

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT PUBLIC WORKS

DIRECTOR: *[Signature]* DATE: 12/16/87

CHIEF, BUREAU OF ENGINEERING: *[Signature]* DATE: 12-14-87

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

COUNTY HEALTH OFFICER: *[Signature]* DATE: 12-7-87

APPROVED: HOWARD COUNTY THE DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR: *[Signature]* DATE: 12/16/87

CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT: *[Signature]* DATE: 12/16/87

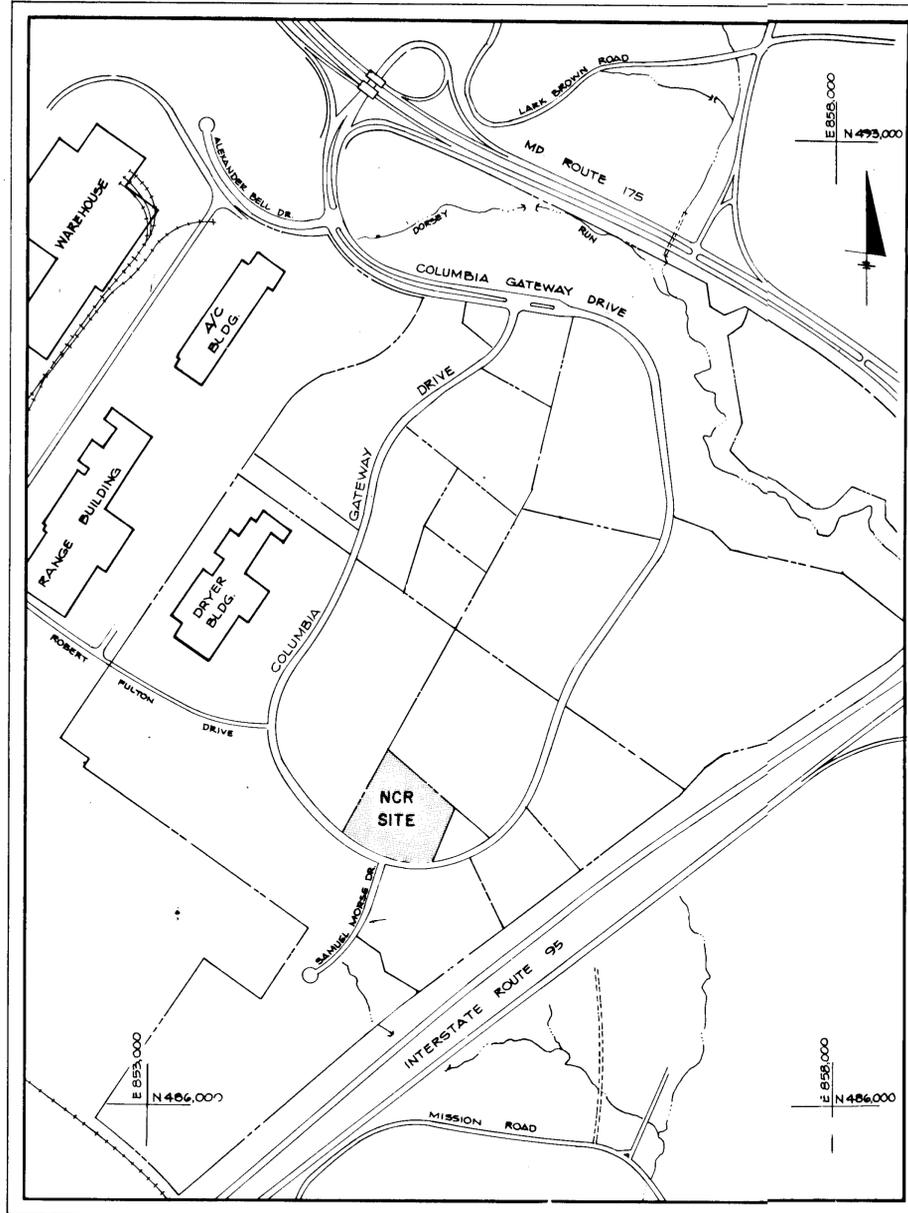
ADDRESS CHART	
PARCEL NUMBER	STREET ADDRESS
S-2	7060 COLUMBIA GATEWAY DRIVE

SUBDIVISION NAME		SECT./AREA	LOT/PARCEL
NCR MID-ATLANTIC DATA CENTER			S-2

PLAT	ORL/F	BLOCK	ZONE	TAX	ZONE MAP	ELEC. DIST.	CENSUS TR.
8805			M-1	43		6	6065.02

WATER CODE: E-06
SEWER CODE: 4900000

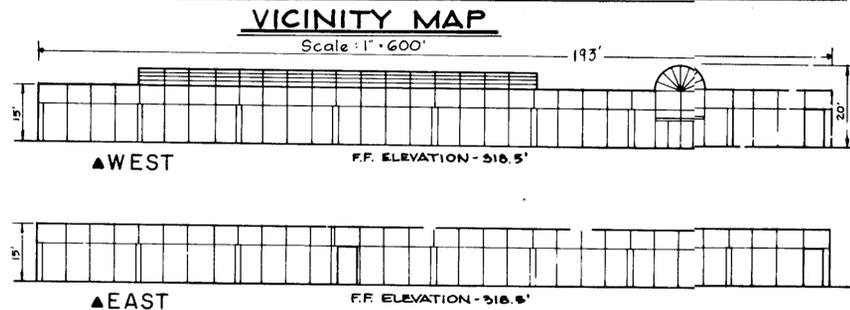
- SITE ANALYSIS**
- OFFICES AND DATA CENTER
- PRESENT ZONING: MANUFACTURING, LIGHT (M-1)
 - TOTAL AREA OF SITE: 5.154 ACRES.
 - AREA OF SUBMISSION 5.154 ACRES
BUILDING FLOOR SPACE:
PROPOSED: 46,000 S.F.
 - NUMBER OF EMPLOYEES
PROPOSED (MAX.): 217
 - NUMBER OF PARKING SPACES
REQUIRED: 7 SPACES/10 EMPLOYEES - 152 SPACES.
PROPOSED: 201 INCLUDING 7 HANDICAP SPACES.
 - GREEN AREA: 1.91 ACRES 37%.
 - BUILDING COVERAGE: 1.05 ACRES 20.3%.
 - PAVING AREA: 1.95 ACRES 37.8%.
 - LANDSCAPED ISLANDS: 0.24 ACRES 12.3% OF PARKING AREA.



- GENERAL NOTES**
- ALL SITE WORK CONSTRUCTION TO BE DONE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL-VOLUME III STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
 - PUBLIC WATER AND PUBLIC SEWER TO BE UTILIZED.
 - ANY DAMAGE TO PUBLIC RIGHT-OF-WAY OR PAVING MUST BE CORRECTED AT THE DEVELOPER'S EXPENSE.
 - GRADES HAVE BEEN ESTABLISHED TO INSURE POSITIVE DRAINAGE.
 - SIDEWALKS SHALL BE SCORED OR OTHERWISE TEXTURED TO INDICATE TO BLIND PERSONS THE LOCATION OF DOORS AT BUILDING.
 - ONE HANDICAPPED PARKING SIGN SHALL BE PLACED AT EACH HANDICAPPED PARKING SPACE IN ACCORDANCE WITH REQUIREMENTS OF THE MARYLAND BUILDING CODE.
 - STORMWATER MANAGEMENT AND WATER QUALITY MANAGEMENT WILL BE PROVIDED BY THE EXISTING OFF SITE POND CONSTRUCTED UNDER F-87-125 (APPROVED REVISION JUNE 2, 1989).
 - ALL PROPOSED EXTERIOR LIGHTING DEVICES SHALL BE REFLECTED/DIRECTED AWAY FROM ALL ADJOINING PUBLIC ROAD RIGHT-OF-WAYS.
 - THERE IS A MINIMUM OF 5 LEVEL FEET AT EACH BUILDING ENTRANCE.

APPROVED
DATE: 8-27-89
[Signature]

SHEET INDEX	
NO.	DESCRIPTION
1.	COVER SHEET
2.	LAYOUT PLAN
3.	GRADING/UTILITY PLAN
4.	SITE DETAILS
5.	PROFILES
6.	SEDIMENT CONTROL PLAN
7.	SEDIMENT CONTROL DETAILS
8.	LANDSCAPING PLAN



BUILDING ELEVATIONS

Ver. Scale: 1"=20'

- LEGEND**
- 318--- EXISTING CONTOUR (2' INTERVAL)
 - 318--- PROPOSED CONTOUR (1' INTERVAL)
 - FF. 000.0 PROPOSED FINISHED FIRST FLOOR ELEVATION
 - 318x0 PROPOSED TOP CURB/BOTTOM CURB
 - TC/BC CONCRETE WALK
 - X--- EXISTING CURB (TO BE REMOVED)
 - ▲ BUILDING ENTRANCE
 - FLOW ARROWS
 - ⊕ RESERVED FOR HANDICAPPED PERSONS (INDICATED)

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS
2315 ST. PAUL ST
BALTIMORE, MARYLAND
21218

[Signature]

ELECTION DISTRICT NO. 6
TAX MAP 43

SITE DEVELOPMENT PLAN
NCR MID-ATLANTIC DATA CENTER
COLUMBIA, GATEWAY
COLUMBIA, MARYLAND

HOWARD COUNTY
PARCEL S-2

**Richter
Cornbrooks
Gribble, Inc.**
Architects/Planners
2120 North Charles Street
Baltimore, Maryland

No.	Description	Date
Revisions		

COVER SHEET

Scale as Shown

Project No. 40555

Date 9/11/89

Drawing No.

C-1

SDP 89-252

APPROVED: WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT PUBLIC WORKS

DIRECTOR: *James J. [Signature]* DATE: 12/16/87

CHIEF, BUREAU OF ENGINEERING: *William S. [Signature]* DATE: 12-14-87

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

John [Signature] (12-17-87) DATE

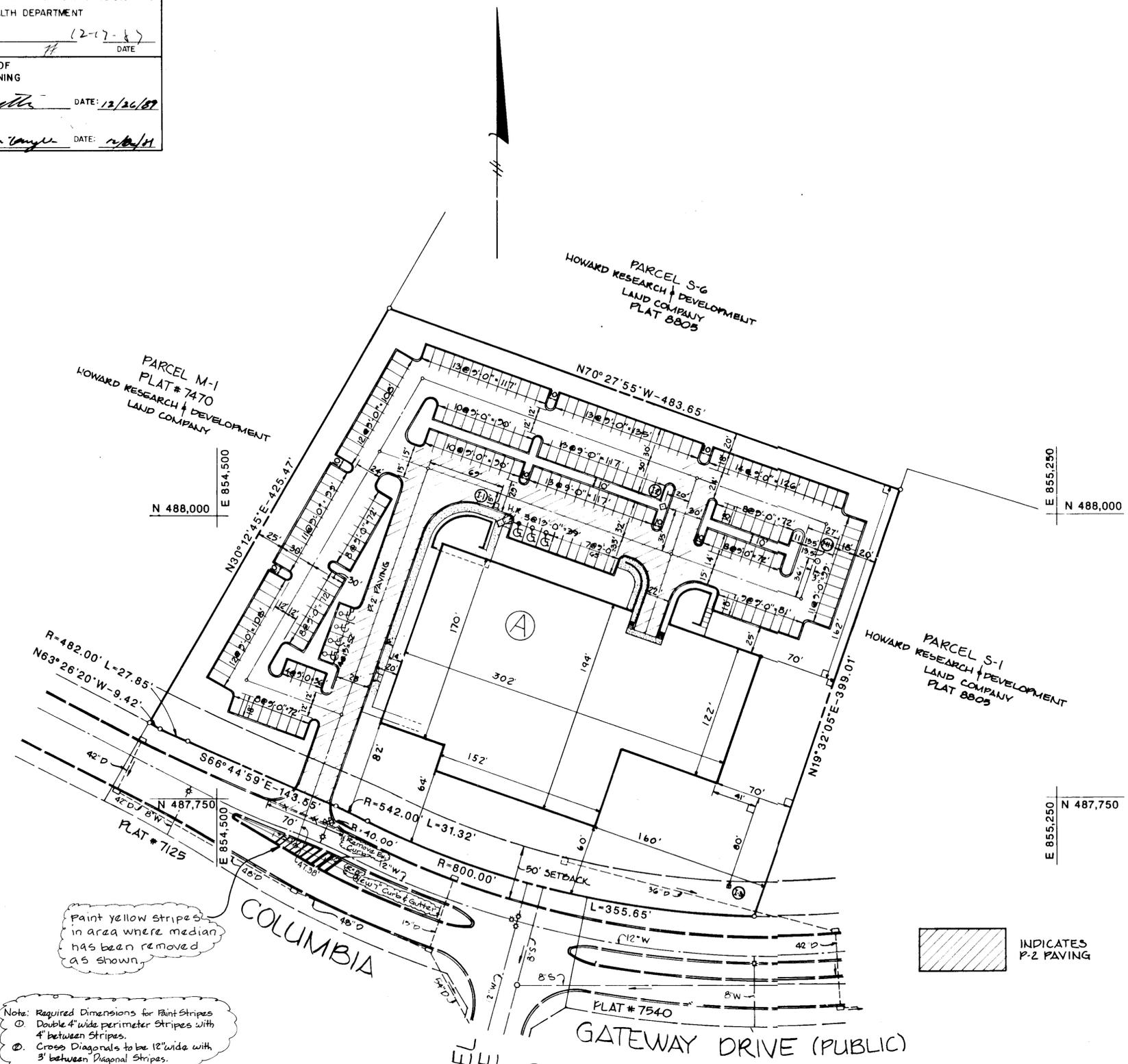
COUNTY HEALTH OFFICER

APPROVED: THE DEPARTMENT OF PLANNING AND ZONING

PLANNING DIRECTOR: *Joseph [Signature]* DATE: 12/26/87

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT: *Frank J. [Signature]* DATE: 12/16/87

Richter Cornbrooks Gribble, Inc.
Architects/Planners
2120 North Charles Street
Baltimore, Maryland 21288



Paint yellow stripes in area where median has been removed as shown.

Note: Required Dimensions for Paint Stripes
 Ⓞ Double 4" wide perimeter Stripes with 4' between Stripes.
 Ⓞ Cross Diagonals to be 12" wide with 3' between Diagonal Stripes.

APPROVED
DATE: 8-27-87
J.B.

No.	Description	Date
Revisions		

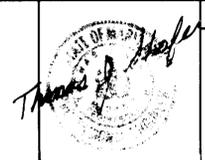
LAYOUT PLAN

Scale: 1" = 50'
Project No. 40555

Date 9/11/89

Drawing No. C-2

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
2315 SAINT PAUL ST. BALTIMORE, MARYLAND 21218



SITE DEVELOPMENT PLAN
NCR MID-ATLANTIC DATA CENTER

COLUMBIA, GATEWAY COLUMBIA, MARYLAND

ELECTION DISTRICT NO 6
TAX MAP 43

HOWARD COUNTY
PARCEL S-2

SDP 89-252

APPROVED: PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT PUBLIC WORKS

DIRECTOR: *James P. ...* DATE: 12/16/87

CHIEF, BUREAU OF ENGINEERING: *William B. ...* DATE: 12/14/87

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

COUNTY HEALTH OFFICER: *...* DATE: 12/17/87

APPROVED: HOWARD COUNTY THE DEPARTMENT
OF PLANNING AND ZONING

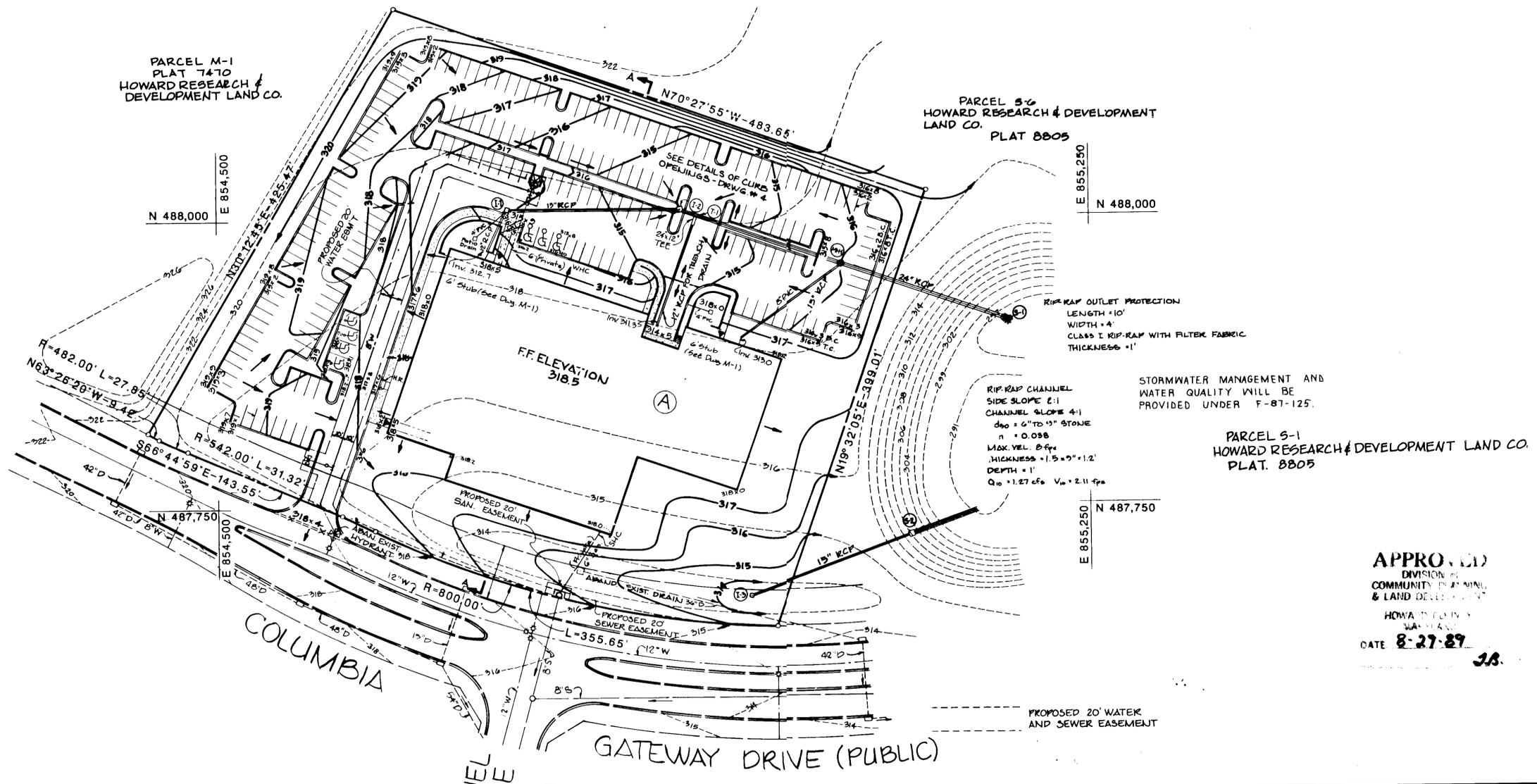
PLANNING DIRECTOR: *...* DATE: 12/24/87

CHIEF, DIVISION OF COMMUNITY PLANNING
AND LAND DEVELOPMENT: *...* DATE: 12/24/87

Richter Cornbrooks Gribble, Inc.
Architects/Planners
2120 North Charles Street
Baltimore, Maryland 21218

STORM DRAIN STRUCTURE SCHEDULE					
NO.	TYPE	TOP EL.	INV. IN	INV. OUT	LOCATION
MH-1	4'-0" Standard	316.0	308.56	308.56	See Layout Plan
I-1	Double Type 'S' Comb. S.D. 4.33	316.0	~	312.30	See Layout Plan
I-2	Type 'D' S.D. 4.11	314.5	310.75	310.00	See Layout Plan
I-3	Yard Inlet S.D. 4.14	312.3	~	309.75	See Layout Plan
S-1	Concrete End Section S.D. 5.5	300.06	298.06	297.00	See Layout Plan
S-2	Concrete End Section S.D. 5.5	309.15	307.90	307.90	See Layout Plan

Two patio drains are to be Zurn Z-610'S 12" Top X-Heavy Duty Drain or approved equal.



APPROVED
DIVISION OF
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY
DATE: 8-27-87

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL ST
BALTIMORE, MARYLAND
21218



SITE DEVELOPMENT PLAN
NCR MID-ATLANTIC DATA CENTER
COLUMBIA, GATEWAY
COLUMBIA, MARYLAND

ELECTION DISTRICT NO 6
TAX MAP 43

HOWARD COUNTY
PARCEL S-2

No.	Description	Date
Revisions		
GRADING / UTILITY PLAN		
Scale: 1"=50'		
Project No. 40555		
Date 9/14/89		
Drawing No. C-3		

SDP 87-252

PROJECT: PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT PUBLIC WORKS

DIRECTOR: *James J. [Signature]* DATE: 12/14/89

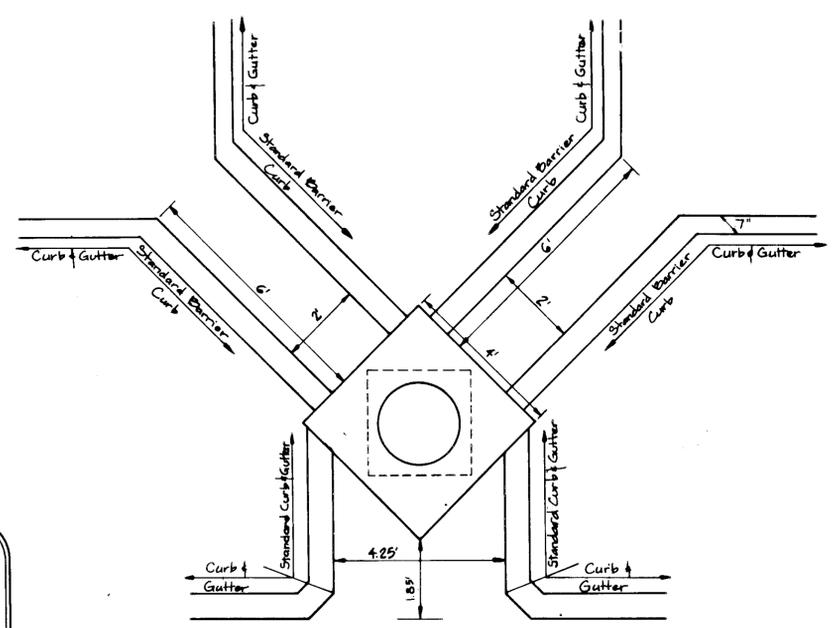
CHIEF, BUREAU OF ENGINEERING: *[Signature]* DATE: 12/14/89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT
[Signature] DATE: 12/15/89

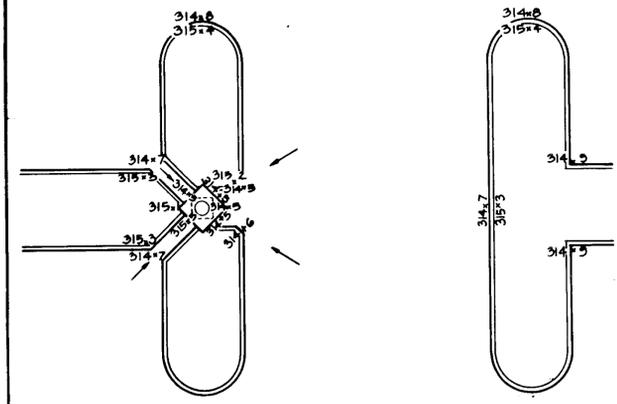
APPROVED: HOWARD COUNTY THE DEPARTMENT OF PLANNING AND ZONING
[Signature] DATE: 12/26/89

PLANNING DIRECTOR: *[Signature]* DATE: 12/26/89

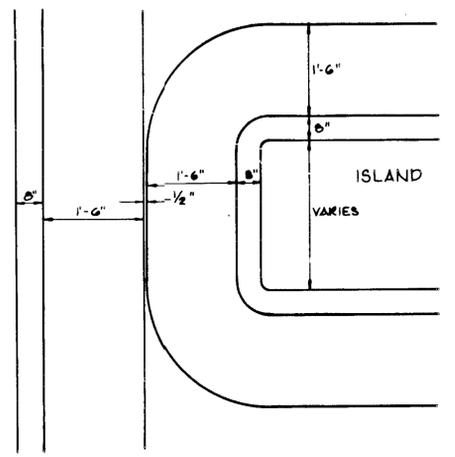
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT: *[Signature]* DATE: 12/26/89



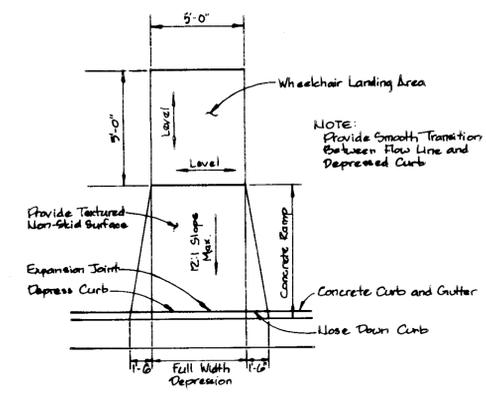
CURB OPENINGS FOR TYPE 'D' INLET WITH DIMENSIONS
 Scale: 1"=2'



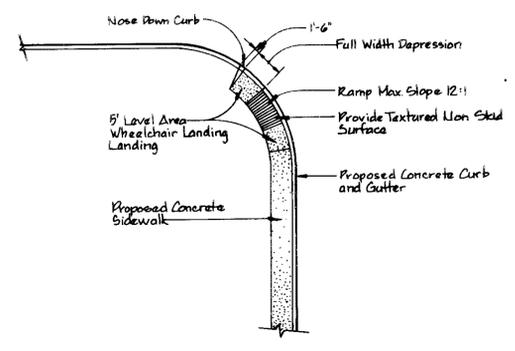
CURB OPENINGS FOR TYPE 'D' INLET WITH SPOT ELEVATIONS
 Scale: 1"=10'



PLAN VIEW OF CURB OPENING REVERSE CURB & GUTTER
 NO SCALE



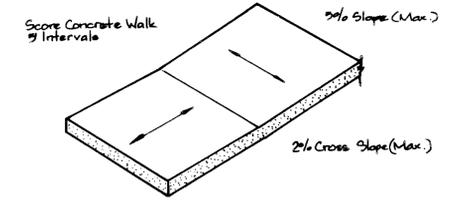
STANDARD



MODIFIED

HANDICAPPED RAMP DETAILS
 No Scale

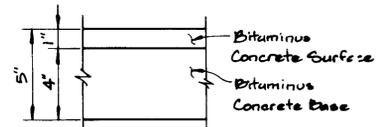
NOTE: Provide Expansion Joint Whenever Sidewalk Abuts Curbs, Buildings, Shafts and Intersections of Walks.



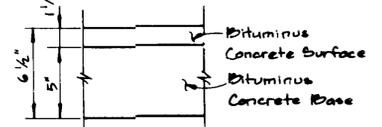
TYPICAL SIDEWALK DETAIL
 No Scale



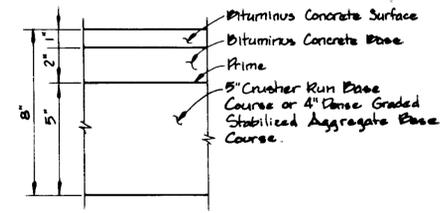
TYPICAL PAVING SECTIONS
 NO SCALE



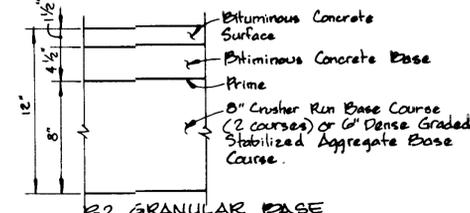
P-1 FULL DEPTH BITUMINOUS CONCRETE



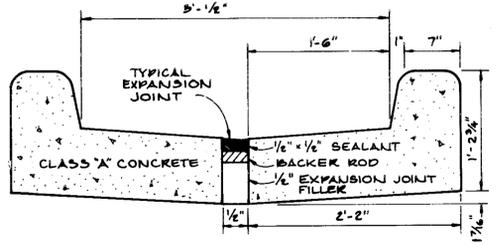
P-2 FULL DEPTH BITUMINOUS CONCRETE



P-1 GRANULAR BASE (ALTERNATE)

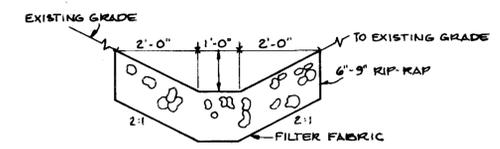


P-2 GRANULAR BASE (ALTERNATE)

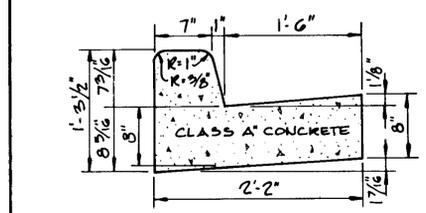


CURB OPENING USING REVERSE CURB & GUTTER
 NO SCALE

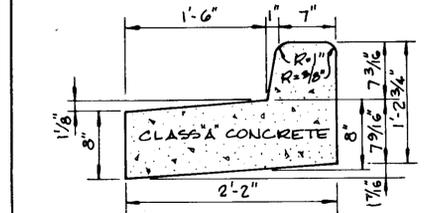
APPROVED
 DATE: 8-27-89
[Signature]



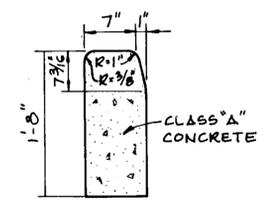
RIP-RAP CHANNEL TYPICAL SECTION
 NO SCALE



STANDARD 7" COMBINATION CURB AND GUTTER
 NO SCALE



REVERSE 7" COMBINATION CURB AND GUTTER
 NO SCALE



STANDARD BARRIER CURB
 NO SCALE

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 SAINT PAUL ST. BALTIMORE, MARYLAND 21218



SITE DEVELOPMENT PLAN
NCR MID-ATLANTIC DATA CENTER
 COLUMBIA, GATEWAY COLUMBIA, MARYLAND

ELECTION DISTRICT NO. 6
 TAX MAP NO. 43

HOWARD COUNTY
 PARCEL S-2

Richter Cornbrooks Gribble, Inc.
 Architects/Planners
 2120 North Charles Street
 Baltimore, Maryland

No.	Description	Date
Revisions		
SITE DETAILS		
Scale as Shown		
Project No. 40555		
Date 9/11/89		
Drawing No. C-4		

PUBLIC WATER AND PUBLIC SEWERAGE
STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT PUBLIC WORKS

DIRECTOR *James J. [Signature]* DATE 12/15/87

CHIEF, BUREAU OF
ENGINEERING *[Signature]* DATE 12-14-87

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

[Signature] COUNTY HEALTH OFFICER DATE 12-19-87

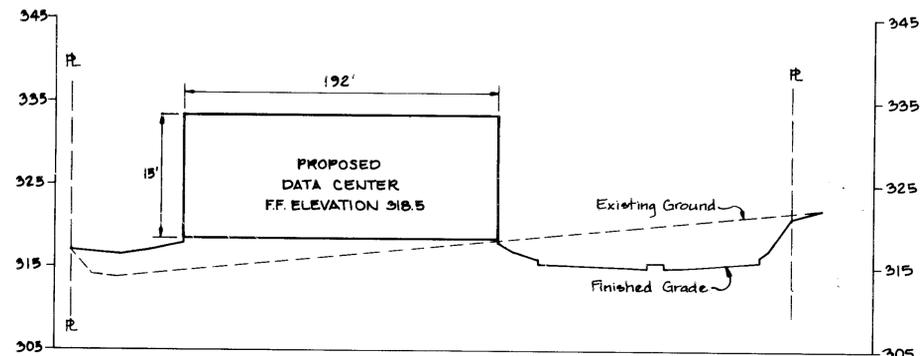
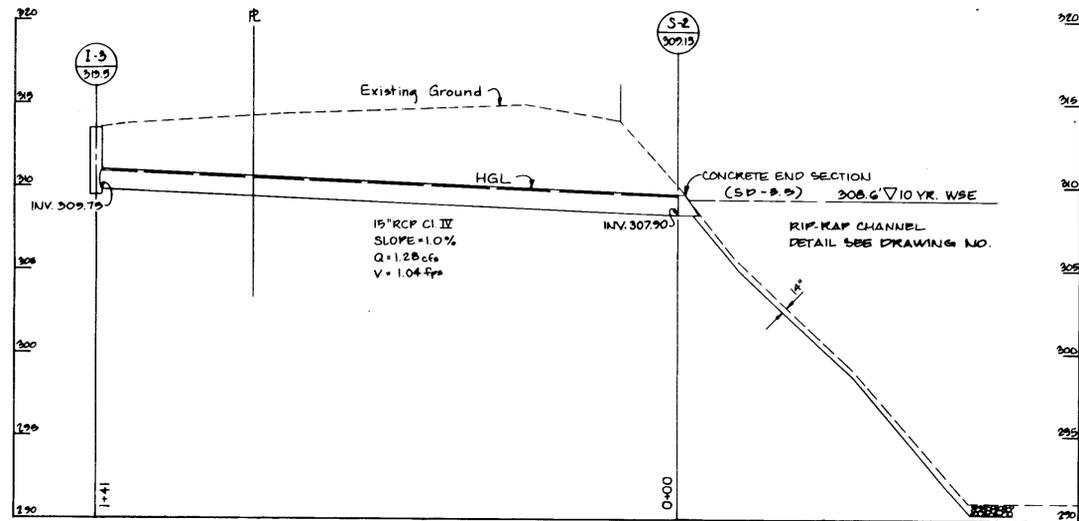
APPROVED HOWARD COUNTY THE DEPARTMENT
OF PLANNING AND ZONING

PLANNING DIRECTOR *[Signature]* DATE 12/24/87

CHIEF, DIVISION
OF COMMUNITY PLANNING
AND LAND DEVELOPMENT *[Signature]* DATE 12/22/87

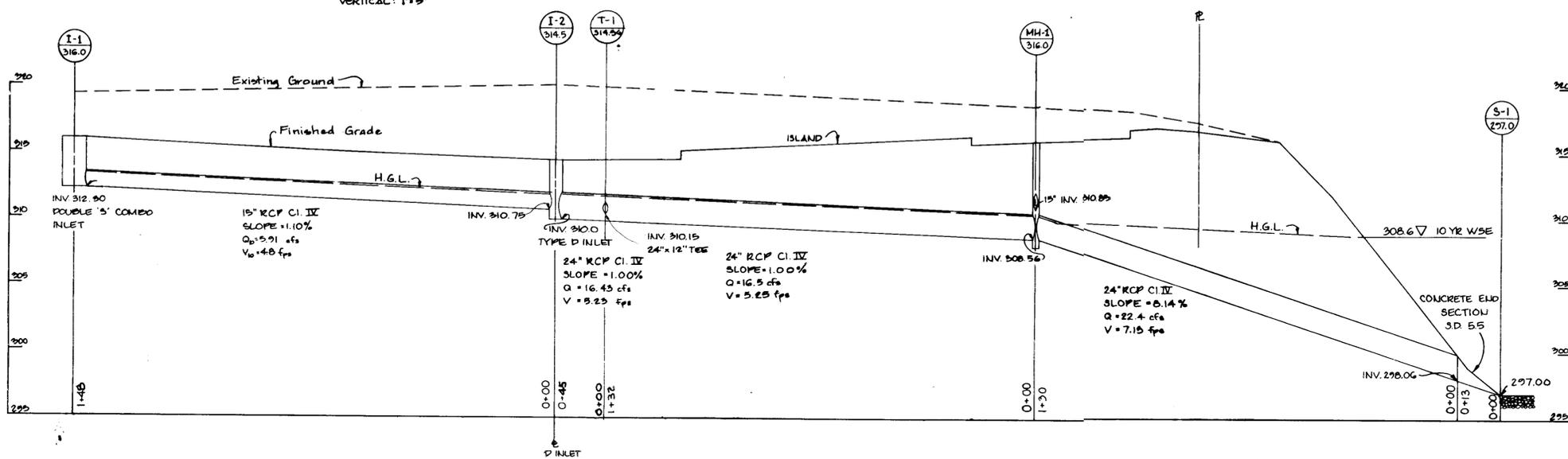
**Richter
Cornbrooks
Gribble, Inc.**

Architects/Planners
2120 North Charles Street
Baltimore, Maryland 21218



PROFILES
SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

CROSS SECTION "A-A"
Scale: Hor. 1"=50'
Ver. 1"=10'



STORM DRAIN PROFILES
SCALE:
HORIZONTAL: 1"=20'
VERTICAL: 1"=5'

APPROVED
FOR THE DEPARTMENT OF
COMMUNITY PLANNING
& LAND DEVELOPMENT
HOWARD COUNTY
DATE: **8-27-87** *[Signature]*

No.	Description	Date

PROFILES

Scale as Shown

Project No. 40555

Date 9/11/89

Drawing No.

C-5

WHITMAN, REQUARDT
AND ASSOCIATES
ENGINEERS
2315 SAINT PAUL ST.
BALTIMORE, MARYLAND



ELECTION DISTRICT NO. 6
TAX MAP NO. 43

SITE DEVELOPMENT PLAN
NCR MID-ATLANTIC DATA CENTER

COLUMBIA, GATEWAY
COLUMBIA, MARYLAND

HOWARD COUNTY
PARCEL S-2

SDP 87-252

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT PUBLIC WORKS
 DIRECTOR *James J. Sheper* DATE 12/16/89
 CHIEF, BUREAU OF ENGINEERING *James J. Sheper* DATE 12-14-89
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER *John Boylan* DATE 12-19-89
 APPROVED HOWARD COUNTY THE DEPARTMENT OF PLANNING AND ZONING
 PLANNING DIRECTOR *Joseph B. Smith* DATE 12/21/89
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT *Frank J. Long* DATE 12/21/89

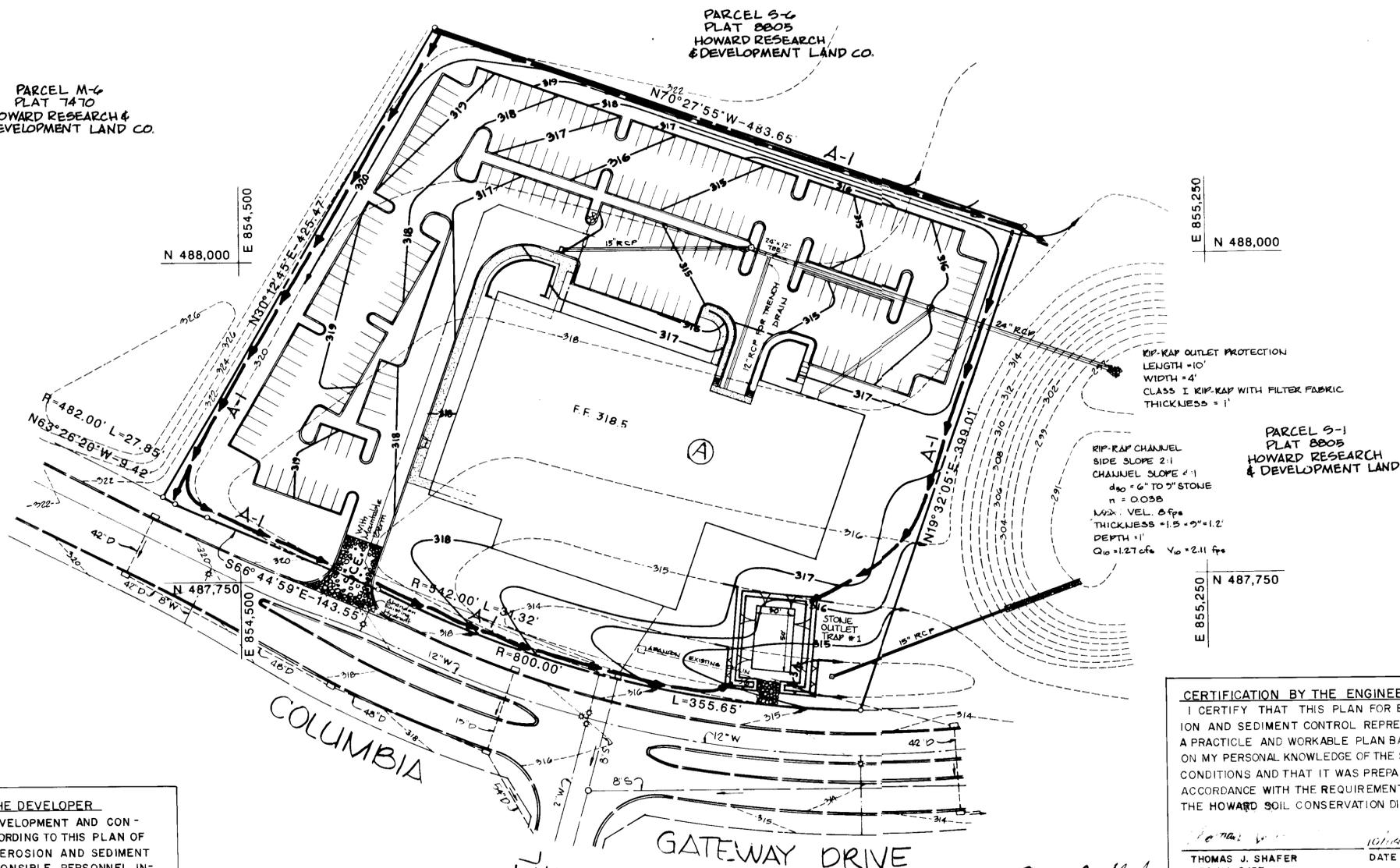
Richter Cornbrooks Gribble, Inc.

Architects/Planners
 2120 North Charles Street
 Baltimore, Maryland 21218

PARCEL M-6
 PLAT 7470
 HOWARD RESEARCH &
 DEVELOPMENT LAND CO.

PARCEL S-6
 PLAT 8805
 HOWARD RESEARCH &
 DEVELOPMENT LAND CO.

APPROVED
 DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
 HOWARD COUNTY MARYLAND
 DATE 8-27-89
J.B.



STONE OUTLET TRAP # 1 SUMMARY TABLE

EXISTING DRAINAGE AREA	4.82 ACRES
PROPOSED DRAINAGE AREA	4.82 ACRES
STORAGE REQUIRED	8676 FT
STORAGE PROVIDED	8816 FT
BOTTOM	30' x 50'
SLOPE	2:1
BOTTOM ELEVATION	310
OUTLET ELEVATION	314
CLEANOUT ELEVATION	312
EMBANKMENT ELEVATION	315
WEIR LENGTH	20'

KIP-KAP OUTLET PROTECTION
 LENGTH = 10'
 WIDTH = 4'
 CLASS I KIP-KAP WITH FILTER FABRIC
 THICKNESS = 1'

PARCEL S-1
 PLAT 8805
 HOWARD RESEARCH &
 DEVELOPMENT LAND CO.

RIP-RAP CHANNEL
 SIDE SLOPE 2:1
 CHANNEL SLOPE 4:1
 d₅₀ = 6" TO 9" STONE
 n = 0.038
 MAX. VEL. 8 fps
 THICKNESS = 1.5 - 2' x 1.2'
 DEPTH 1'
 Q₁₀ = 1.27 cfs V₁₀ = 2.11 fps

CERTIFICATION 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"

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

APPROVED: *John P. Robertson* DATE 12/11/89
 HOWARD S.C.D.
 REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 SIGNATURE: *James J. Sheper* DATE 12/11/89
 U.S. SOIL CONSERVATION SERVICE

CERTIFICATION BY THE DEVELOPER
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY"

WHITMAN, REQUARDT AND ASSOCIATES ENGINEERS
 2315 SAINT PAUL ST
 BALTIMORE, MARYLAND 21218



ELECTION DISTRICT NO 6
 TAX MAP 43

SITE DEVELOPMENT PLAN
NCR MID-ATLANTIC DATA CENTER
 COLUMBIA, GATEWAY
 COLUMBIA, MARYLAND

HOWARD COUNTY
 PARCEL S-2

No. Description Date

Revisions

Scale: 1" = 50'
 Project No. 40555

Date 9/11/89

Drawing No.

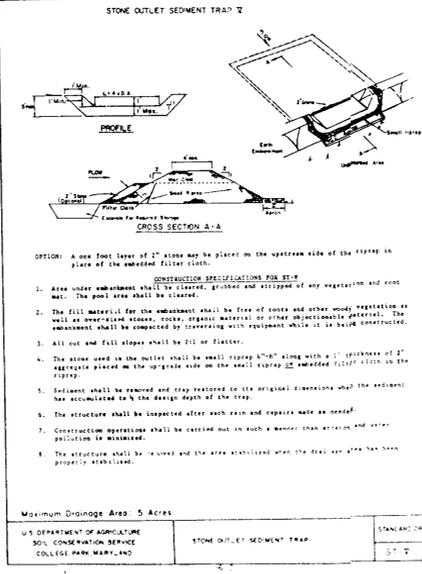
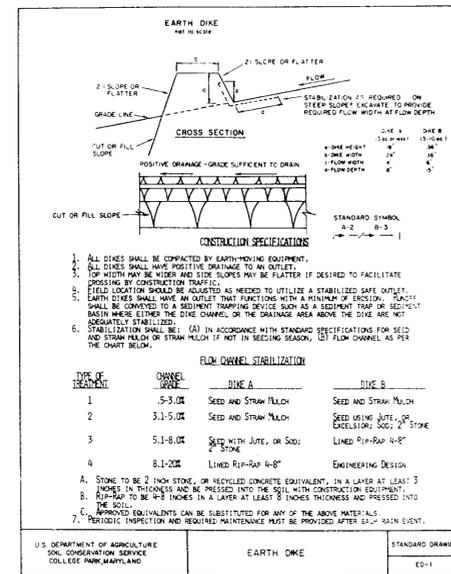
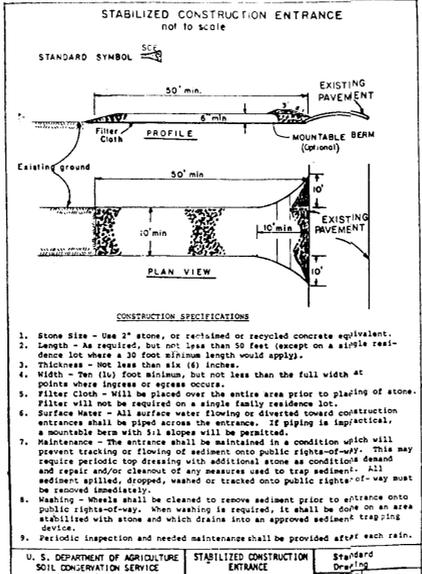
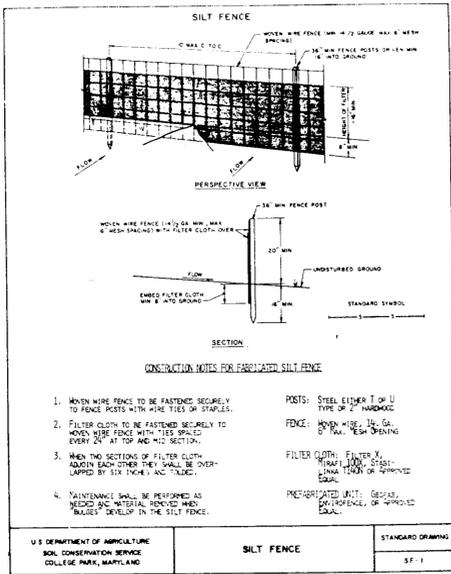
C-6

SDP 89-252

James J. St... DATE 12/16/89
 William E. Ray E... DATE 12-14-89
 HOWARD COUNTY HEALTH DEPARTMENT
 12-19-89 DATE
 HOWARD COUNTY THE DEPARTMENT
 OF PLANNING AND ZONING
 PLANNING
 DATE 10/26/89
 DEVELOPMENT
 DATE 12/24/89

SEQUENCE OF CONSTRUCTION

- OBTAIN REQUIRED PERMITS.
- CLEAR AND GRUB FOR SEDIMENT CONTROLS.
- INSTALL SEDIMENT CONTROLS.
- GRADE SITE AND STABILIZE AS PER SEDIMENT CONTROL NOTE NO. 3, THIS SHEET.
- CONSTRUCT BUILDING, PARKING AND UTILITIES.
- SEED AND MULCH EXPOSED AREAS WITH PERMANENT SEEDING.
- ONCE SITE IS STABLE AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR
 - REMOVE ACCUMULATED SEDIMENT FROM SEDIMENT CONTROLS AND DISPOSE OF AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR.
 - REMOVE SEDIMENT CONTROLS
 - FINAL GRADING WHERE NECESSARY.
 - SEED AND MULCH AREAS DISTURBED BY SEDIMENT CONTROLS WITH PERMANENT SEEDING.



SEDIMENT CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 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.
- Following initial soil disturbance or redistribution, 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 to all other disturbed or graded areas on the project site.
- 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.
- 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 seeding (Sec. 51) and (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.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
 Total Area of Site: 5.154 Acres
 Area Disturbed: 2.0 Acres
 Area to be roofed or paved: 3.0 Acres
 Area to be vegetatively stabilized: 1.6 Acres
 Total Cut: 10,000 Cu. Yds
 Total Fill: 10,000 Cu. Yds
 Offsite waste/borrow area location: N/A
- 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 DPW sediment control inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

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

- Preferred -- Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 500 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 80-0-0 urea fertilizer (2 lbs/1000 sq ft).
- 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 80 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 90 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 seed. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 14 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 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.

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, disking or other acceptable means before seeding.

Soil Amendments: Apply 60 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 75 bushels 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 seed.

Mulching: Apply 14 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 feet 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 site and methods not covered.

CERTIFICATION BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

THOMAS J. SHAFER
 REG. NO. 8457

CERTIFICATION 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."

THOMAS J. SHAFER
 REG. NO. 8457

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

APPROVED: *John K. Robertson* 12/11/89
 HOWARD S.C.D. DATE

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

SIGNATURE: *Thomas J. Shafer* 12/11/89
 S. SOIL CONSERVATION SERVICE DATE

SEDIMENT CONTROL DETAILS

Scale as Shown
 40555

9/11/89

