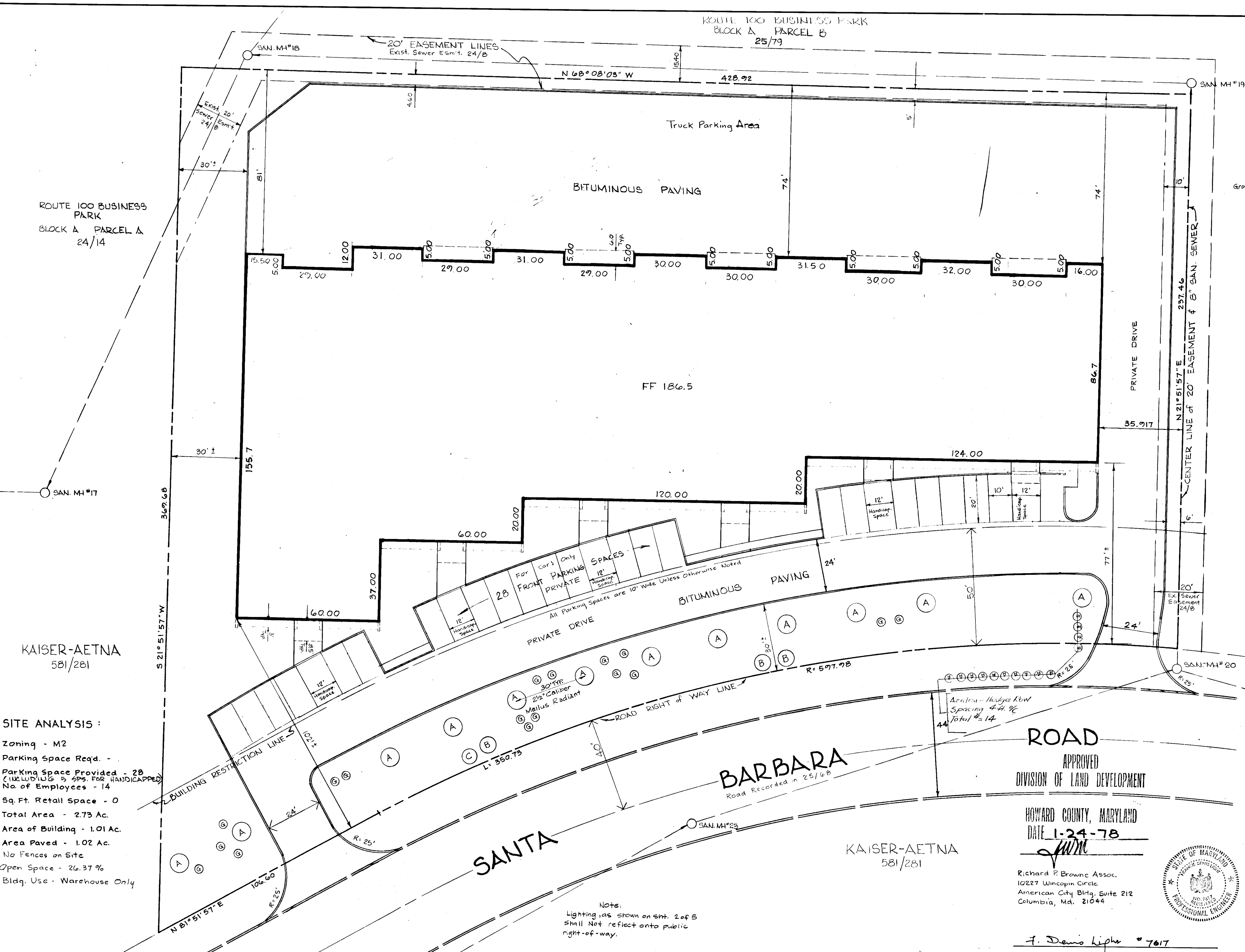
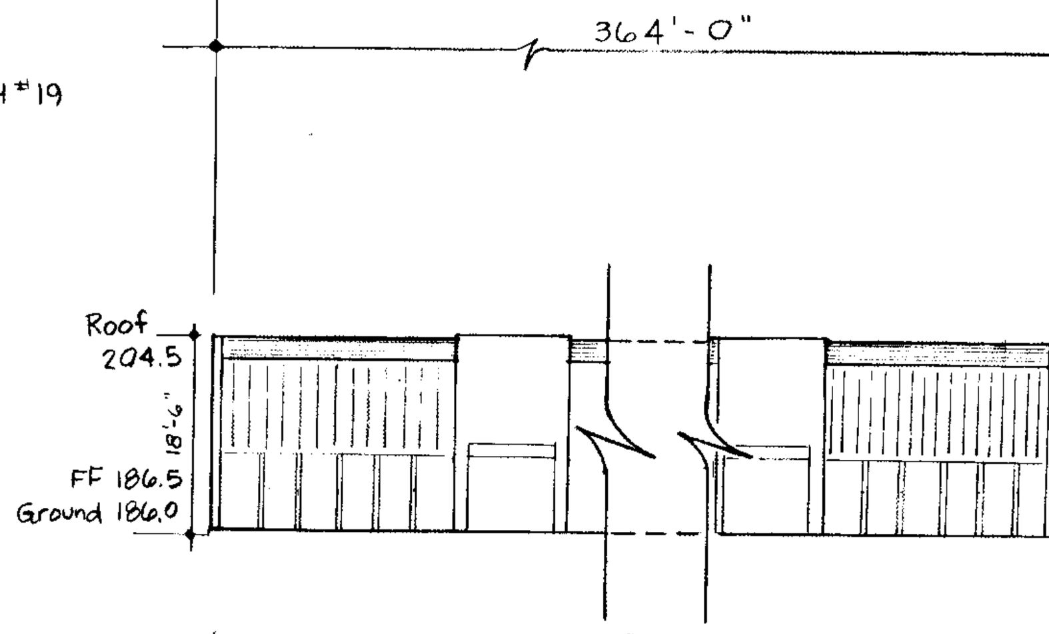


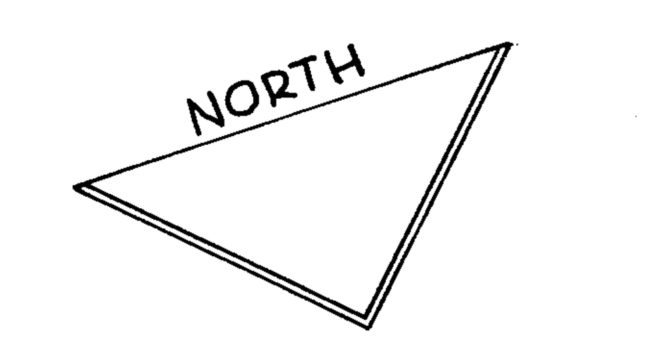


BLDG. ELEVATION

Scale: 1" = 20'

KAISER-AETNA
581/281

DESCRIPTION OF TREES AND SHRUBS					
Symbol	Variety	Caliber	Spread	Height	Spacing
A	Mallus Radiant	Min. 2½"	Min. 6'	7' to 8'	35'
B	Cornus Florida	1"	3'	5'	9'
C	Cornus Flor. Rubra	1"	3'	5'	9'
G	Pinus Strobus	1½"	4'	6'	8'
H	Azalea				4'



OWNER:
Rte. 100 Joint Venture Inc.
5515 Randolph Rd.
Rockville, Md. 20852

Date	Revisions
2-11-78	
11-8-77	Gen. Rev.
5-10-77	Relocate Bldg. Shts. 1-4

SITE ANALYSIS:

Zoning - M2
Parking Space Req'd. -
Parking Space Provided - 28 (INCLUDING 5 SPS. FOR HANDICAPPED)
No. of Employees - 14
Sq. Ft. Retail Space - 0
Total Area - 2.73 Ac.
Area of Building - 1.01 Ac.
Area Paved - 1.02 Ac.
No Fences on Site
Open Space - 26.37 %
Bldg. Use - Warehouse Only

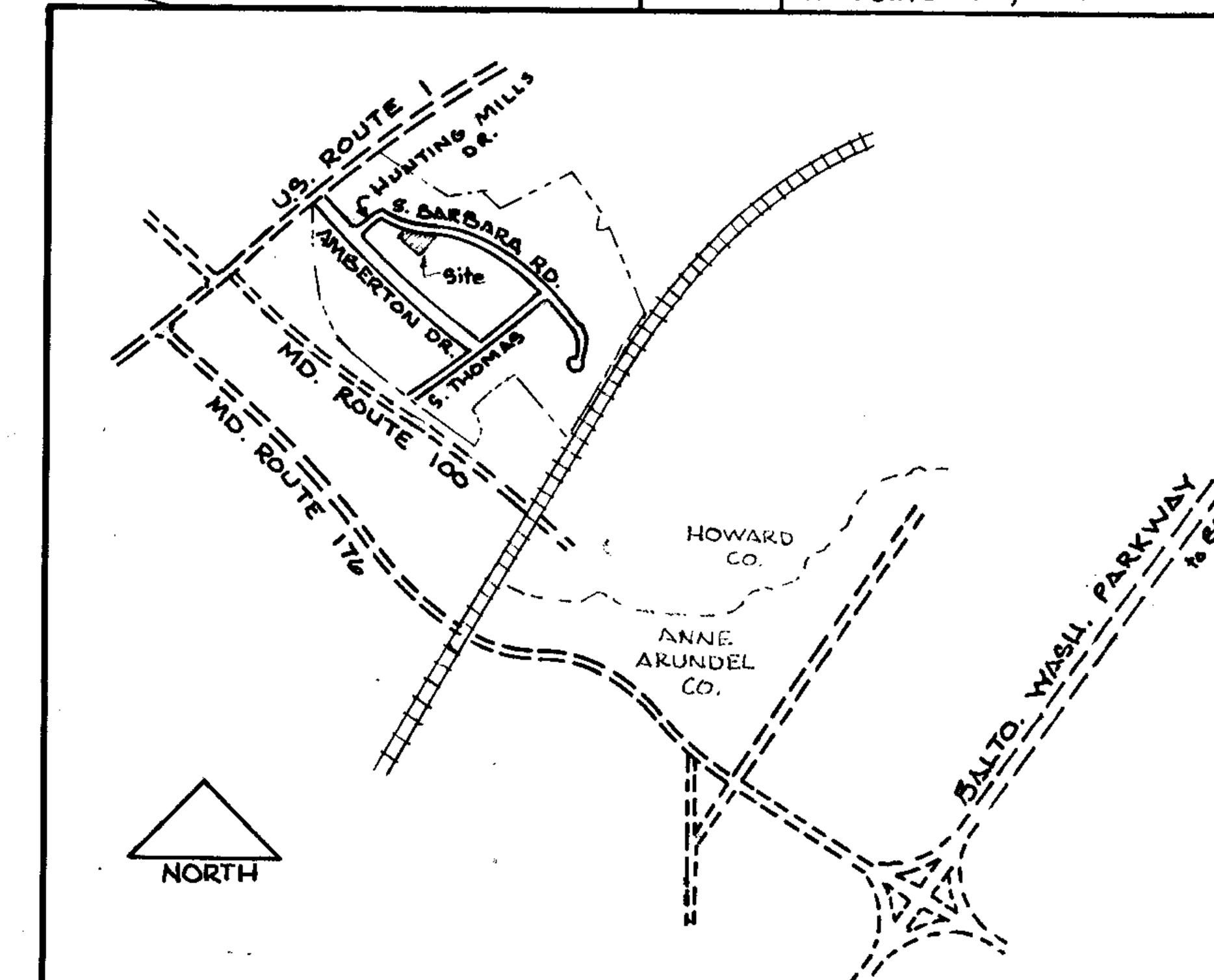
Note:
Lighting, as shown on sht. 2 of 5 Shall Not reflect onto public right-of-way.

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 1-24-78
[illegible]

Richard P. Browne Assoc.
10227 Wincopin Circle
American City Bldg. Suite 212
Columbia, Md. 21044

STATE OF MARYLAND
FRANCIS DENIS LIGHT
NO. 7617
REGISTERED
PROFESSIONAL ENGINEER

F. Denis Light #7617



LOCATION MAP — scale: 1" = 2000'

APPROVED: For Public Water and Public Sewerage Systems Howard County Health Dept.	APPROVED: HOWARD COUNTY OFFICE PLANNING and ZONING	APPROVED: For Public Water, Public Sewerage and Storm Drainage Systems and Roads Howard County Dept. of Public Works
[illegible] 3-30-78 County Health Officer / Date	[illegible] 4-3-78 Planning Director / Date	[illegible] 3-23-78 Director / Date
	[illegible] 4-3-78 Chief, Division of Land Development / Date	[illegible] 3-22-78 Chief, Bureau of Engineering / Date

rba richard p. browne associates
professional design & planning consultants
wayne, new jersey . columbia, maryland

DRAWN GT, MK CHKD. ________ SHEET 1 OF 5

SITE PLAN

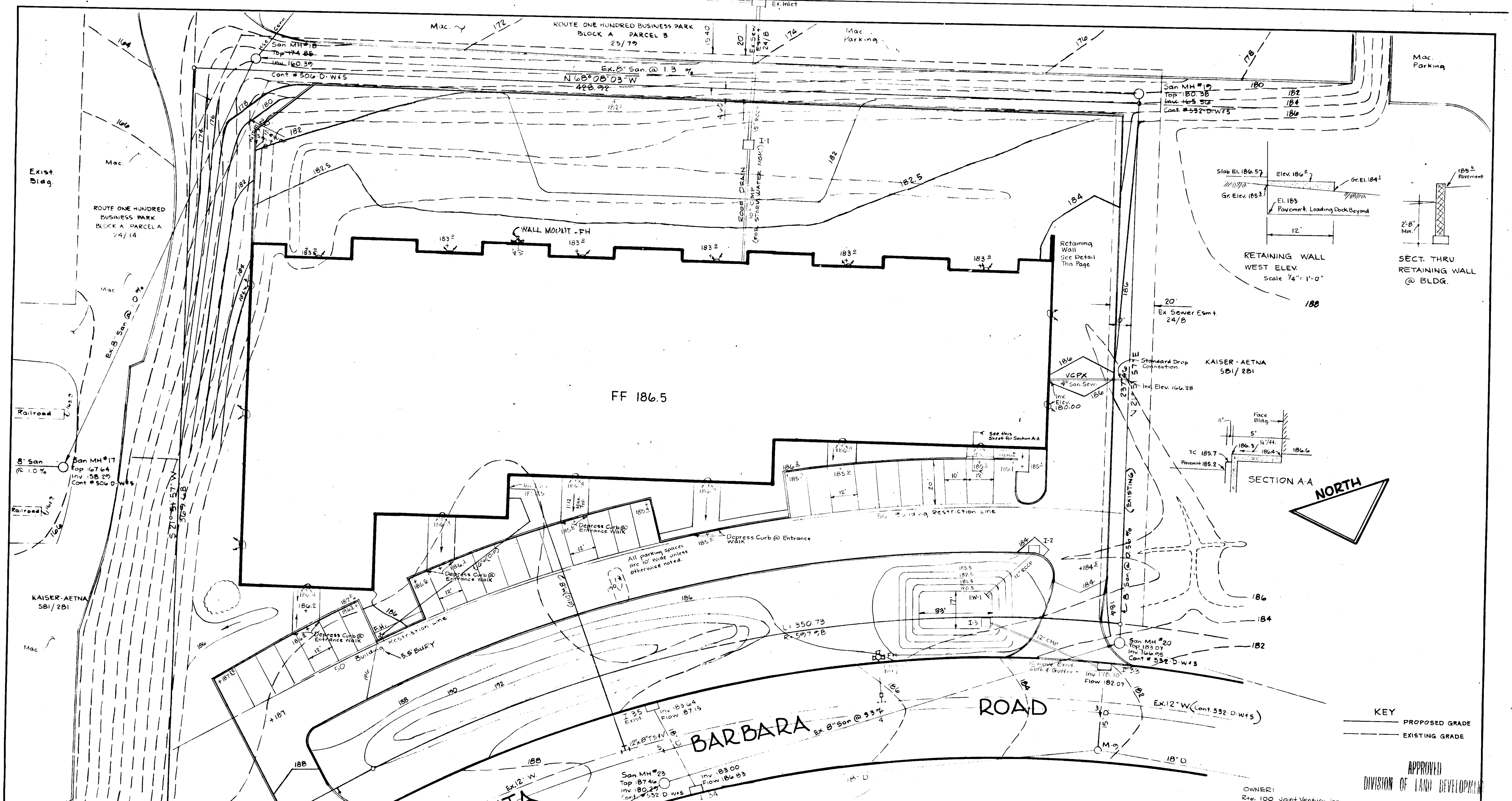
ROUTE ONE HUNDRED BUSINESS PARK
BLOCK A PARCEL D
2.73 Ac.±
TAX MAP 37 — RECORDING REF. NO. 26/1
1ST ELECTION DISTRICT — HOWARD COUNTY, MD.

SCALE 1" = 20' DATE 6-6-77 PROJECT NO. 4190

SDP-78-17

2-11-78

K&E BALTIMORE 17 0253 PHOENIX MC 5189



KEY

———	PROPOSED GRADE
— — —	EXISTING GRADE

NOTES:

1. ALL BENDS FOR 6" & 8" WATER LINES SHALL BE SUPPORTED BY THRUST BLOCKS IN ACCORDANCE WITH HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.

2. ALL PROPOSED WATER MAINS & SEWERS TO BE CONSTRUCTED IN ACCORDANCE W/ HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS.

Exterior Bldg. Lights shall be WALLPACK V-589-120 Volt, (wall exterior) directed as shown. Each shall be 250 Watts - 11,000 lumens.

Symbol

NOTE: LIGHTING SHALL NOT REFLECT ONTO PUBLIC RIGHT-OF-WAYS

Richard P. Browne Assoc.
10227 Wincopin Circle
American City Bldg. Suite 212
Columbia, Md. 21044

STATE OF MARYLAND
FRANCIS DENIS LIGHT
NO. 7617 REGISTERED
PROFESSIONAL ENGINEER

F. Denis Light #7617

OWNER:
Rte. 100 Joint Venture Inc.
5515 Randolph Rd.
Rockville, Md. 20852

TOPO FIELD RUN 2/25/77

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY MARYLAND
DATE 1-24-78
[illegible]

2-11-78
12- -77 Ho. Co. Comments 12-9-77
12-6-77 Ho. Co. Comments 11-25-77

12-1-77	WATER CONNECTION
11-8-77	Gen Rev.
7/25/77	GRADING REV. ON ISLAND

APPROVED: For Public Water and Public Sewerage Systems. Howard County Health Dept.	APPROVED: Howard County Office of Planning and Zoning.	APPROVED: For Public Water, Public Sewerage and Storm Drainage Systems and Roads Howard County Dept. of Public Works
[illegible] 3-30-78 County Health Officer Date	[illegible] 4-3-78 Planning Director Date	[illegible] 3-2?-78 Director Date
	[illegible] 4-3-78 Chief, Div. of Land Development Date	W O Talbert 3-22-78 Chief Bureau of Engineering Date

rba richard p. browne associates
professional design & planning consultants
wayne, new jersey . columbia, maryland

DRAWN GT, MK CHKD. ________ SHEET 2 OF 5

GRADING & UTILITIES

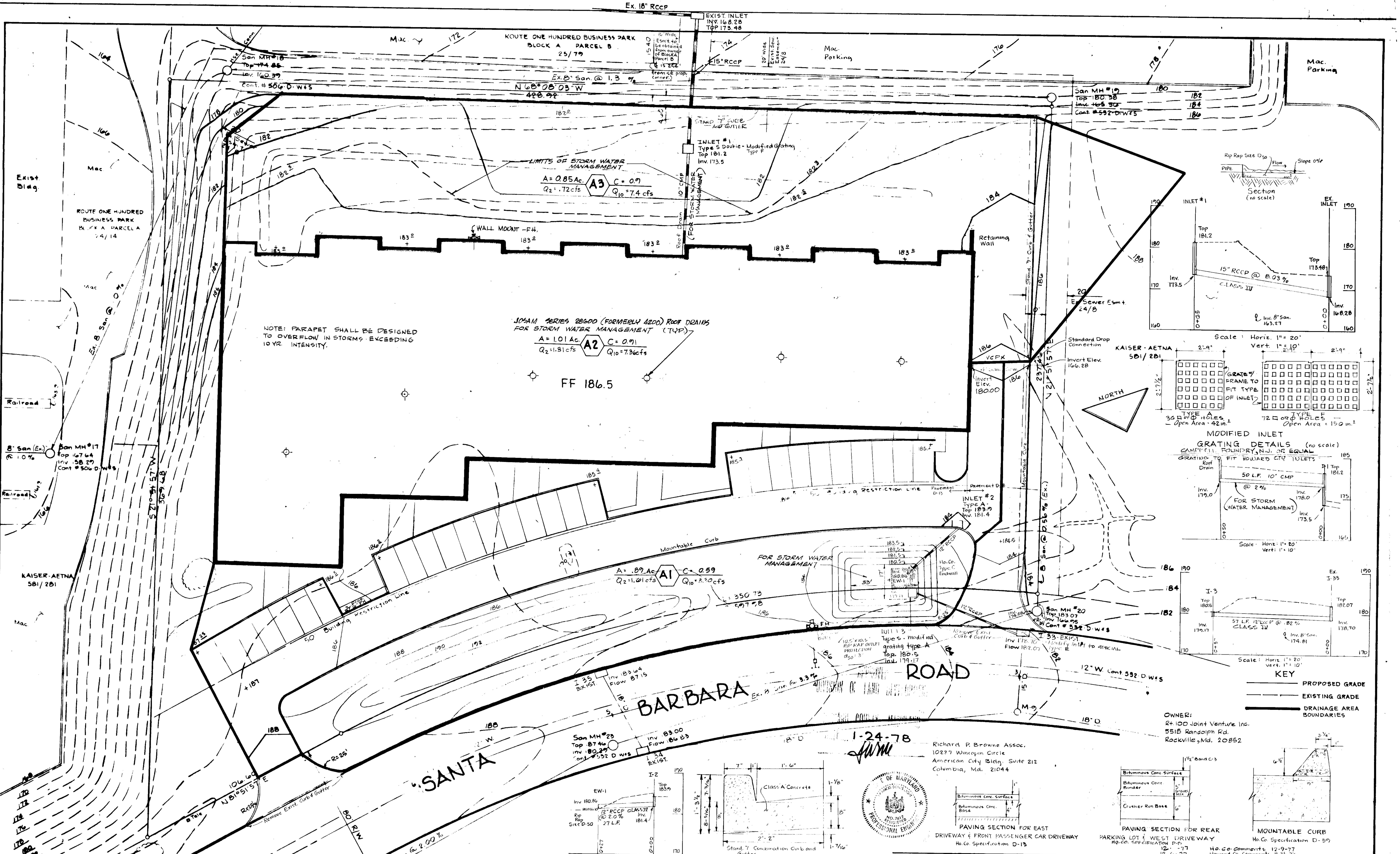
ROUTE ONE HUNDRED BUSINESS PARK
BLOCK A PARCEL D

TAX MAP 37
1ST ELECTION DISTRICT
RECORDING REF. NO. 26/1
HOWARD COUNTY, MD.

SCALE 1" = 20' DATE 6-6-77 PROJECT NO. 4190

K&E BALTIMORE 17 0293 PHOENIX MC 5189

SDP-78-17


Ex. 18" RCCP
EXIST. INLET INV. 168.28 TOP 173.48
ROUTE ONE HUNDRED BUSINESS PARK BLOCK A PARCEL B 25/79
15' Wide Esm't. to be obtained from owner of Block A Parcel B
15"RCCP
20' Wide Exist. Sew. Easement 24/8
Mac. Parking
San MH #18 Top 174.85 Inv. 160.39 Cont. #506-D-W&S
Ex. 8" San. @ 1.3 %
N 68°08'03" W 428.92
San MH #19 Top 180.38 Inv. 165.50 Cont #532-D-W&S
Exist. Bldg.
ROUTE ONE HUNDRED BUSINESS PARK BLOCK A PARCEL A 24/14
STAND. 7" CURB AND GUTTER
INLET #1 Type S Double - Modified Grating Type F Top 181.2 Inv. 173.5
LIMITS OF STORM WATER MANAGEMENT
A = 0.85 Ac. Q2 = .72 cfs A3 C = 0.9 Q10 = 7.4 cfs
10" CMP Roof Drain (FOR STORM WATER MANAGEMENT)
WALL MOUNT - F.H.
Retaining Wall
NOTE: PARAPET SHALL BE DESIGNED TO OVERFLOW IN STORMS EXCEEDING 10 YR. INTENSITY.
JOSAM SERIES 28600 (FORMERLY 4200) ROOF DRAINS FOR STORM WATER MANAGEMENT (TYP.)
A = 1.01 Ac. Q2 = 1.31 cfs A2 C = 0.91 Q10 = 7.36 cfs
FF 186.5
Ex. Sewer Esmt. 24/8
Standard Drop Connection
Invert Elev. 166.28
Invert Elev. 180.00
VCPX
S 21°51'57" W 237.48
S 21°51'57" W 369.68
NORTH
San MH #17 Top 167.64 Inv. 158.29 Cont #506-D-W&S
8" San (Ex.) @ 1.0 %
Ex. 8" San @ 1.0 %
Railroad
KAISER-AETNA 581/281
Building Restriction Line
Mountable Curb
INLET #2 Type A Top 183.9 Inv. 181.4
FOR STORM WATER MANAGEMENT
Ho. Co. Type C Endwall
A = .89 Ac. Q2 = 1.61 cfs A1 C = 0.59 Q10 = 8.30 cfs
L = 350.73 R = 597.58
12" RCCP
San MH #20 Top 183.07 Inv 166.95 Cont # 532-D-W&S
Inlet 3 Type S - modified grating type A Top 180.5 Inv. 179.17
10.5'x10.5' RIP RAP OUTLET PROTECTION d50 = 3"
I 33 - EXIST. Modify Inlet to SPECIAL Type E
Inv 178.70 Flow 182.07
12" W. Cont. 532-D-W&S
8" Sdn. @ 0.56 % (Ex.)
I 35 EXIST. Inv 183.64 Flow 187.15
SANTA BARBARA ROAD
Ex. 8" San @ 3.3 %
San MH #23 Top 187.46 Inv. 180.29 Cont. #532 D W&S
Inv 183.00 Flow 186.83
I 34 EXIST.
N 81°51'57" E 106.60
Remove Exist. Curb & Gutter
R = 25'
80' R/W
Ex. 8" San @ 2.00 %
M-9
18" D
Rip Rap Size D50 Flow Slope 0% PIPE Section (no scale)
INLET #1 Top 181.2 Inv. 173.5 15" RCCP @ 8.03% CLASS III EX. INLET Top 173.48 Inv. 168.28 Inv. 8" San. 163.27
Scale: Horiz. 1" = 20' Vert. 1" = 10'
KAISER - AETNA 581/281
GRATE w/ FRAME TO FIT TYPE OF INLET
TYPE A 36 □ or ○ HOLES Open Area = 42 in.²
TYPE F 72 □ or ○ HOLES Open Area = 150 in.²
MODIFIED INLET GRATING DETAILS (no scale)
CAMPBELL FOUNDRY, N.J. OR EQUAL
GRATING TO FIT HOWARD CTY INLETS
Roof Drain 50 L.F. 10" CMP @ 2% Inv. 179.0 Inv. 178.0 Inv. 173.5 Top 181.2 (FOR STORM WATER MANAGEMENT)
Scale: Horiz: 1" = 20' Vert: 1" = 10'
I-3 Top 180.5 Inv. 179.17 57 L.F. 12" RCCP @ .82% CLASS III Ex. I-33 Top 182.07 Inv. 178.70 Inv. 8" San. 174.81
Scale: Horiz. 1" = 20' Vert. 1" = 10'
KEY
PROPOSED GRADE
EXISTING GRADE
DRAINAGE AREA BOUNDARIES
OWNER: Rt. 100 Joint Venture Inc. 5515 Randolph Rd. Rockville, Md. 20852
EW-1 Inv. 180.86 I-2 Top 183.9 12" RCCP CLASS III @ 2.0% 27 L.F. Inv. 181.4 Rip Rap Size D-50
Scale: Horiz: 1" = 20' Vert: 1" = 10'
Class A Concrete
Stand. 7" Combination Curb and Gutter Ho. Co. Specification D-40
1-24-78
Richard P. Browne Assoc. 10227 Wincopin Circle American City Bldg. Suite 212 Columbia, Md. 21044
STATE OF MARYLAND FRANCIS DENIS LIGHT NO. 7617 REGISTERED PROFESSIONAL ENGINEER
Bituminous Conc. Surface Bituminous Conc. Base
PAVING SECTION FOR EAST DRIVEWAY & FRONT PASSENGER CAR DRIVEWAY Ho. Co. Specification D-13
1 1/2" Band C-3 Bituminous Conc. Surface Bituminous Conc. Binder 5" Gravel Mix Crusher Run Base 6"
PAVING SECTION FOR REAR PARKING LOT & WEST DRIVEWAY Ho. Co. SPECIFICATION D-8
MOUNTABLE CURB Ho. Co. Specification D-39

F. Denis Light #7617

DATE	REVISION
12- -77	Ho. Co. Comments 12-9-77
12-6-77	Howard Co. Comments 11-25-77
12-2-77	PARAPET NOTE

APPROVED: For Public Water and Public Sewerage Systems
Howard County Health Dept.
[illegible] 3-30-78
County Health Officer Date

APPROVED: Howard County Office of Planning and Zoning.
Thomas G. Harris Jr. 4-3-78
Planning Director Date
[illegible] 4-3-78
Chief, Div. of Land Development Date

APPROVED For Public Water, Public Sewerage & Storm Drainage System & Roads
Howard County Dept. of Public Works
[illegible] 3-23-78
Director Date
W O Lelbert 3-22-78
Chief Bureau of Engineering Date

rba richard p. browne associates
professional design & planning consultants
wayne, new jersey . columbia, maryland

DRAWN GT, MK CHKD. ________ SHEET 3 OF 5

DRAINAGE PLAN

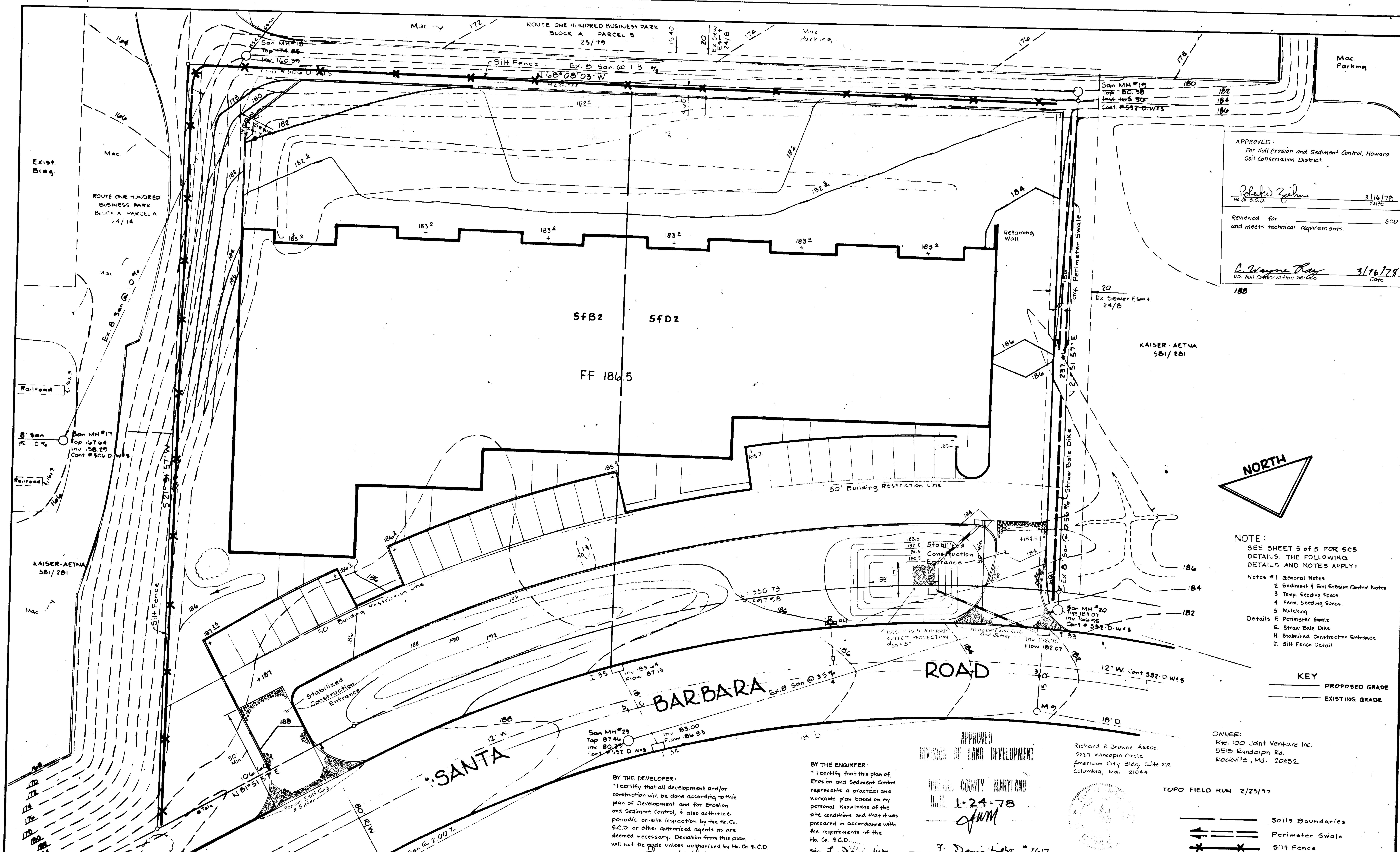
ROUTE ONE HUNDRED BUSINESS PARK
BLOCK A PARCEL D

TAX MAP 37
1ST ELECTION DISTRICT
RECORDING REF. NO. 26/1
HOWARD COUNTY, MD.

SCALE 1" = 20' DATE 6-6-77 PROJECT NO. 4190

SDP-78-17 2-11-78

KBE BALTIMORE 17 PHOENIX MC 9189



APPROVED:
For Soil Erosion and Sediment Control, Howard Soil Conservation District.

Ho. Co. S.C.D. — Date 3/16/78

Reviewed for ______ SCD and meets technical requirements.

U.S. Soil Conservation Service — Date 3/16/78

NOTE:
SEE SHEET 5 of 5 FOR SCS DETAILS. THE FOLLOWING DETAILS AND NOTES APPLY:

Notes #1 General Notes
2 Sediment & Soil Erosion Control Notes
3 Temp. Seeding Specs.
4 Perm. Seeding Specs.
5 Mulching

Details F. Perimeter Swale
G. Straw Bale Dike
H. Stabilized Construction Entrance
J. Silt Fence Detail

OWNER:
Rte. 100 Joint Venture Inc.
5515 Randolph Rd.
Rockville, Md. 20852

Richard P. Browne Assoc.
10227 Wincopin Circle
American City Bldg. Suite 212
Columbia, Md. 21044

TOPO FIELD RUN 2/25/77

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY MARYLAND
DATE 1-24-78

BY THE DEVELOPER:
"I certify that all development and/or construction will be done according to this plan of Development and for Erosion and Sediment Control, & also authorize periodic on-site inspection by the Ho. Co. S.C.D. or other authorized agents as are deemed necessary. Deviation from this plan will not be made unless authorized by Ho. Co. S.C.D.

Signature Thomas W. Yoder Date 7/27/77

BY THE ENGINEER:
"I certify that this plan of 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 Ho. Co. S.C.D.

Sign. F. Dennis Lighter
Date 6-6-77

F. Dennis Lighter #7617

APPROVED: For Public Water and Sewerage Systems.
Howard County Health Dept.
County Health Officer — Date 3-30-78

APPROVED: Howard County Office of Planning and Zoning.
Planning Director — Date 4-3-78
Chief, Div. of Land Development — Date 4-3-78

APPROVED: For Public Water, Public Sewerage and Storm Drainage Systems and Roads
Howard County Dept. of Public Works
Director — Date 3-23-78
Chief Bureau of Engineering — Date 3-22-78

rba richard p. browne associates
professional design & planning consultants
wayne, new jersey • columbia, maryland

DRAWN GT, MK CHKD. ______ SHEET 4 OF 5

SEDIMENT CONTROL PLAN

ROUTE ONE HUNDRED BUSINESS PARK
BLOCK A PARCEL D

TAX MAP 37
1ST ELECTION DISTRICT
RECORDING REF. NO. 26/1
HOWARD COUNTY, MD.

SCALE 1" = 20' DATE 6-6-77 PROJECT NO. 4190

SDP-78-17

Rev. 11-8-77
Rev. 12-6-77 Ho. Co. comments 11-25-77
2-11-78

K&E BALTIMORE 17 8889 PHOENIX MC 9189

1. GENERAL NOTES:

1. Diversion Terraces (or Furrows) will be utilized to reduce slope lengths where possible, during land grading operations.
2. Permanent Vegetation will be established as rapidly as possible on all exposed faces of cuts and fills and other areas following grading operations.
3. Temporary Vegetation will be applied upon completion on rough grading on all other disturbed areas where such areas will not be built on within a period of ninety (90) days.
4. Storm Sewer inlets located below high silt producing areas will be protected by the use of adequate silt traps during construction.
5. All inlets shall be blocked with 1/2" plywood held in place with stone until all areas are stabilized. (see detail this sheet)

2. SEDIMENT AND SOIL EROSION CONTROL NOTES:

1. All Sediment Control Measures to be adjusted to meet field conditions at time of construction and be constructed prior to any grading or disturbance of existing surface material.
2. All Sediment Measures shall be undertaken in strict accordance with the approved plans and the criteria specifications approved by the Howard County Soil Conservation District. (Ho. Co. SCD)
3. All Seeding on Sediment Control Facilities to be done in accordance with the Ho. Co. SCD, see Temporary Seeding Specs., this sheet. Seeding to be done immediately upon construction.
4. Periodic inspection and maintenance of all Sediment Control Structures must be provided to insure the intended purpose is accomplished.
5. Contractor installing the above shall obtain and follow the Standards and Specifications for soil erosion in urbanizing areas, as distributed by the Ho. Co. SCD.
6. All Sediment Control Measures are to remain in place until permission for their removal has been obtained from the Ho. Co. SCD.
7. Notify the Ho. Co. Inspection and Permit Office prior to starting any work. (992-2434)
8. On site inspection and maintenance of all Sediment Control Measures including cleanout of all Sediment Traps and Drains and proper establishment of all vegetation measures will be the responsibility of the Contractor or his representative on the site on a continuing day to day basis.

3. TEMPORARY SEEDING SPECIFICATIONS:

1. Apply ground agricultural limestone at the rate of two tons per acre.
2. Apply a minimum of 500 lbs. per acre of 10-20-10 or equivalent fertilizer.
3. Incorporate both lime and fertilizer into the top 3/4" of surface soil by disking or other suitable means.
4. Seed one of the following mixtures at the rate shown per acre. (August 1 to November 1)
   50 lbs. Italian rye grass or
   2 bu. rye (small grain) or
   3 bu. winter oats
5. Mulch according to Mulching notes, this sheet.

4. PERMANENT SEEDING SPECIFICATIONS:

Before seeding apply the following: 2000# Ground Agricultural Limestone, 1000# 5-10-10 Fertilizer

Distribute into the soil to a depth of 2-3".

Then seed the following mixture at the rate shown per acre:
50 lbs. Kentucky 31 Tall Fescue
15 lbs. Korean Lespedeza

Mulch as stated under mulching rates, this sheet.

Slopes flatter than 3:1 in lawns.

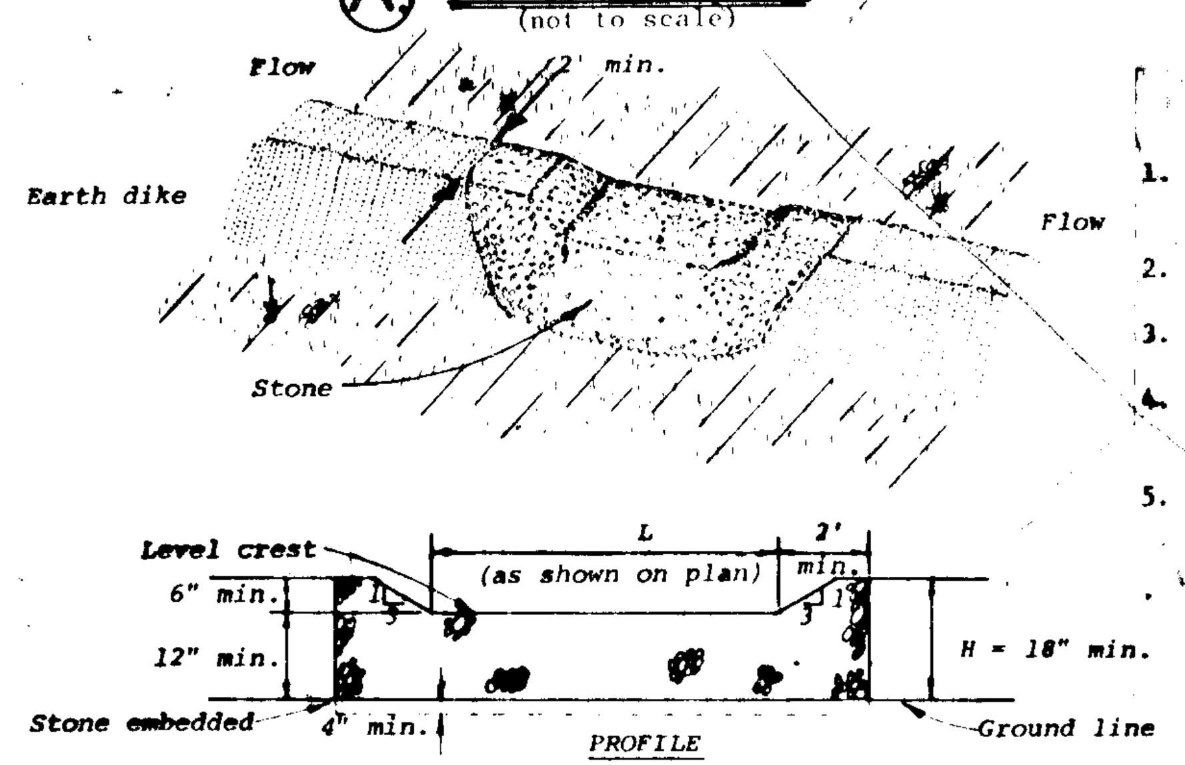
Lime and Fertilizer as above.
Incorporate as above.
Seed to 60# Kentucky Blue Grass and 60# Red Fescue
Mulch as above.

5. MULCHING:

1. Mulch materials should be unweathered, unchopped small grain straw, spread at the rate of 1 1/2 to 2 tons per acre.
2. Spread uniformly by hand or mechanically so that atleast 75% of the soil surface will be covered. For uniform distribution of hand spread mulch divide area into approx. 1,000 sq. ft. section and place one bale approx. 100 lbs. of mulch for distribution within each section approx. 65-100 lb. bales will be required.

APPROVED: For Public Water and Public Sewerage Systems Howard County Health Dept.	APPROVED: Ho. Co. Office of Planning and Zoning	APPROVED: For Public Water, Public Sewerage & Storm Drainage Systems and Roads. Ho. Co. Dept. of Public Works
	[illegible] Planning Director Date 4-3-78	[illegible] 3-23-78 Director Date
[illegible] 3-30-78 County Health Officer Date	[illegible] Chief, Div. of Land Devel. Date	W O Lilbert 3-22-78 Chief, Bur. of Engineering Date

A. STONE OUTLET STRUCTURE*
(not to scale)



HOWARD
O. Wayne Ray 3/16/78

Approved Robert D. Zielinski 3/16/78
Howard S.C.D.

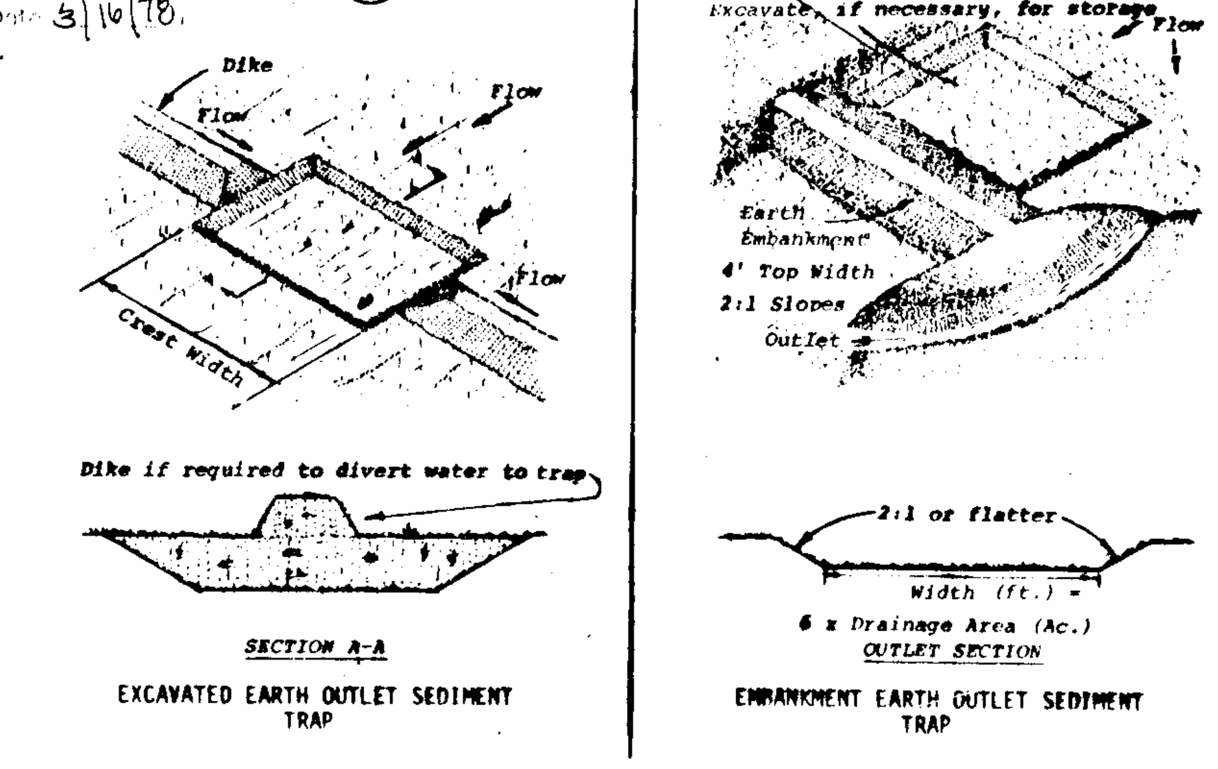
Construction Specifications

1. The stone shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet MSHA Size No. 2 or AASHTO designation M43 Size No. 2 or 24.
2. The crest of the stone dike shall be at least six inches lower than the lowest elevation of the top of the earth dike and shall be level.
3. The stone outlet structure shall be embedded into the soil a minimum of four inches.
4. The minimum length, in feet, of the crest of the stone outlet structure shall be equal to six times the number of acres of contributing drainage area.
5. The stone outlet structure shall be inspected after each rain, and the stone shall be replaced when the structure ceases to function as intended due to silt accumulation among the stone, washout, construction traffic damage, etc.

Standard Symbol SOS L =

* Drainage area less than 5 acres

B. EARTH OUTLET SEDIMENT TRAP*

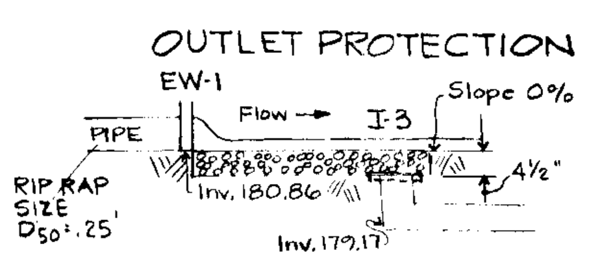


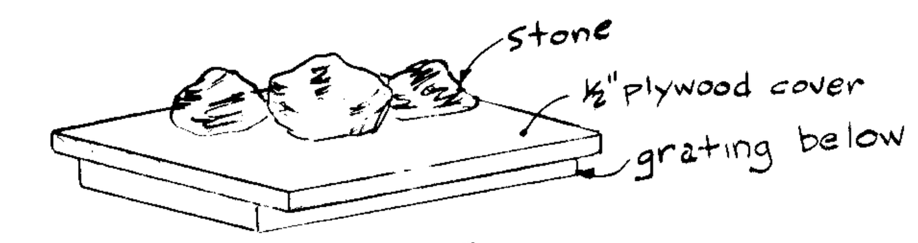
Construction Specifications

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 or other woody vegetation as well as oversized stones, rocks, organic material, or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
4. The structure shall be inspected after each rain and repairs made as needed.
5. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
6. The structure shall be removed and area stabilized when the drainage area has been properly stabilized.
7. All cut and fill slopes shall be 2:1 or flatter.
8. Outlet crest elevation shall be at least one foot below the top of the embankment.

* Drainage area less than 5 acres

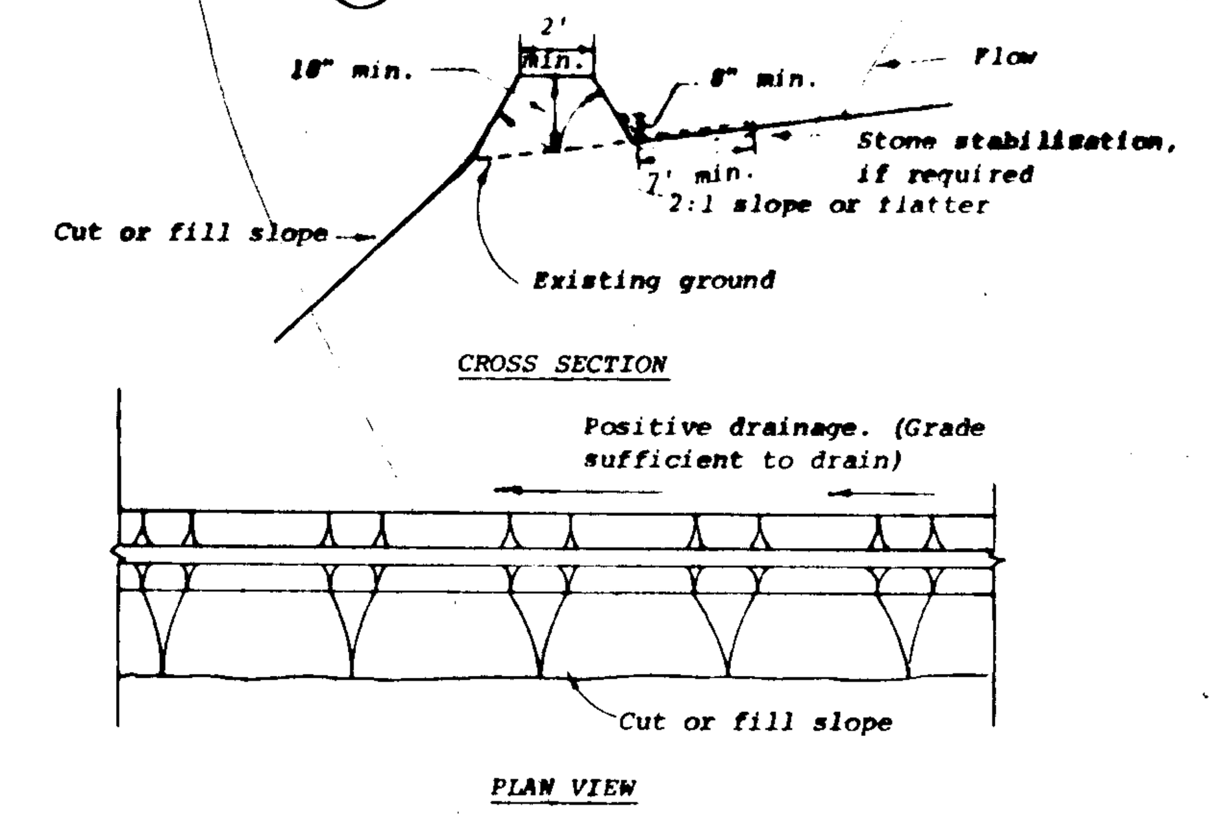
OUTLET PROTECTION





INLET PROTECTION

C. DIVERSION DIKE*



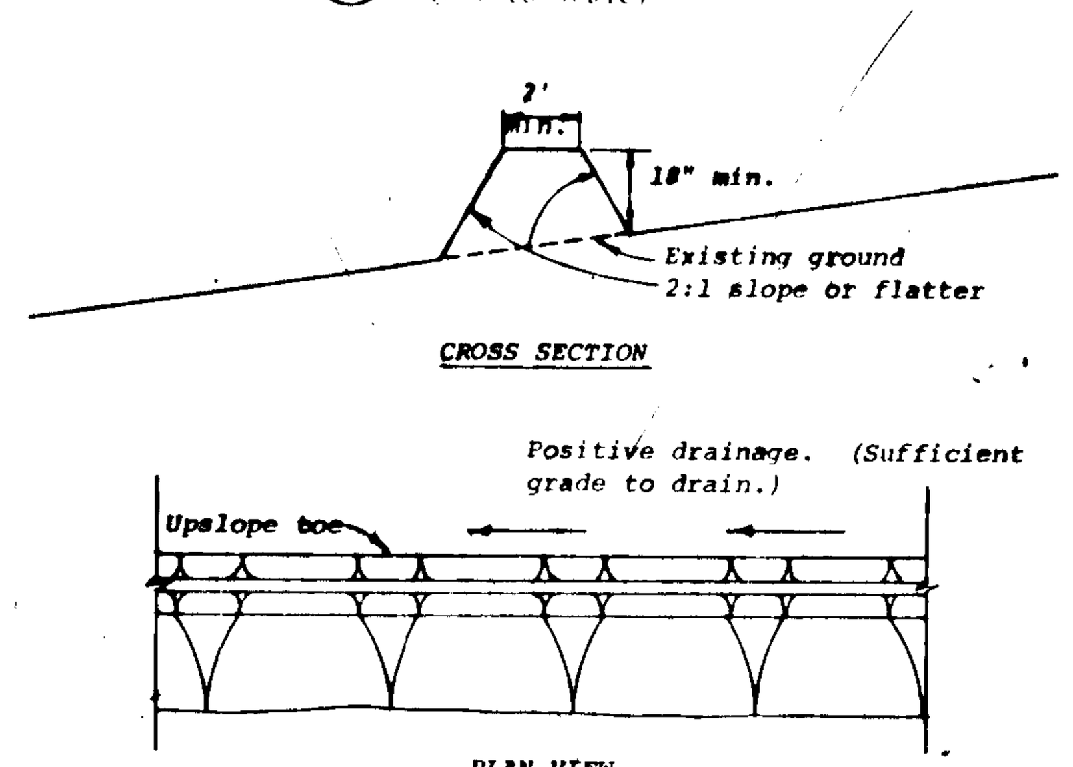
Construction Specifications.

1. All dikes shall be machine compacted.
2. All diversion dikes shall have positive drainage to an outlet.
3. A. Diverted runoff from a protected or stabilized area shall outlet directly to an undisturbed stabilized area or into a level spreader or grade stabilization structure.
   B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or to an area protected by any of these practices.
4. Stabilization, as specified by the plans, shall be: (1) in accordance with Standard and Specifications for Grassed Waterway, and the area to be stabilized shall be the channel (flow area); or (2) the flow area shall be lined with stone that meets MSHA size No. 2 or AASHTO M43 size No. 2 or 24 which is placed in a 3 inch thick layer and pressed into the soil. The area covered by the stone shall be as shown on the drawing above.
5. Periodic inspection and required maintenance shall be provided.

Standard Symbol DD

* Drainage area less than 5 acres

D. PERIMETER DIKE
(not to scale)



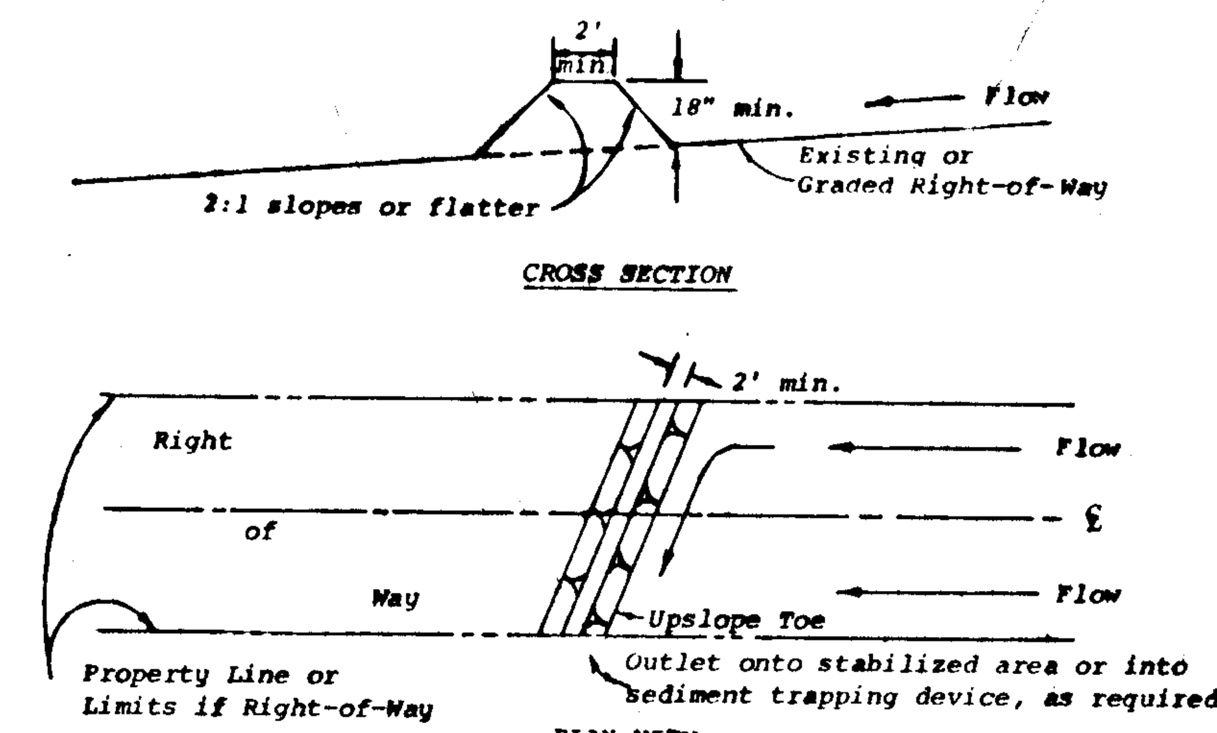
Construction Specifications

1. All dikes shall be machine compacted.
2. All perimeter dikes shall have positive drainage to an outlet.
3. A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or into a level spreader or grade stabilization structure.
   B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as sediment trap or a sediment basin or to an area protected by any of these practices.
4. Stabilization, when required, shall be done in accordance with Standard and Specifications for Grassed Waterway. The minimum area to be stabilized shall be the channel flow area.
5. Periodic inspection and required maintenance shall be provided.

Standard Symbol PD

* Drainage area less than 5 acres

E. INTERCEPTOR DIKE*
(not to scale)

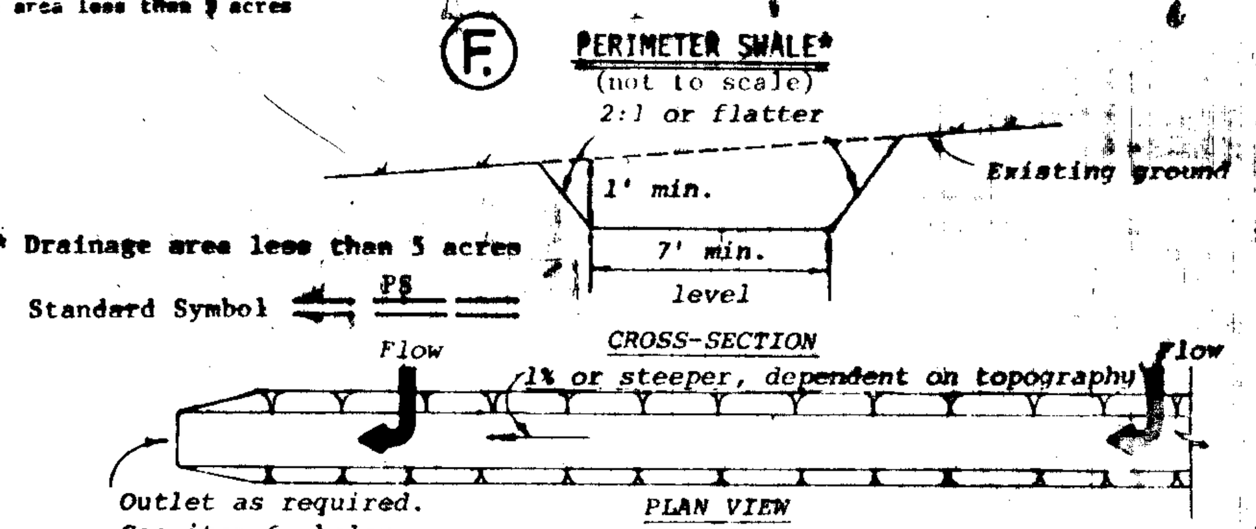


Construction Specifications

1. All dikes shall be machine compacted.
2. All interceptor dikes shall have positive drainage to an outlet.
3. Top width may be wider 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. Interceptor dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin when either the interceptor dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization, as specified by the plans, shall be: (1) in accordance with Standard and Specifications for Grassed Waterway, and the area to be stabilized shall be the channel (flow area); or (2) the flow area shall be lined with stone that meets MSHA size No. 2 or AASHTO size No. 2 or 24 which is placed in a 3 inch thick layer and pressed into the soil. The area covered by the stone shall be as shown on Standard Drawing DD-1.
7. Periodic inspection and required maintenance must be provided.

* Drainage area less than 5 acres. Standard Symbol ID

F. PERIMETER SWALE*
(not to scale)



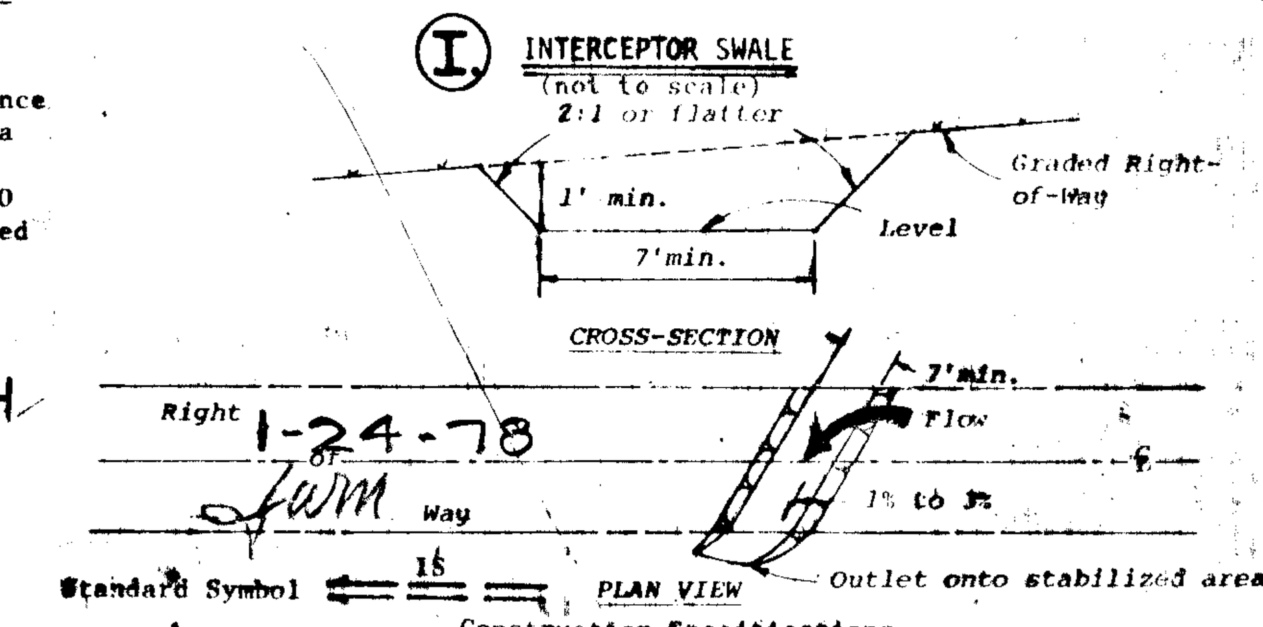
* Drainage area less than 5 acres

Standard Symbol PS

Construction Specifications

1. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
2. The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
3. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the completed swale.
4. All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the swale.
5. Perimeter swales shall have a minimum grade of one percent and the bottom shall be level.
6. A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area, level spreader or into a grade stabilization structure.
   B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or within an area protected by any of these practices.
7. Stabilization shall be: (1) in accordance with the Standard and Specifications for Grassed Waterway; or (2) by lining the flow area with stone that meets MSHA size No. 2 or AASHTO M43 size No. 2 or 24 in a layer at least 3 inches in thickness and pressed into the soil. The lining shall extend across the bottom and up both sides of the channel a height of at least 8 inches vertically above the bottom.
8. Periodic inspection and required maintenance shall be provided.

I. INTERCEPTOR SWALE
(not to scale)



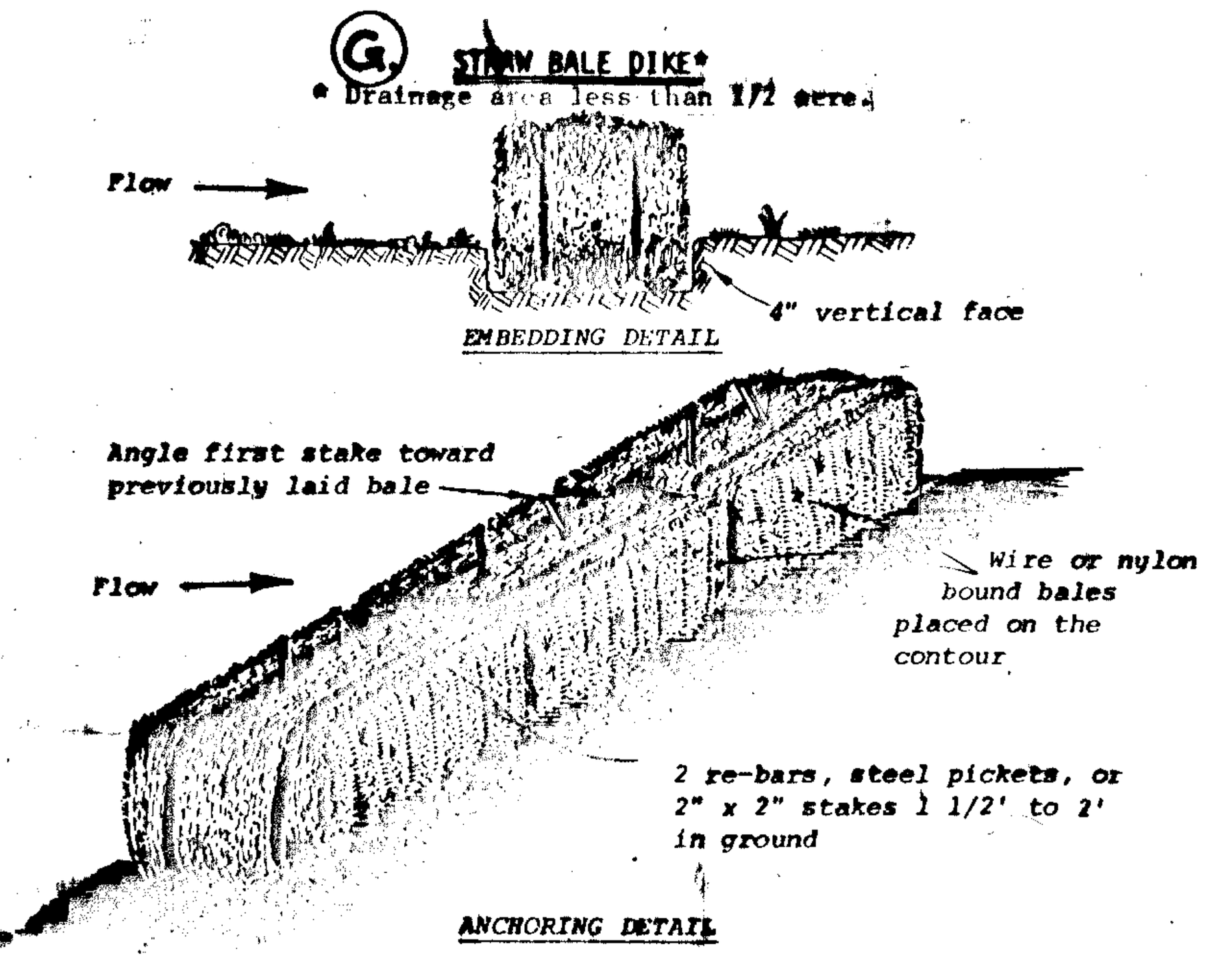
1-24-78
JWM

Standard Symbol IS

Construction Specifications

1. All trees, brush, stumps, obstructions, and other objectionable material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
2. The swale shall be excavated or shaped to line, grade, and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.
3. Fills shall be compacted as needed to prevent unequal settlement that would cause damage in the complete swale.
4. All earth removed and not needed in construction shall be spread or disposed of so that it will not interfere with the functioning of the swale.
5. Interceptor swales shall have a minimum grade of one percent and the bottom shall be level.
6. An interceptor swale shall have an outlet that functions with a minimum of erosion.
7. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin.
8. The on-site location may need to be adjusted to meet field conditions in order to utilize the most suitable outlet.
9. Stabilization shall be: (1) in accordance with the Standard and Specifications for Grassed Waterway; or (2) by lining the flow area with stone that meets MSHA size No. 2 or AASHTO M43 size No. 2 or 24 in a layer at least 3 inches in thickness and pressed into the soil. The lining shall extend across the bottom and up both sides of the channel a height of at least 8 inches vertically above the bottom.
10. Periodic inspection and required maintenance shall be provided.

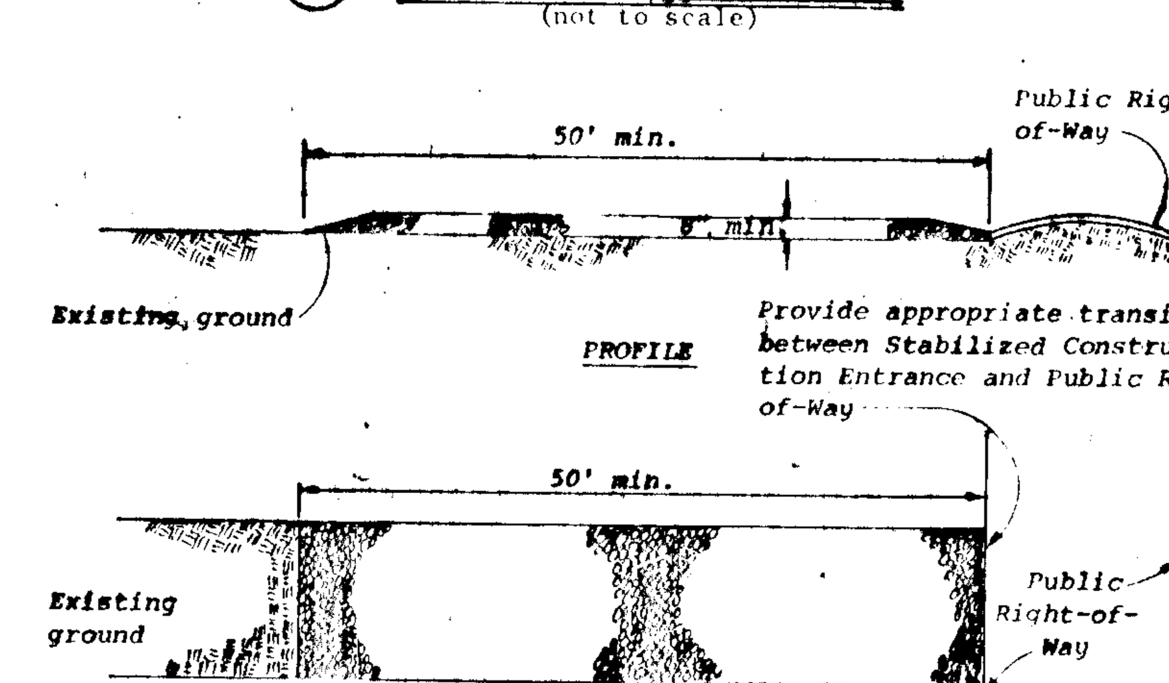
G. STRAW BALE DIKE*
* Drainage area less than 1/2 acre.



Construction Specifications

1. Bales shall be placed in a row with ends tightly abutting the adjacent bales.
2. Each bale shall be embedded in the soil a minimum of 4".
3. Bales shall be securely anchored in place by stakes or re-bars driven through the bales. The first stake in each bale shall be angled toward previously laid bale to force bales together.
4. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
5. Bales shall be removed when they have served their usefulness so as not to block or impede storm flow or drainage.

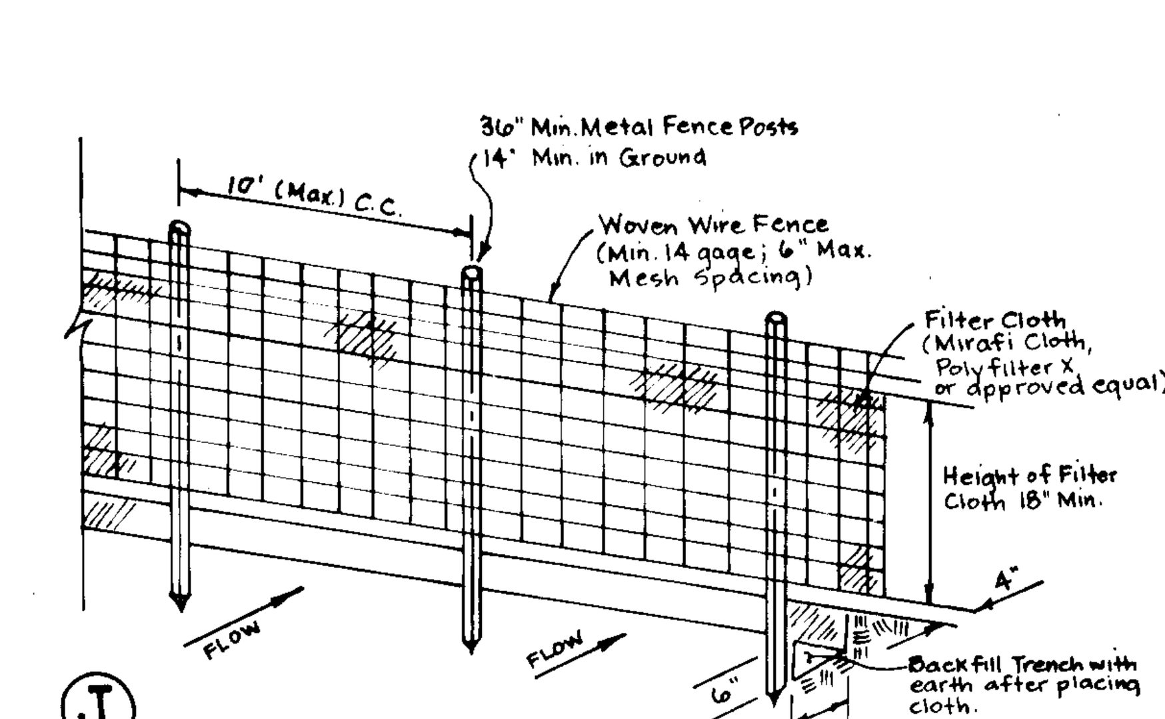
H. STABILIZED CONSTRUCTION ENTRANCE
(not to scale)



Construction Specifications

1. Stone size - Use MSHA size No. 2 (2-1/2" to 1") or AASHTO designation M43, size No. 2 (2-1/2" to 1-1/2"). Use crushed stone.
2. Length - As effective, but not less than 50 feet.
3. Thickness - Not less than eight (8) inches.
4. Width - Not less than full width of all points of ingress or egress.
5. Washing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved methods.
6. 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 and 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.

J. SILT FENCE DETAIL
NO SCALE



NOTE:
1. Woven Wire fence to be fastened securely to fence posts with wire ties.
2. Filter Cloth to be fastened securely to woven wire fence with wire ties spaced every 24" x 24".

OWNER:
Rte. 100 Joint Venture Inc.
5515 Randolph Rd.
Rockville, Md. 20852

STATE OF MARYLAND
H. E. VEENENDAAL
No. 7327
REGISTERED PROFESSIONAL ENGINEER

H.E. Veenendaal

Richard P. Browne Assoc.
10227 Wincopin Circle
American City Bldg. Suite 212 Columbia, Md. 21044

rba richard p. browne associates
professional design & planning consultants
wayne, new jersey . columbia, maryland

DRAWN MK	CHKD.	SHEET 5 OF 5

DETAIL SHEET

ROUTE ONE HUNDRED BUSINESS PARK
BLOCK A PARCEL D
2.73 Ac.±
TAX MAP 37 — RECORDING REF. NO. 26/1
1ST ELECTION DISTRICT — HOWARD COUNTY, MD.

SCALE as shown	DATE 6-6-77	PROJECT NO. 4170

SDP-78-17

Rev. 12-6-77 Ho. Co. Comments 11-28-77
2-11-78

K&E BALTIMORE 17 0253 PHOENIX MC 5189.