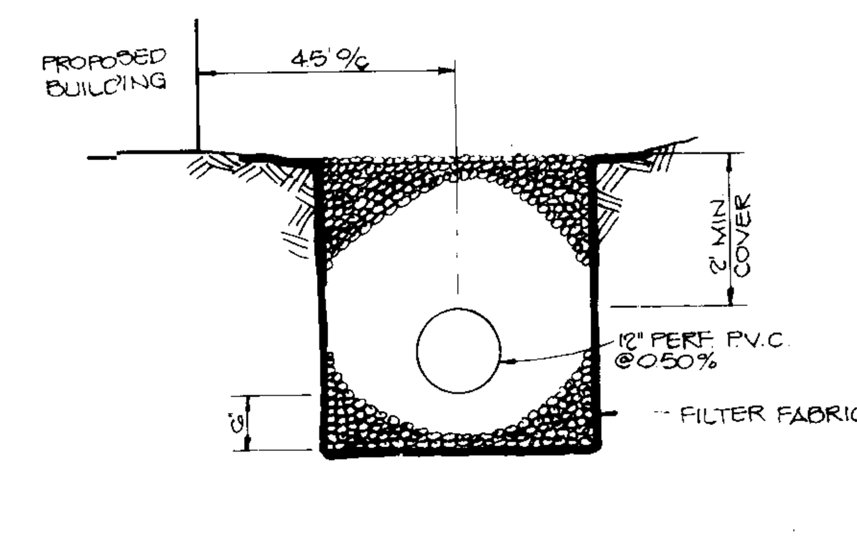
WATER PROFILE

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



SEWER PROFILE

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



DETAIL OF UNDERDRAIN

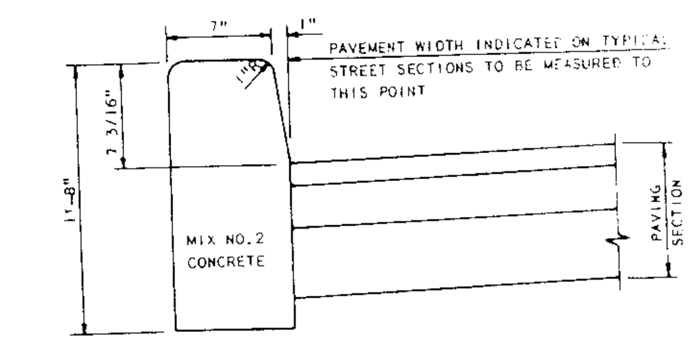
NO SCALE

8-30-89

STRUCTURE SCHEDULE

NO.	TYPE	T.C. ELEV.	INV. IN	INV. OUT	REMARKS
I-1	YARD INLET	442.2*	434.84	434.59	HO.CO. STD. DTL. SD-4.14
I-2	A-5	448.28	---	444.70	HO.CO. STD. DTL. SD-5.11
I-3	"K" TYPE	440.6*	---	434.43	HO.CO. STD. DTL. SD-4.12
M-1	STAND. 4' MANHOLE	442.8*	431.03	430.93	HO.CO. STD. DTL. [illegible]
S-1	WATER QUALITY STRUCTURE	438.58	---	431.10	SEE DETAIL
S-2	WATER QUALITY STRUCTURE	448.38	444.45	436.08	SEE DETAIL

* TOP OF GRATE OR LID



STANDARD BARRIER CURB

NO SCALE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 10-11-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING.

DIRECTOR — DATE 10.23.89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/12/89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 9.29.89

CHIEF, BUREAU OF ENGINEERING — DATE 9.29.89

DATE	NO	REVISION

OWNER / DEVELOPER
PARCEL N ASSOCIATES
10320 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21045

PROJECT COLUMBIA 100 OFFICE RESEARCH PARK PARCEL N SECTION 1, AREA 2
A TWO STORY OFFICE BUILDING

AREA TAX MAP 30 ZONED FOR [illegible]
COLUMBIA 100 OFFICE RESEARCH PARK SECT. 1, AREA 2 [illegible]
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

TITLE PROFILES AND DETAILS

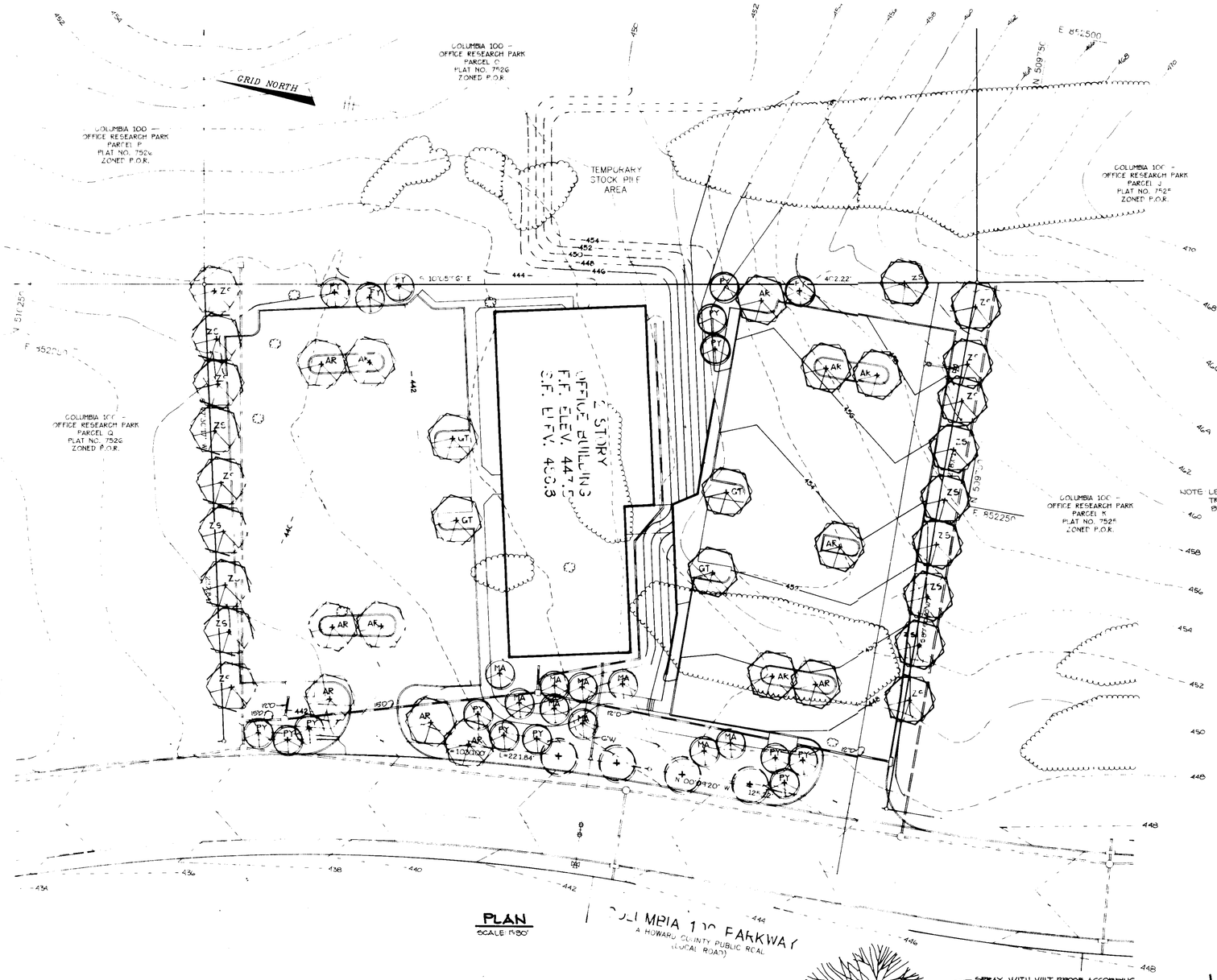
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

DATE 9.13.89

ARTHUR E. MUEGGE #8107

DESIGNED BY W. N.
DRAWN BY MAP
PROJECT NO [illegible]
DATE MAY 18, 1989
SCALE AS SHOWN
DRAWING NO 5 OF 6

SDP-89-230

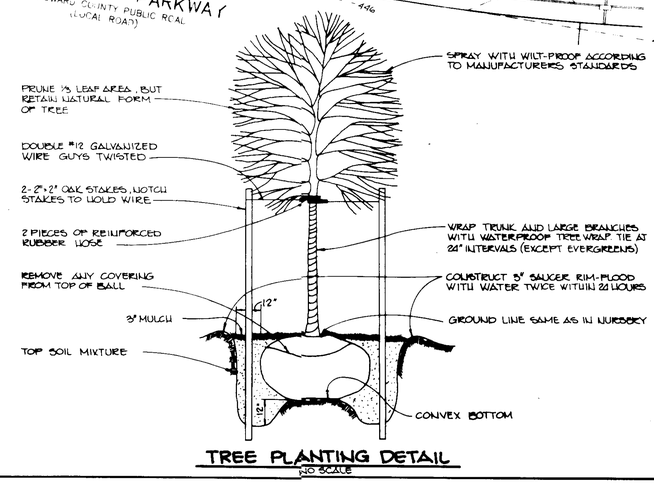


PLAN
SCALE: 1"=80'

NOTE: LETTER OF PERMISSION TO PLANT TREES IN PARCEL K TO BE OBTAINED BY THE DEVELOPER

PLANT LIST

QUANTITY	KEY	NAME	SIZE
14	AR	ACER RUBRUM "OCTOBER GLORY"	2-1/2" - 3" CAL FULL CROWN B&B
4	GT	GLEDITSIA TRIACONTHOS VAR. INERMIS "MORAINE" MORAINE THORNLESS COMMON HONEY LOCUST	2-1/2" - 3" CAL FULL CROWN B&B
9	MA	MALUS FLORIBUNDA JAPANESE FLOWERING CRABAPPLE	1-1/2" CAL B&B
16	PY	PRUNUS YEDOENSIS YOSHINO CHERRY	1-1/2" CAL B&B
20	ZS	ZELKOVA SERRATA JAPANESE ZELKOVA	2-1/2" - 3" CAL FULL CROWN B&B



TREE PLANTING DETAIL
NO SCALE

LEGEND

ZS — PROPOSED TREES

EXISTING STREET TREES AS PER F-87-82

8-30-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER — DATE 10-11-89

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

DIRECTOR — DATE 10 22 89

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT — DATE 10/3/89

APPROVED: FOR PUBLIC WATER, PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 9.29.89

CHIEF, BUREAU OF ENGINEERING — DATE 9-29-89

DATE	NO	REVISION

OWNER DEVELOPER
PARCEL N ASSOCIATES
10320 LITTLE PATUXENT PKWY.
COLUMBIA, MARYLAND 21044

PROJECT COLUMBIA 100 OFFICE RESEARCH PARK
PARCEL N
SECTION 1, AREA 2
A TWO STORY OFFICE BUILDING

AREA TAX MAP 30 ZONED POR
COLUMBIA 100 OFFICE RESEARCH PARK
2ND ELECTION DISTRICT, HOWARD COUNTY, MD.

TITLE
LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

September 13, 1989
DATE

STATE OF MARYLAND — MICHAEL G. RIEMER — REGISTERED LANDSCAPE ARCHITECT — NO. 201

MICHAEL G. RIEMER #201

DESIGNED BY	M.E.N.
DRAWN BY	C.A.E.
PROJECT NO	5000R
DATE	MAY 18, 1989
SCALE	AS SHOWN
DRAWING NO	6 OF 10

SDP-89-230

MARYLAND BLUE PRINT CO.