

Site Analysis - Parcel A-2

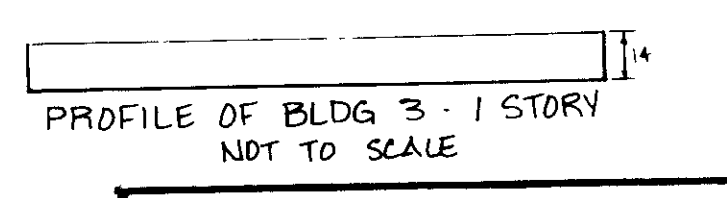
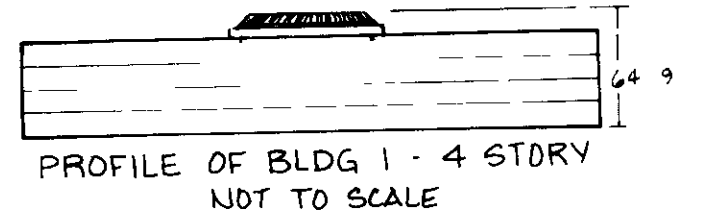
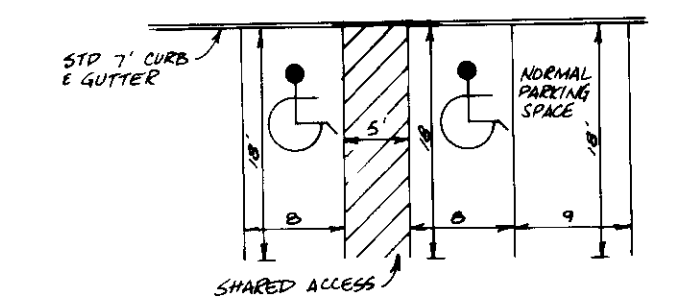
A	Area of Parcel A-2	9.00 Ac.
B	Area of Proposed Site	3.3631 Ac.
C	Present Zoning	New Town Employment Center Industrial
D	Proposed Use	New Town Office Building (Research & Development)
E	Total Building Area	EX 280,840 SF + PROP 51,560 SF = TOTAL 332,400 SF
F	Spaces Required	Two Spaces/1000 Sq.Ft.
G	Parking Provided	EX 574 + PROP 63 = TOTAL 637
H	Handicap Space Required	EX 948 + PROP 03 = TOTAL 1011
I	Handicap Space Provided	50
J	Landscape Required	60
K	Landscape Provided	0.699 Ac (20% of Property Site Area)
L	Parking Area	1.60 Ac (47% of Property Site)
M	Building Coverage	.65% Ac.
N	Percentage of Building Coverage	EX 165,790 SF + PROP 31,350 SF = TOTAL 197,140 SF 50% of Total Site (482 Ac)

GENERAL NOTES

- ALL WATER LINES SHALL BE CONSTRUCTED A MINIMUM OF 42" COVER BELOW FINISHED GRADE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST FIT EXISTING UTILITIES, WHERE DIRECTED BY THE ENGINEER, A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 

MISS UTILITY	1-800-257-7777
CSF TELEPHONE COMPANY	783-9976
HOWARD CO BUREAU OF UTILITIES	992-2366
AT&T CABLE LOCATION DIVISION	393-3555
BALTIMORE GAS & ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD CO. CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
- PROFILE STATIONS ARE TO BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED 4/7/87 BY KIDDE CONSULTANTS, INC. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- SITE LIGHTING TO BE DIRECTED INWARD AND DOWNWARD AWAY FROM ALL RESIDENTIAL AREAS.
- A WAIVER HAS BEEN GRANTED FOR STORM WATER MANAGEMENT. (SDP-85-130)
- ALL THE FINAL PLAN CRITERIA IS BASED ON COLUMBIA COMMERCIAL AND INDUSTRIAL DEVELOPMENT GUIDELINES.
- PLAN REFERENCE TO SDP-85-130, P-85-256, FDP-147.
- BUILDING USE: GENERAL OFFICE.

PAVING P-1  
PAVING P-2



ADDRESS CHART	
BLDG	ADDRESS
#1	9755 PATIENT WOODS DRIVE
#3	9830 PATIENT WOODS DRIVE

SUBDIVISION NAME		SECT/AREA	PARCEL NO
VILLAGE OF OWEN BROWN		G/1	C-2 & A-2
PLAT NO OR L/F	BLOCK NO	ZONE	TAX/ZONE MAP/ELEC DIST
8178	8	NEW TOWN	G
WATER CODE		SEWER CODE	
E 13		5330300	

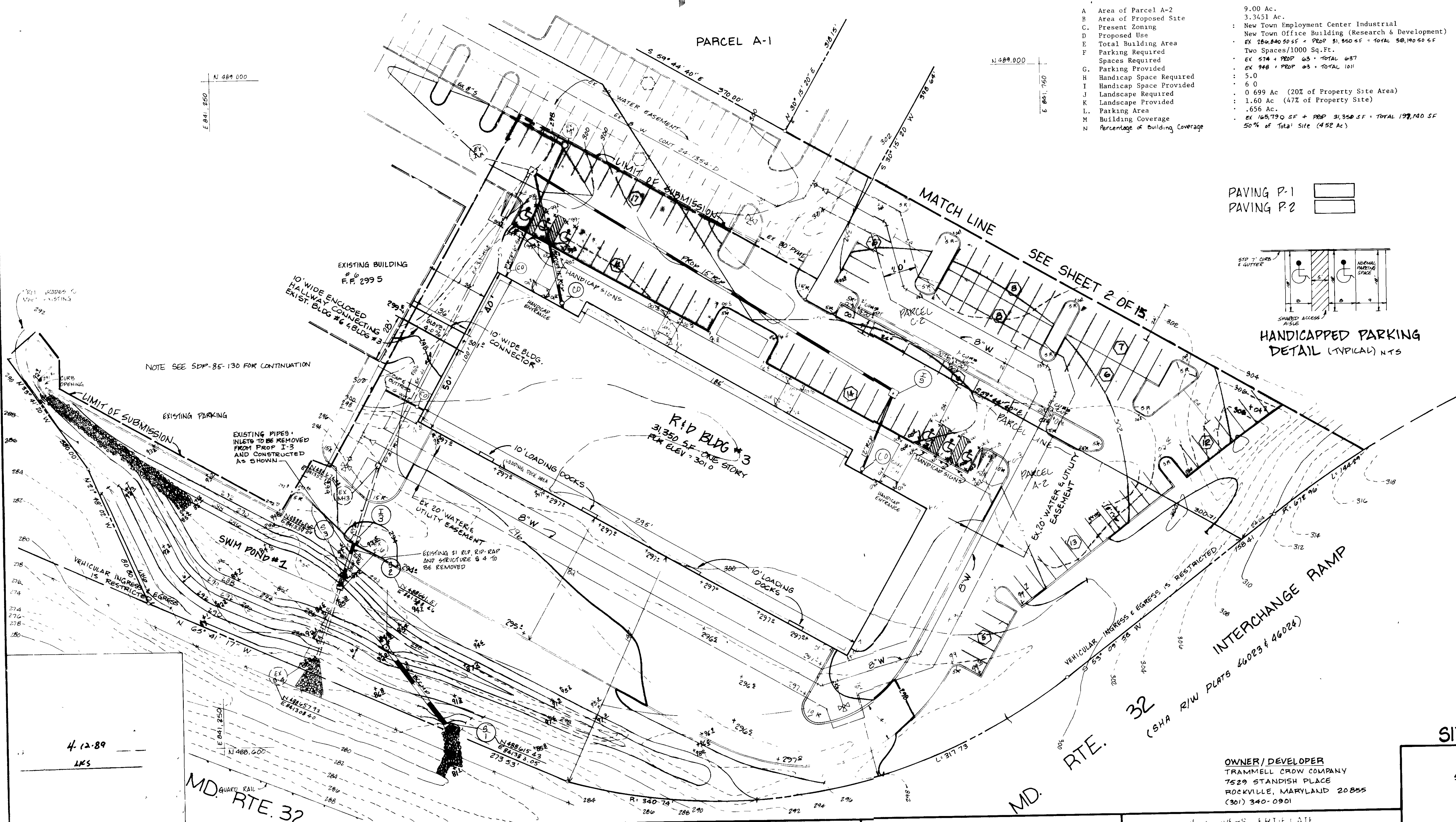
SITE DEVELOPMENT PLAN

VILLAGE OF OWEN BROWN  
SECTION G AREA 1, PARCEL C-2 & A-2  
TAX MAP 42 PARCEL 16  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**KIDDE CONSULTANTS, INC.**

ENGINEERS • PLANNERS • SURVEYORS

Paul Reiff  
12/6/88  
August 1988



4-12-89  
LMS

9.17.89	9.11.89
7/1/85	

REVISION CHART

NOV. 14, 1987	REMOVED EX. 6" WATER & 20" UTILITY EASEMENT
NOV. 14, 1989	ADDED NEW 8" WATER & 20" UTILITY EASEMENT
NOV. 14, 1989	REVISED GRADES
JAN. 3, 1992	ADDED AS-BUILT POND ELEVATIONS

James J. ... 8/30/89  
8-29-89  
9/1/89

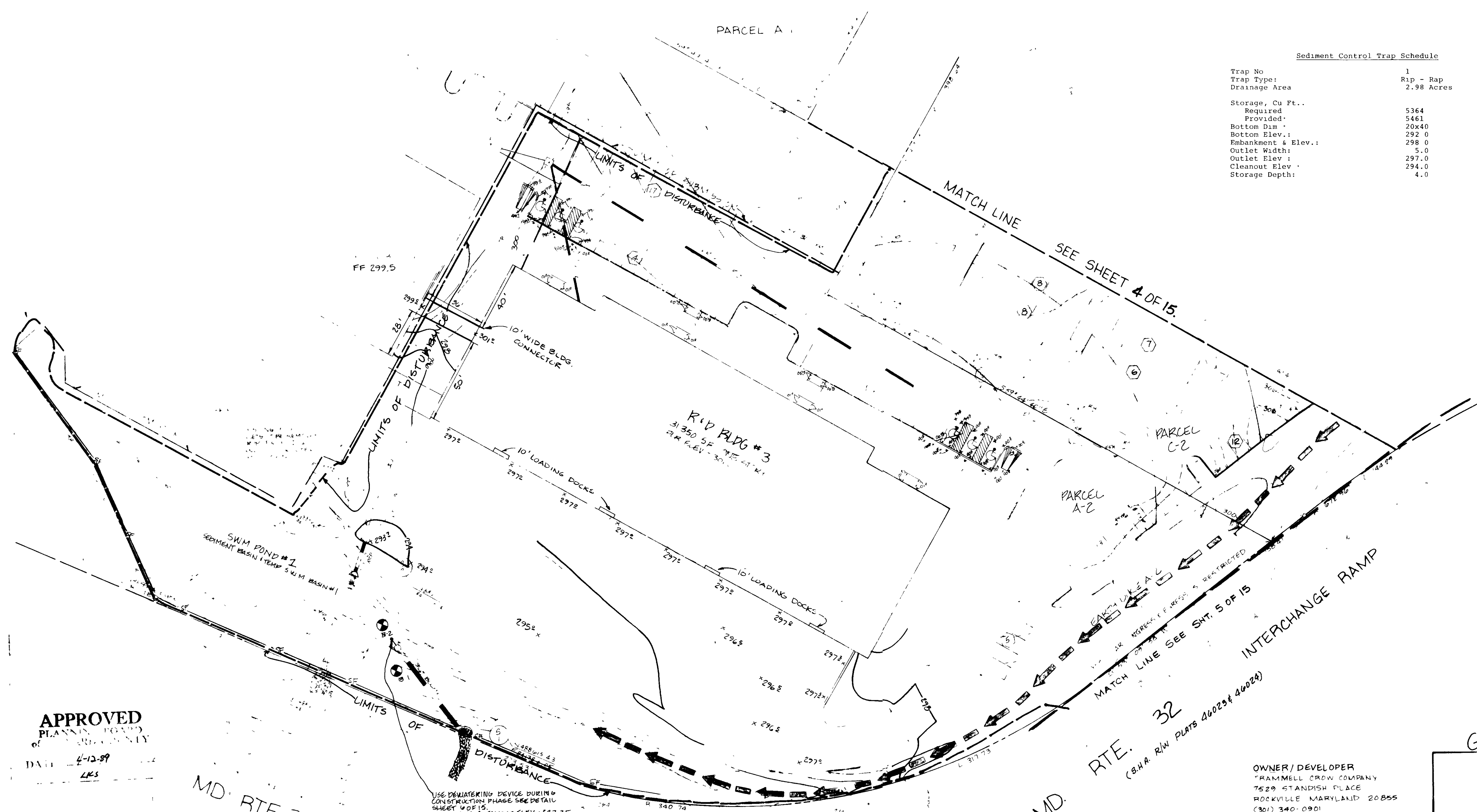
J. Helms 5-19-89  
5-19-89

Robert W. Ziehm 5-19-89

OWNER/DEVELOPER  
TRAMMELL CROW COMPANY  
7529 STANDISH PLACE  
ROCKVILLE, MARYLAND 20855  
(301) 340-0901

SITE

VICINITY MAP SCALE 2000



**Sediment Control Trap Schedule**

Trap No	1 Rip - Rap	2 Storm Drain
Trap Type:	2.98 Acres	0.51 Acres
Drainage Area		
Storage, Cu Ft.:		
Required:	5364	916
Provided:	5461	1021
Bottom Dim.:	20x40	5 x 10
Bottom Elev.:	292.0	297.5
Embankment & Elev.:	298.0	302.0
Outlet Width:	5.0	6.0 (inlet opening)
Outlet Elev.:	297.0	301.5
Cleanout Elev.:	294.0	299.5
Storage Depth:	4.0	4.0

- Sequence Of Construction**
- 1) Obtain grading permit... 1 Day
  - 2) Install all sediment control devices, including silt fences, earth dikes, and sediment traps. Excavate SWM pond and install structure dewatering device... 1 Week
  - 3) Grade site as per grading plan... 3 Weeks
  - 4) Install utilities, construct stormdrain system, except M-4 to existing MH-1. Block all inlets immediately... 1 Week
  - 5) Install all curb and gutter which does not conflict with sediment control... 1 Week
  - 6) Construct buildings... 2 Months
  - 7) Fine grade site... 2 Days
  - 8) Install pavement except where it conflicts with sediment control... 2 Weeks
  - 9) Stabilize all disturbed areas... 3 Days
  - 10) With approval of the sediment control inspector remove sediment control devices and construct M-4 to existing M-1 and all remaining portions of storm drain system, including oil and grit structure (I-7) curb & gutter, and final paving... 2 Weeks
  - 11) Grade behind building #3 as per grading plan. Remove dewatering device from pond and excavate or compact to final design elevation... 2 Days
  - 12) Immediately stabilize all remaining disturbed areas and unblock all inlets... 2 Days

**APPROVED**  
PLANNING BOARD  
of  
HOWARD COUNTY  
DATE 4-12-89  
LKS

MD. RTE 32

MD. RTE. 32  
(S.H.A. RW PLATS 40023 & 40024)

OWNER/DEVELOPER  
TRAMMELL CROW COMPANY  
7520 STANDISH PLACE  
ROCKVILLE MARYLAND 20855  
(301) 340-0901

**GRADING & SEDIMENT CONTROL PLAN**

VILLAGE OF OWEN BROWN  
SECTION 6 AREA 1, PARCEL C-2 & A 2  
TAX MAP 42 PARCEL 16  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**KIDDE CONSULTANTS, INC.**  
ENGINEERS & ARCHITECTS

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
DIRECTOR  
DATE 9/2/89

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DIRECTOR  
DATE 8-29-89

J. Helm / z  
5-19-89

I CERTIFY CONTROL BASED CONDITIONS WITH CONSERVATION DISTRICT KNOWLEDGE OF PREPARED REQUIREMENTS

Paul Reif  
2/21/89

11/14/89 REMOVED EX 6" W & 20' EASEMENT  
11/14/89 REVISED GRADES  
11/14/89 ADDED SPOT ELEVATIONS & 10' CONNECTORS

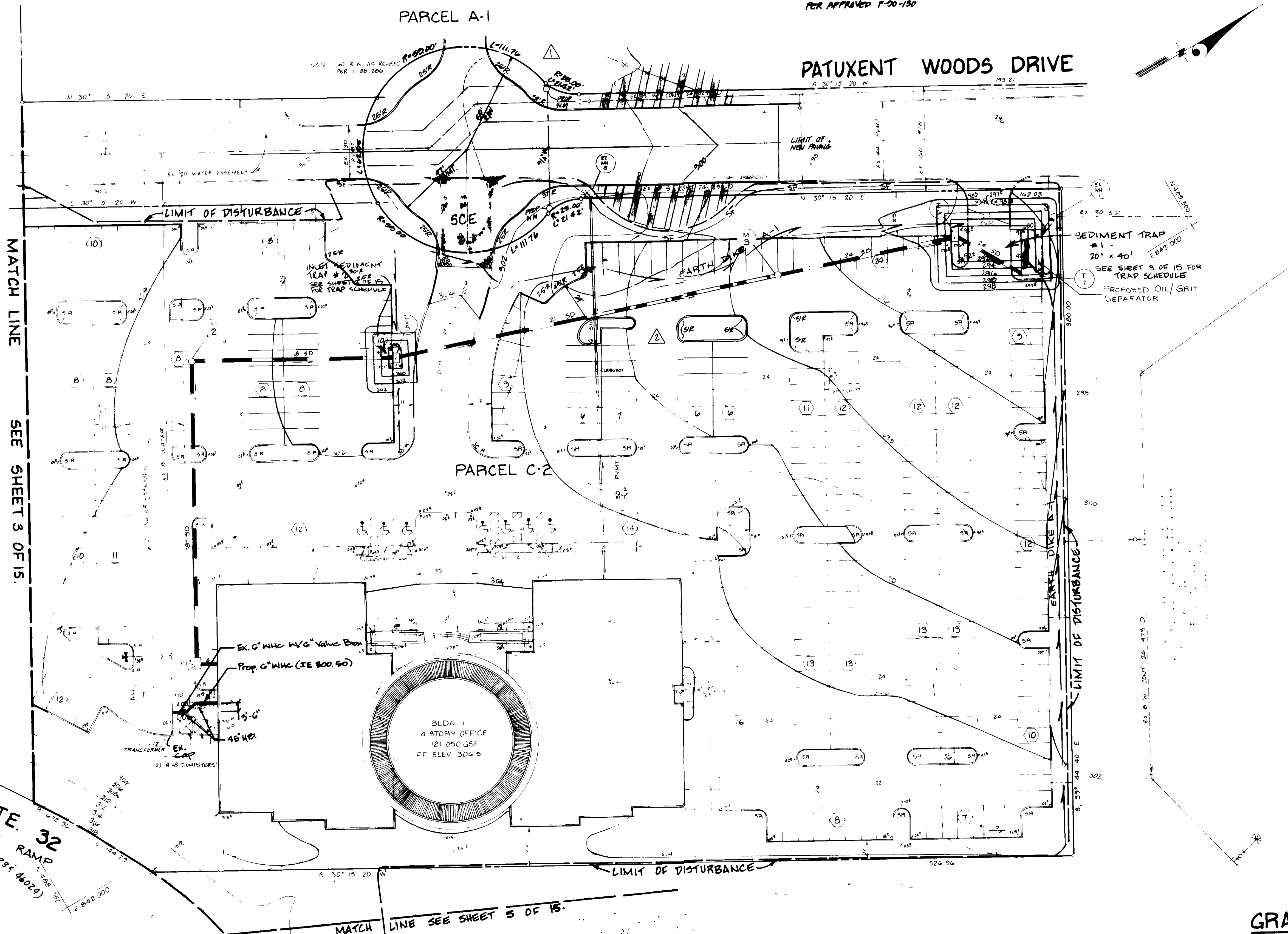
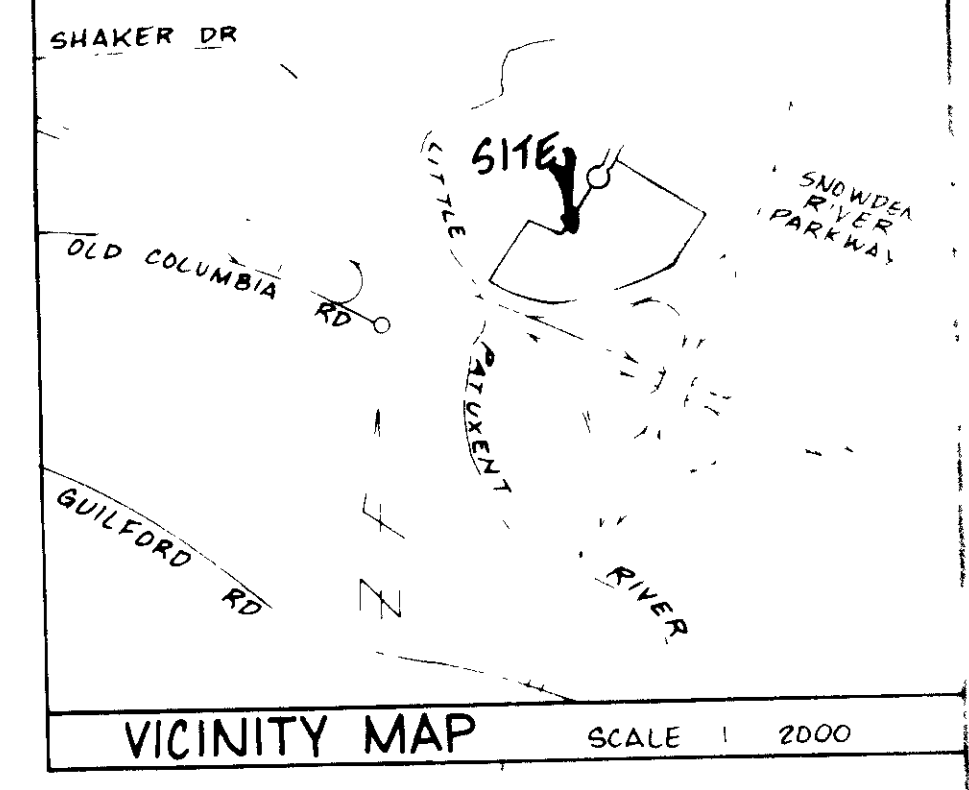
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT  
DATE 9/1/89

Robert W. Zehn  
5-19-89

James C. Ferguson  
4/12/89



NOTE: THESE RED LINE CHANGES ARE PER APPROVED P-20-130



PROPOSED PAVING  
EX. PAVING TO BE REMOVED

MD RTE. 32  
INTERCHANGE RAMP  
(S&A R/W PARTS 44023 & 44024)

APPROVED  
PLANNING BOARD  
OF HOWARD COUNTY  
DATE 4-12-89  
LKS

OWNER/DEVELOPER  
TRAMMELL CROW COMPANY  
7525 STANDISH PLACE  
ROCKVILLE, MARYLAND 20855  
(301) 340-0901

GRADING & SEDIMENT CONTROL PLAN

VILLAGE OF OWEN BROWN  
SECTION 6 AREA 1, PARCEL C-2 & A-2  
TAX MAP 42 PARCEL 16  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

KIDDE CONSULTANTS, INC.  
ENGINEERS • PLANNERS • SURVEYORS

<i>[Signature]</i>	7.19.81
<i>[Signature]</i>	7/7/89
REVISION PART	
2-9-88	Range G' WMC

<i>[Signature]</i>	8/30/89
<i>[Signature]</i>	8-29-89
<i>[Signature]</i>	9/1/89

<i>[Signature]</i>	5-19-89
<i>[Signature]</i>	5-19-89

ENGINEER IN CHARGE  
DATE  
1/17/89

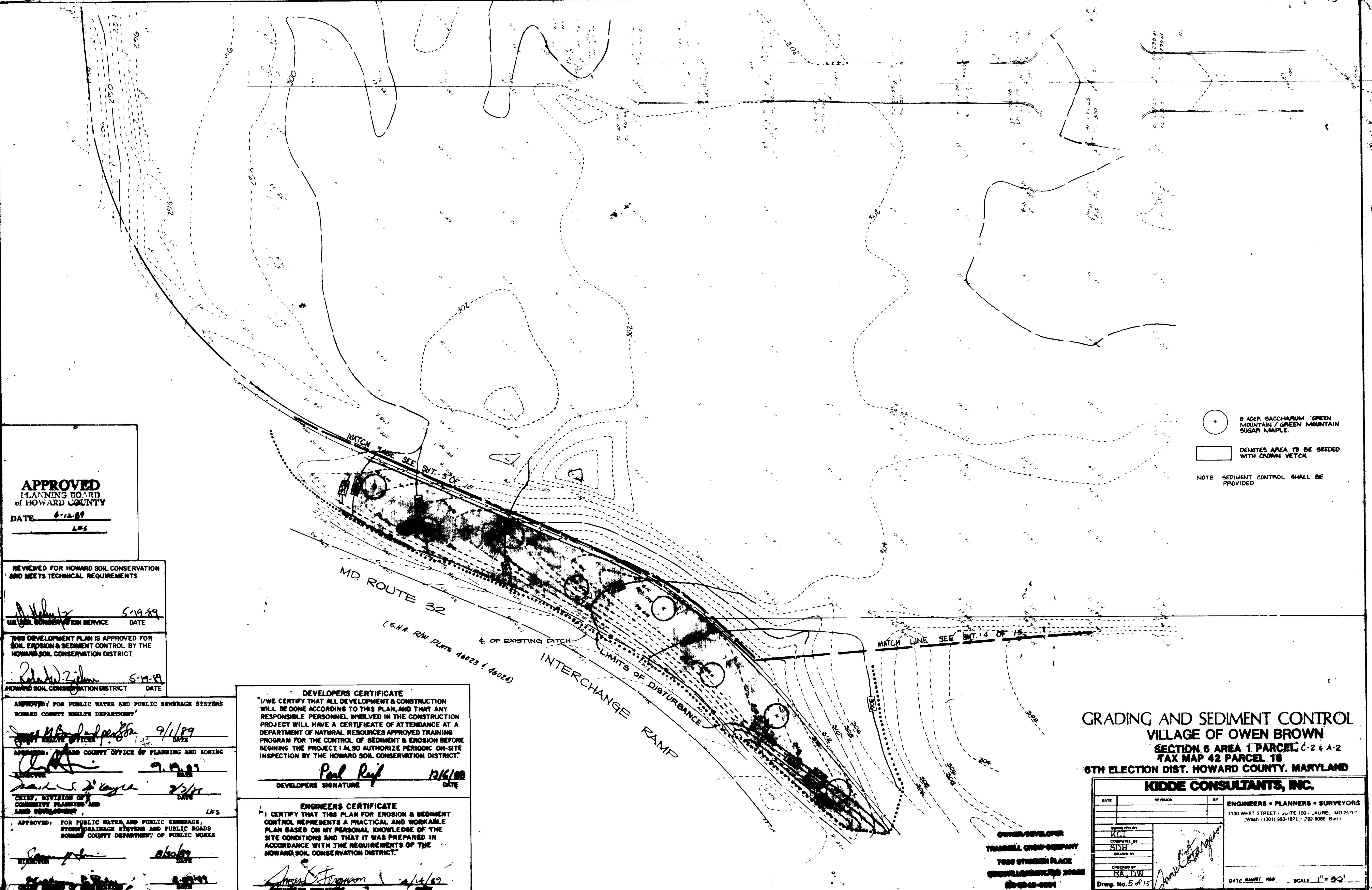
DEVELOPER'S CERTIFICATE  
DATE  
12/6/88

12/10/80 CHANGED C/A-DE-88C LAYOUT P. 2  
12/10/80 CHANGED PAVING AREA P. 2

KCI  
SDH  
SGK  
BS

DATE: AUGUST 1980

Drawg No. 4 of 15



(Symbol: Circle with a cross) 8 ACER SACCHARUM 'GREEN MOUNTAIN' / GREEN MOUNTAIN SUGAR MAPLE.  
 (Symbol: Rectangle) DENOTES AREA TO BE SEEDED WITH CROWN VETCH.  
 NOTE SEDIMENT CONTROL SHALL BE PROVIDED

**APPROVED**  
 PLANNING BOARD  
 of HOWARD COUNTY  
 DATE 6-12-89  
 LMS

REVIEWED FOR HOWARD SOIL CONSERVATION  
 AND MEETS TECHNICAL REQUIREMENTS

[Signature] 5-19-89  
 U.S. SOIL CONSERVATION SERVICE DATE

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

[Signature] 5-19-89  
 HOWARD SOIL CONSERVATION DISTRICT DATE

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

[Signature] 9/1/89  
 HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

[Signature] 9-19-89  
 PLANNING AND ZONING DATE

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT LMS

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

[Signature] 8/2/89  
 DATE

[Signature] 8-2-89  
 DATE

**DEVELOPERS CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT & 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 & EROSION BEFORE  
 BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE  
 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 [Signature] 12/16/89  
 DEVELOPERS SIGNATURE DATE

**ENGINEERS CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR EROSION & 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.  
 [Signature] 12/16/89  
 ENGINEERS SIGNATURE DATE

**GRADING AND SEDIMENT CONTROL**  
**VILLAGE OF OWEN BROWN**  
 SECTION 6 AREA 1 PARCEL C-2 & A-2  
 TAX MAP 42 PARCEL 18  
 6TH ELECTION DIST. HOWARD COUNTY, MARYLAND

**KIDDE CONSULTANTS, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS  
 1100 WEST STREET / SUITE 100 / LAUREL MD 20707  
 (Wash.) (301) 253-1871 / 792-8006 (Ball)

DATE	REVISION	BY

SURVEYED BY: KCI  
 COMPUTED BY: SISH  
 DRAWN BY: RA, JSW  
 CHECKED BY: RA, JSW  
 DATE: 12/16/89  
 Drwg. No. 5 of 15

OWNER/DEVELOPER  
 TRAVELL GROUP COMPANY  
 7000 STAMM PLACE  
 WOODBRIDGE, MD 20686  
 (301) 544-0001

DATE: 12/16/89 SCALE: 1" = 20'



These specifications are appropriate to ponds within the scope of the Standard for practice 379.

**SITE PREPARATION**  
Areas designated for borrow areas, subdrainage, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, rocks and other objectionable material shall be removed. Channel banks and shore benches shall be sloped to no steeper than 1:1.

Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fence, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside and below the limits of the site and reservoir or directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the subdrainage and other designated areas.

**MATERIAL**  
The fill material shall be taken from approved designated borrow areas or areas. It shall be free of roots, stumps, wood, rubbish, excessive stones, frozen or other objectionable material. The subdrainage shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height shall be along the length of the subdrainage shall be increased above the design elevation (including freeboard) as shown on the plans.

**Placement**  
Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill material shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portion of the subdrainage.

**Compaction**  
The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Where a minimum required density is specified, each layer of fill shall be compacted as necessary to obtain this density and is to be certified by the Engineer.

**Cutoff Trench**  
Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the subdrainage as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slope of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to secure maximum density and minimum permeability.

**STRUCTURAL BACKFILL**  
Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by completely all areas under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

**PIPE CONDUITS**  
All pipes shall be circular in cross section.

**A. Corrugated Metal Pipe**  
1. **Materials** - (Steel Pipe) - This pipe and its appurtenances shall be galvanized fully bituminous coated and shall conform to the requirements of ASTM Specification M-190 Type A with water tight coupling bands. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

Steel pipe with polymeric coatings shall have a minimum coating thickness of 0.01 inch (26 mil) on both sides of the pipe. The following coatings are considered acceptable: Epoxy, Fluoro-ethylene, Fluoro-ethylene, and Fluoro-ethylene. Detailed specifications shall meet the requirements of ASTM D-200 and D-200A.

**Materials** - (Aluminum Steel Pipe) - This pipe and its appurtenances shall conform to the requirements of ASTM Specification D-200 or D-200A with water tight coupling bands or flanges. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

**Materials** - (Aluminum Pipe) - This pipe and its appurtenances shall conform to the requirements of ASTM Specification D-200 or D-200A with water tight coupling bands or flanges. Any bituminous coating damaged or otherwise removed shall be replaced with cold applied bituminous coating compound.

2. **Connections** - All connections with pipe shall be completely watertight. The drain pipe or barrel connection to the riser shall be installed all around the pipe and clear any voids. Connections with pipe shall be completely watertight. Connections with pipe shall be completely watertight. Connections with pipe shall be completely watertight.

3.  **bedding** - The pipe shall be firmly and uniformly bedded throughout its entire length on a smooth, even, compacted subgrade. All bedding material shall be compacted, and all bedding material shall be compacted and supported with suitable earth compacted to provide adequate support.

4.  **Laying pipe** - The pipe shall be placed with inside circumferential lap pointing downstream and with the longitudinal top on the left.

5.  **Backfilling** shall conform to structural backfill as shown above.

6.  **Other details** (anti-sweep collars, valves, etc.) shall be as shown on the drawings.

- 1. Materials**
  - a. **Concrete** - Normal Portland cement shall conform to the latest ASTM Specification C-150.
  - b. **Water** - The water used in concrete shall be clean, free from oil, acid, alkali, sugar, organic matter or other objectionable substances.
  - c. **Sand** - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a No. 20 sieve and 5 percent passing a No. 40 sieve.
  - d. **Coarse Aggregate** - The coarse aggregate shall be clean, hard, strong and durable, and shall be well graded with a maximum size of 1 1/2 inches.
  - e. **Reinforcing Steel** - The reinforcing steel shall be deformed bars of intermediate grade mild steel or rail steel conforming to ASTM Specification A-615.
- 2. Design Mix** - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U.S. gallons of water per 95 pound bag of cement. The proportion of materials for the trial mix shall be 1:1 1/2:3-1/2. The combination of aggregate may be adjusted to produce a plastic and workable mix that will not produce hardening in placing or honeycombing in the structure.
- 3. Mixing** - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicated on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixing operation. Successive averaging regarding the addition of water to preserve the required concrete consistency shall not be permitted. Fresh mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given herein.
- 4. Forms** - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tapping, and vibration without deflection from the prescribed lines. They shall be water-tight and constructed so that they can be removed without hammering or prying against the concrete.
- 5. The inside of forms** shall be oiled with a non-staining mineral oil or thoroughly oiled before concrete is placed.
- Forms** may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be removed from the surface of the concrete.
- Reinforcing Steel** - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coating. The steel shall be accurately placed and securely tied and braced into position so that no movement of the steel will occur during placement of concrete.
- Consolidating** - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces in corners, and around subdrainage items.
- Finishing** - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be repaired and completely filled with dry packing mortar.
- Protection and Curing** - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Measures may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.
- Placing Temperature** - Concrete may not be placed at temperatures below 32° F with the temperature falling, or 54° F with the temperature rising.

**CONCRETE**  
1. **Materials**  
a. **Concrete** - Normal Portland cement shall conform to the latest ASTM Specification C-150.  
b. **Water** - The water used in concrete shall be clean, free from oil, acid, alkali, sugar, organic matter or other objectionable substances.  
c. **Sand** - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a No. 20 sieve and 5 percent passing a No. 40 sieve.  
d. **Coarse Aggregate** - The coarse aggregate shall be clean, hard, strong and durable, and shall be well graded with a maximum size of 1 1/2 inches.  
e. **Reinforcing Steel** - The reinforcing steel shall be deformed bars of intermediate grade mild steel or rail steel conforming to ASTM Specification A-615.

2. **Design Mix** - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U.S. gallons of water per 95 pound bag of cement. The proportion of materials for the trial mix shall be 1:1 1/2:3-1/2. The combination of aggregate may be adjusted to produce a plastic and workable mix that will not produce hardening in placing or honeycombing in the structure.

3. **Mixing** - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicated on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixing operation. Successive averaging regarding the addition of water to preserve the required concrete consistency shall not be permitted. Fresh mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given herein.

4. **Forms** - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tapping, and vibration without deflection from the prescribed lines. They shall be water-tight and constructed so that they can be removed without hammering or prying against the concrete.

5. **The inside of forms** shall be oiled with a non-staining mineral oil or thoroughly oiled before concrete is placed.

6. **Forms** may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be removed from the surface of the concrete.

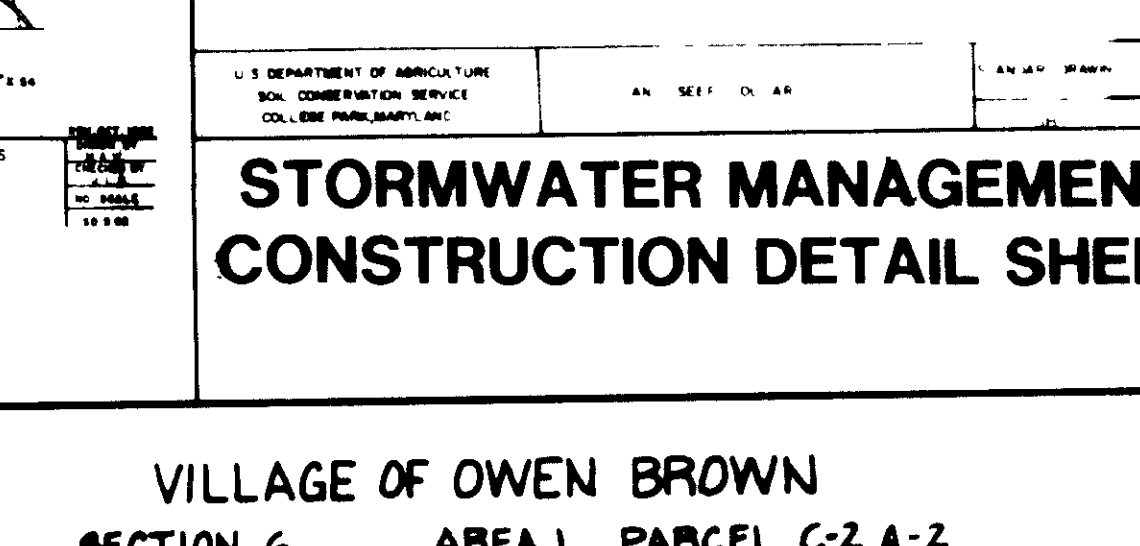
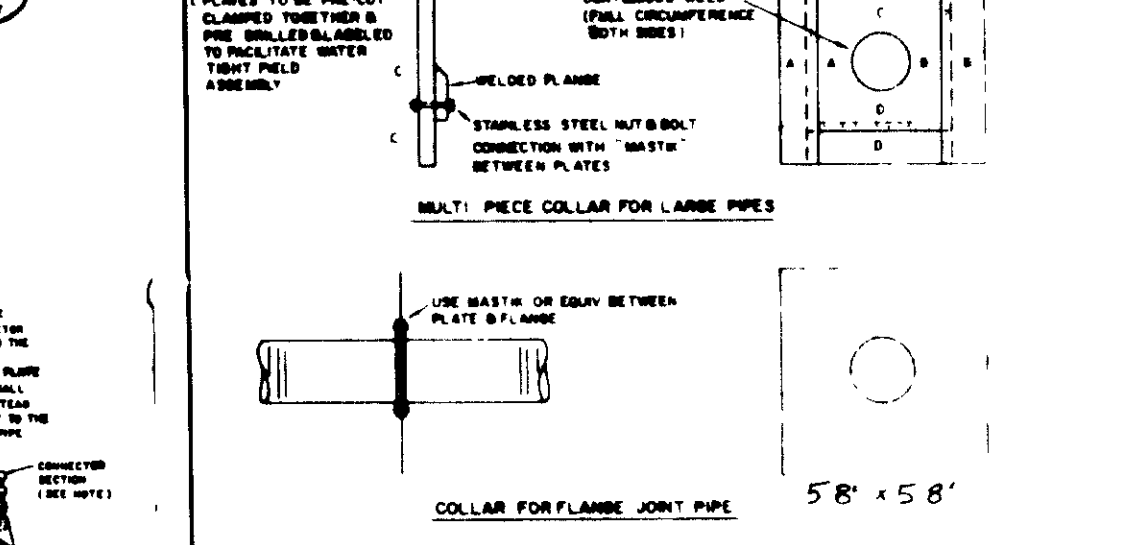
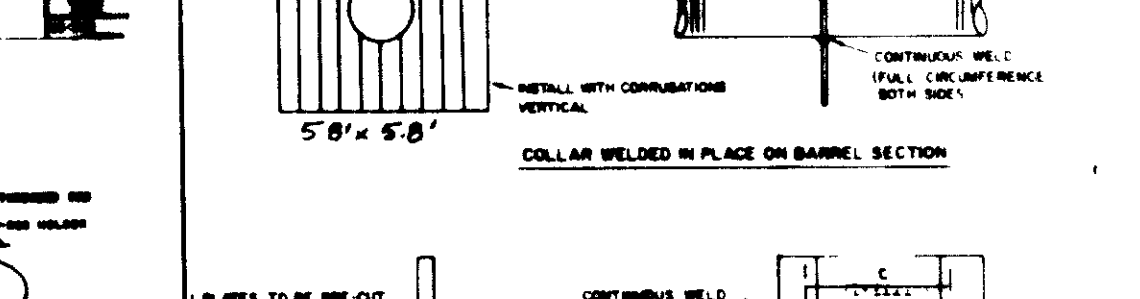
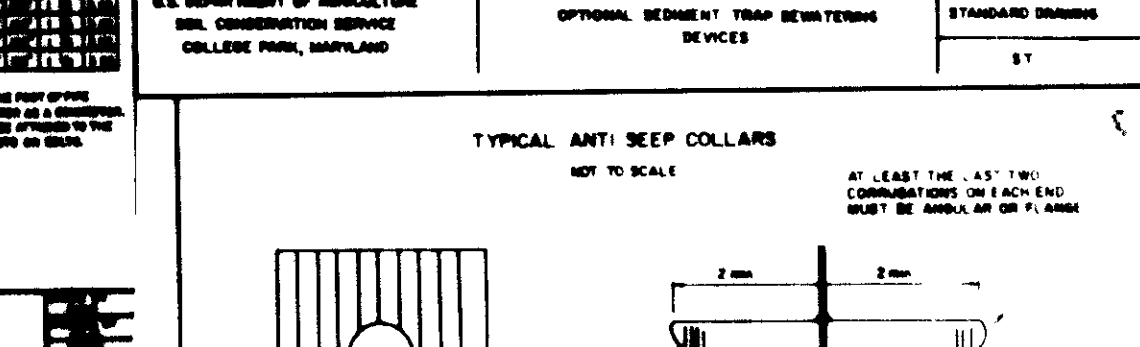
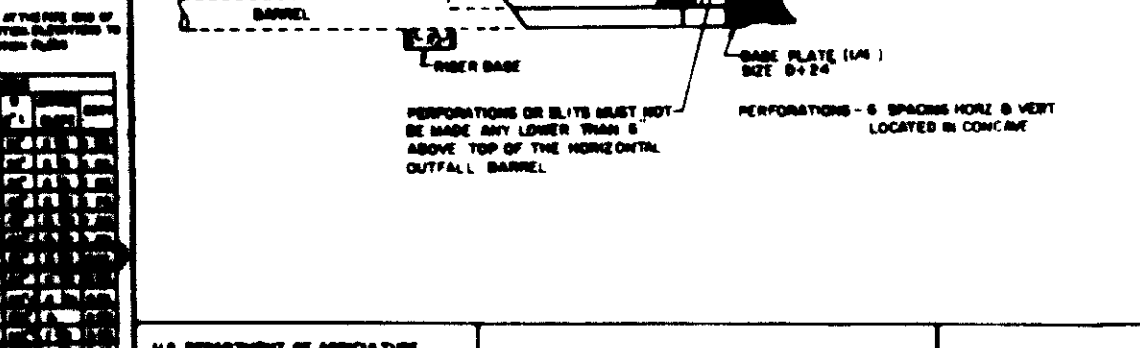
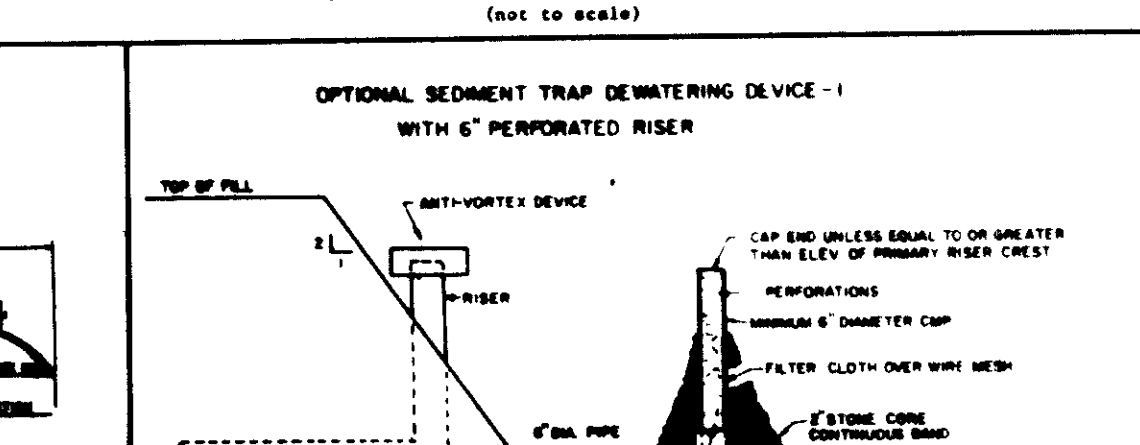
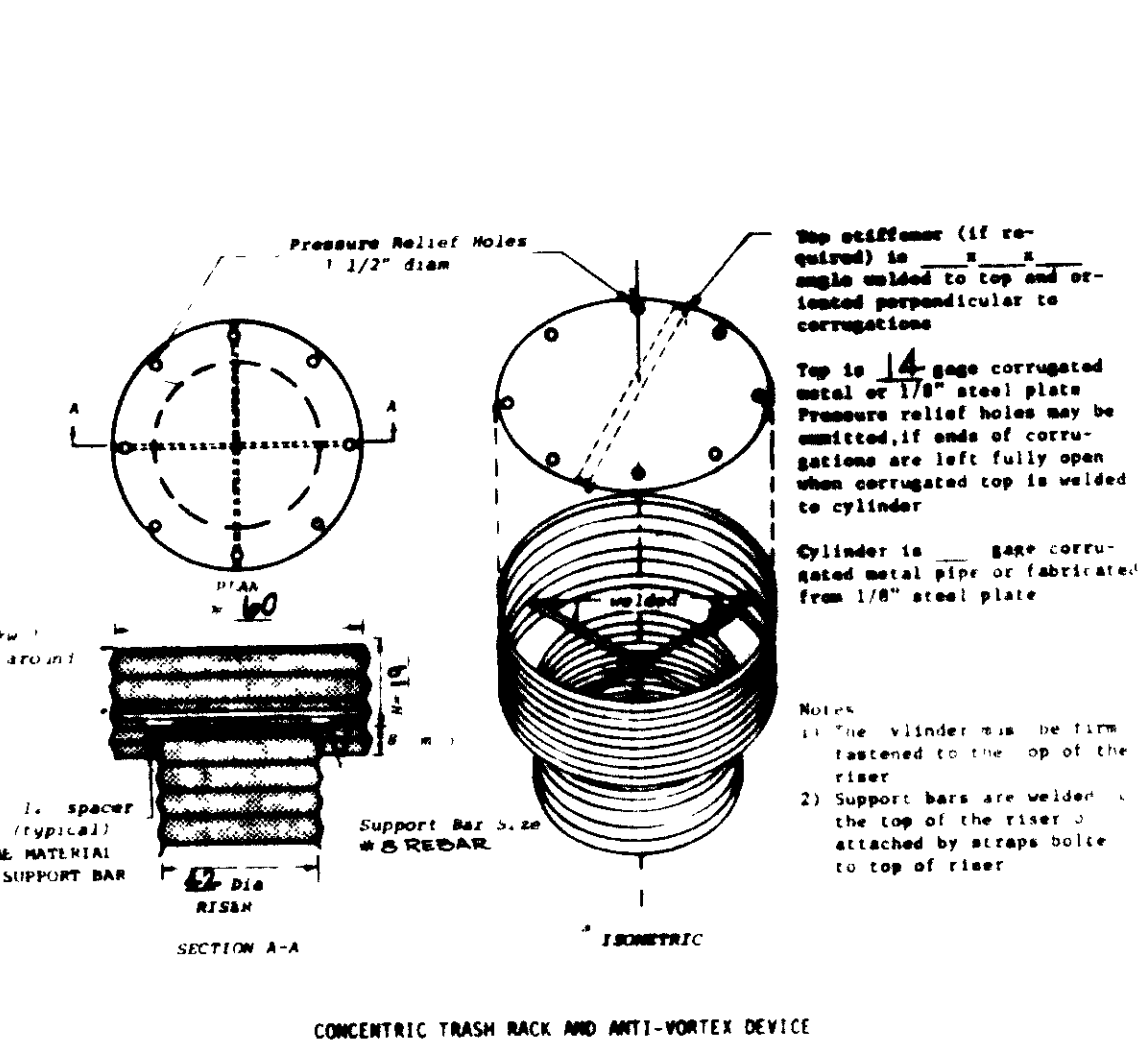
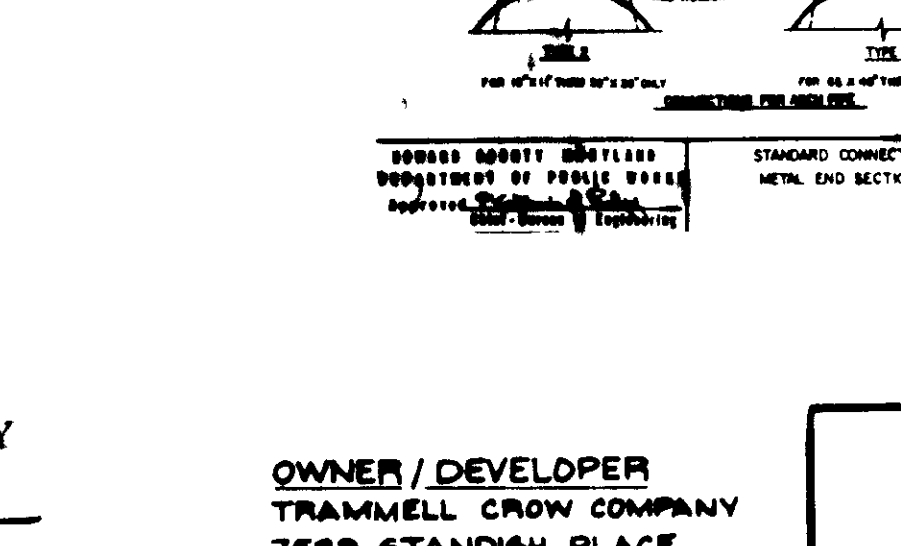
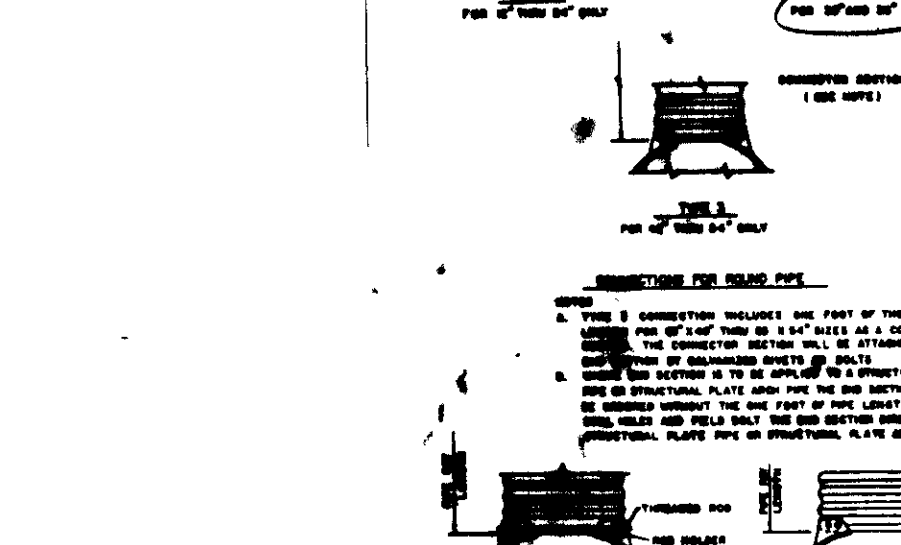
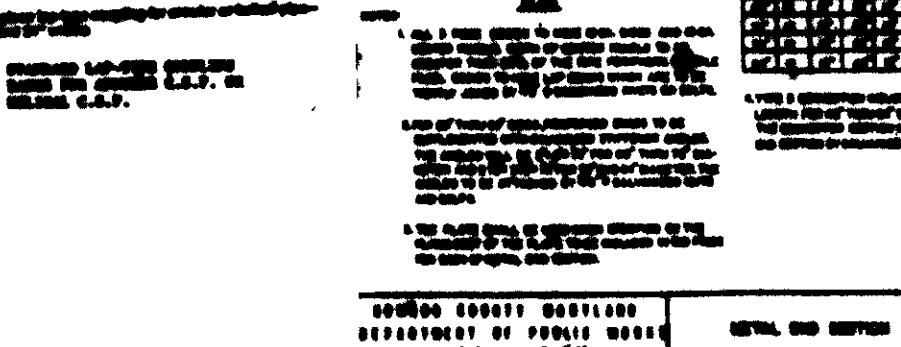
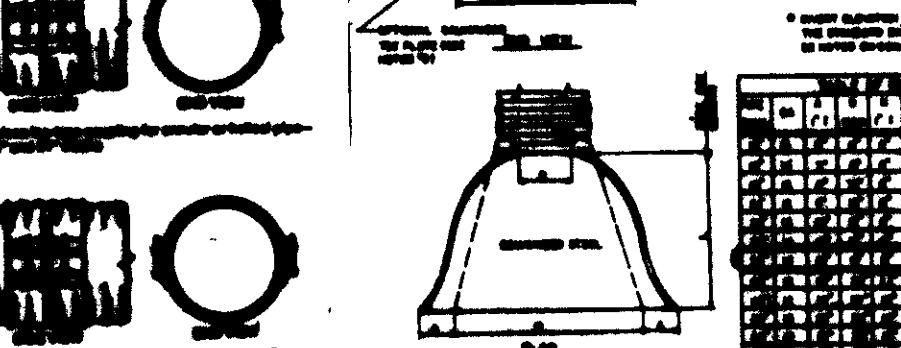
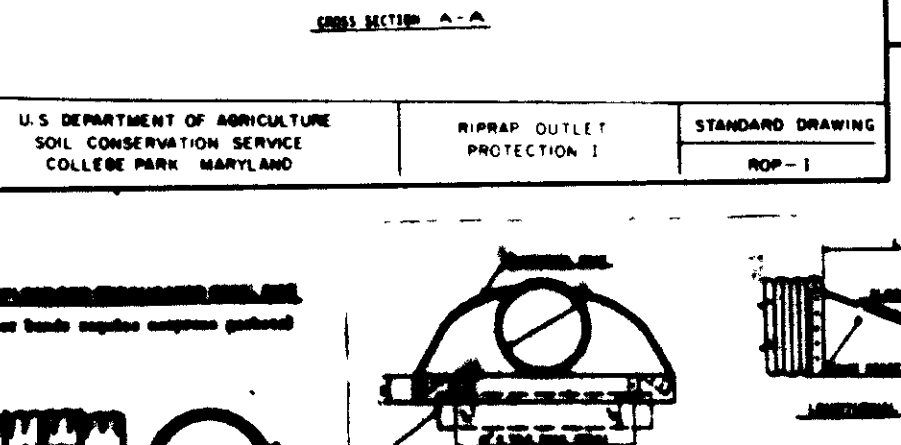
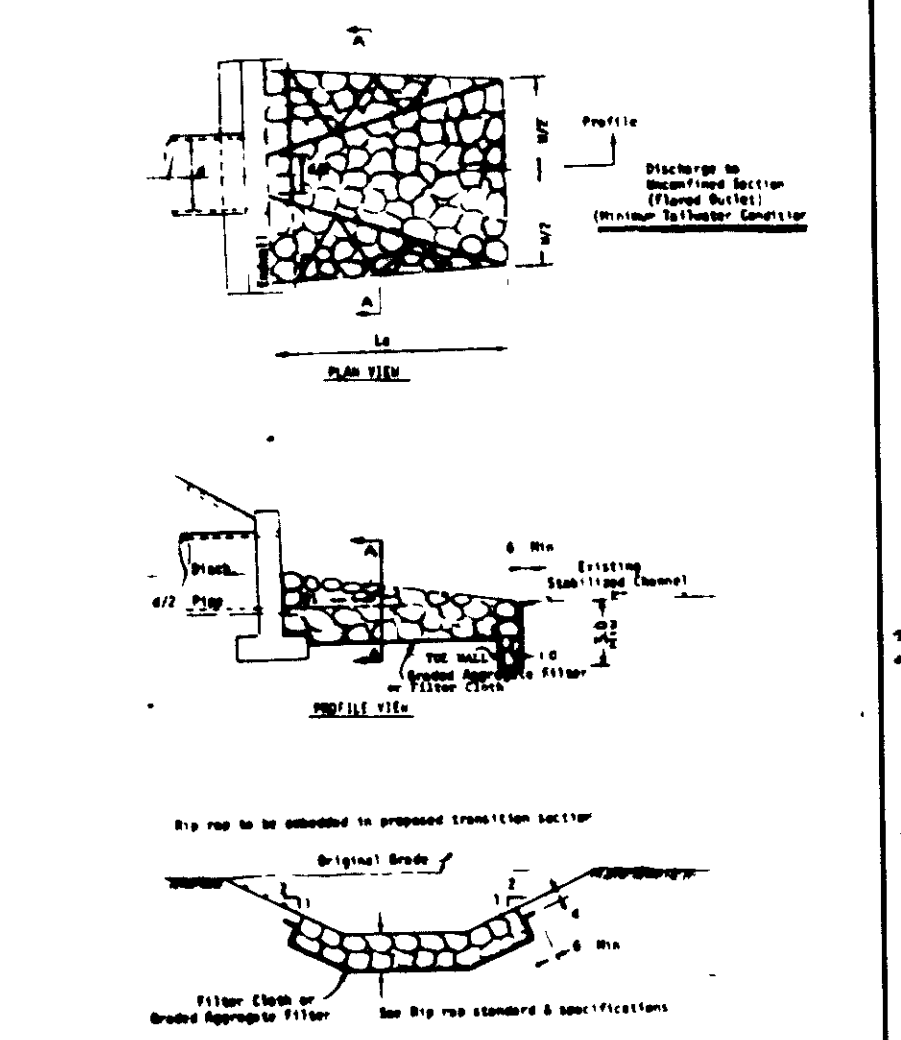
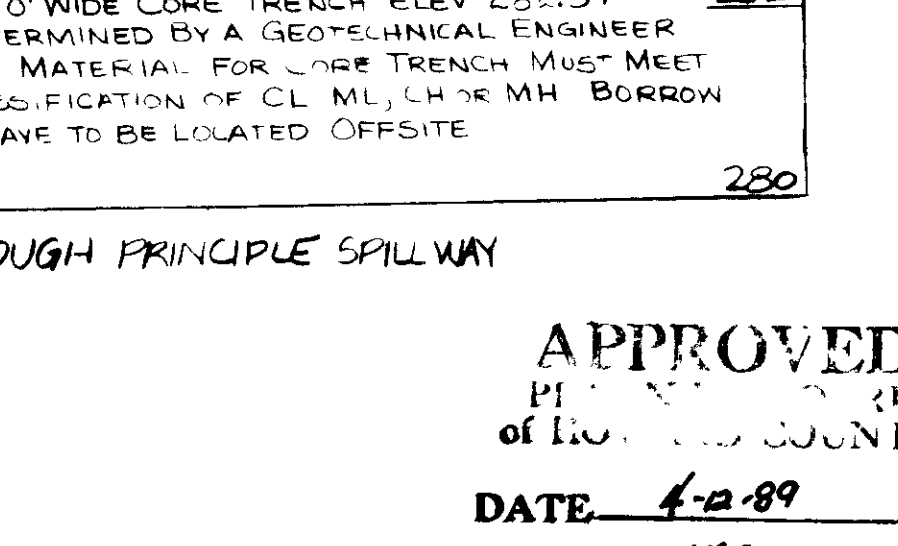
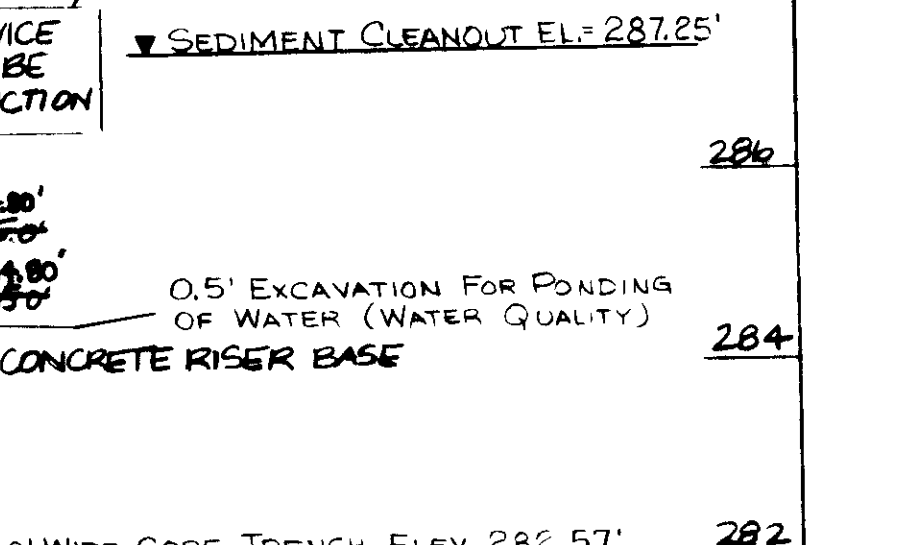
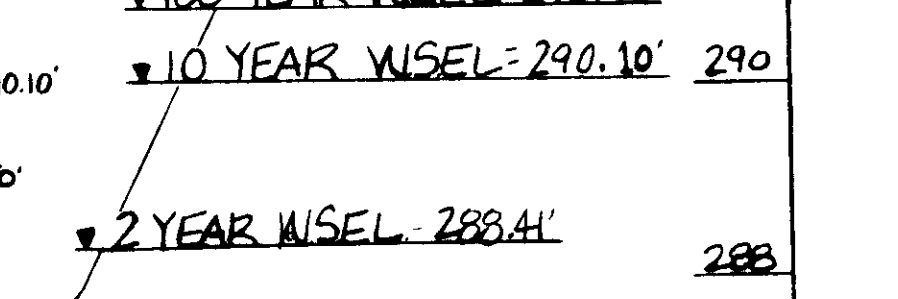
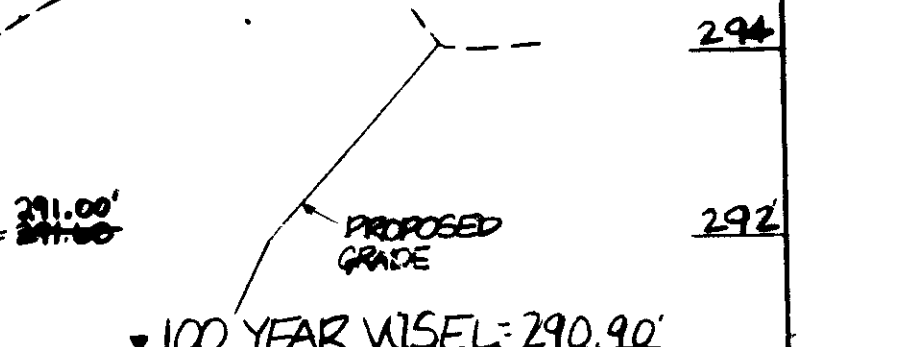
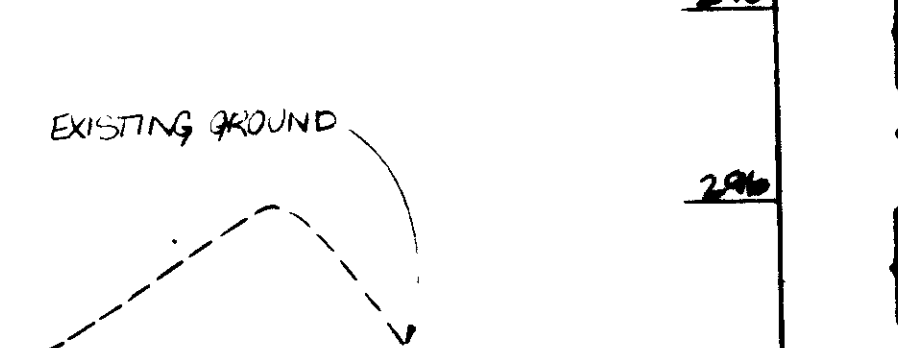
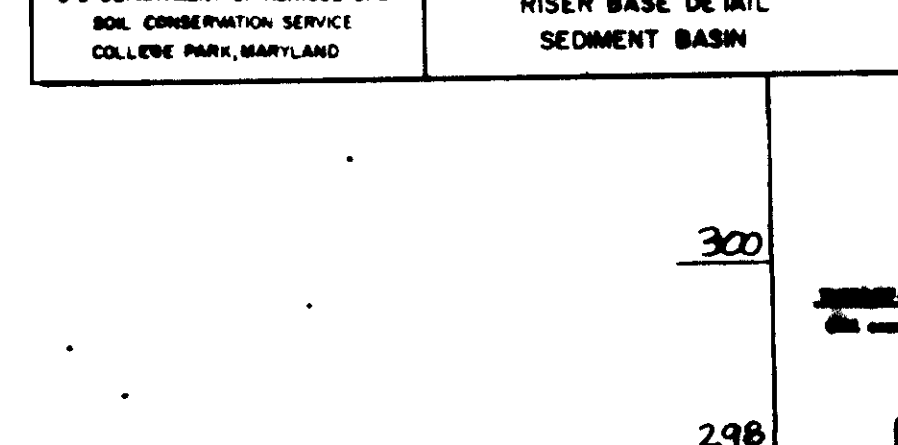
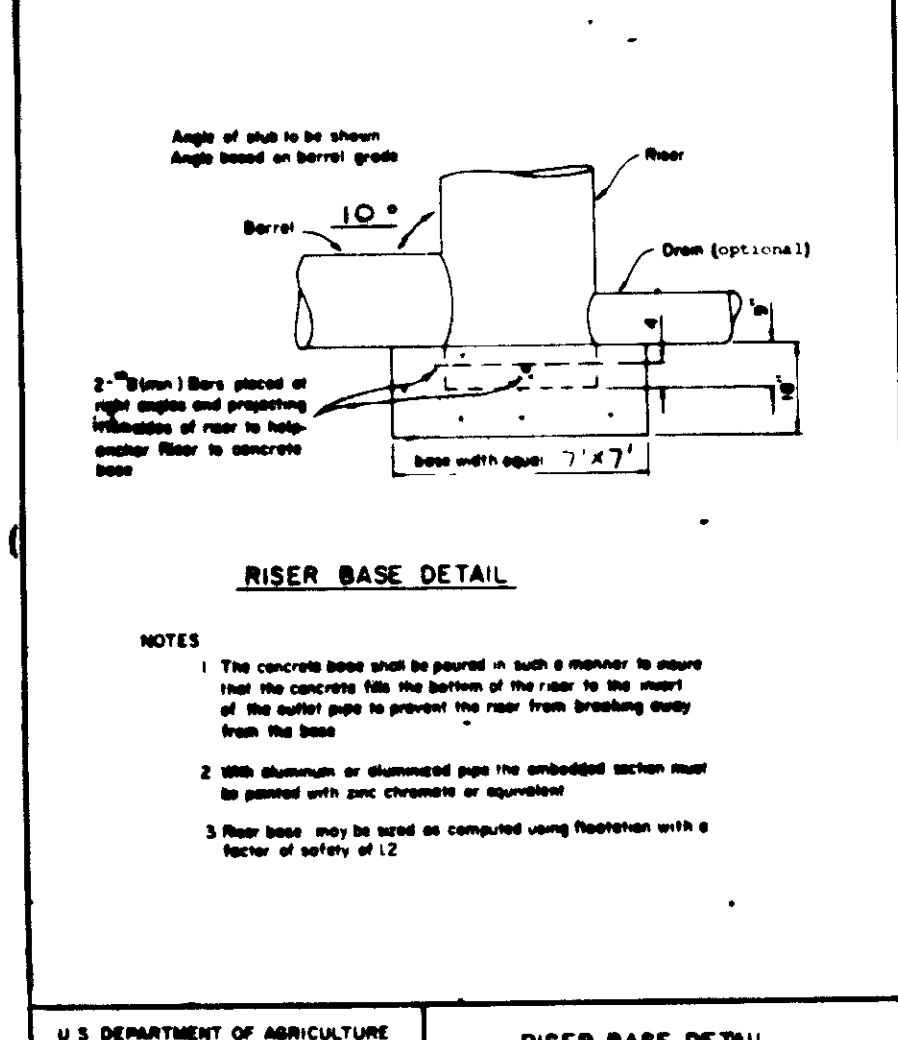
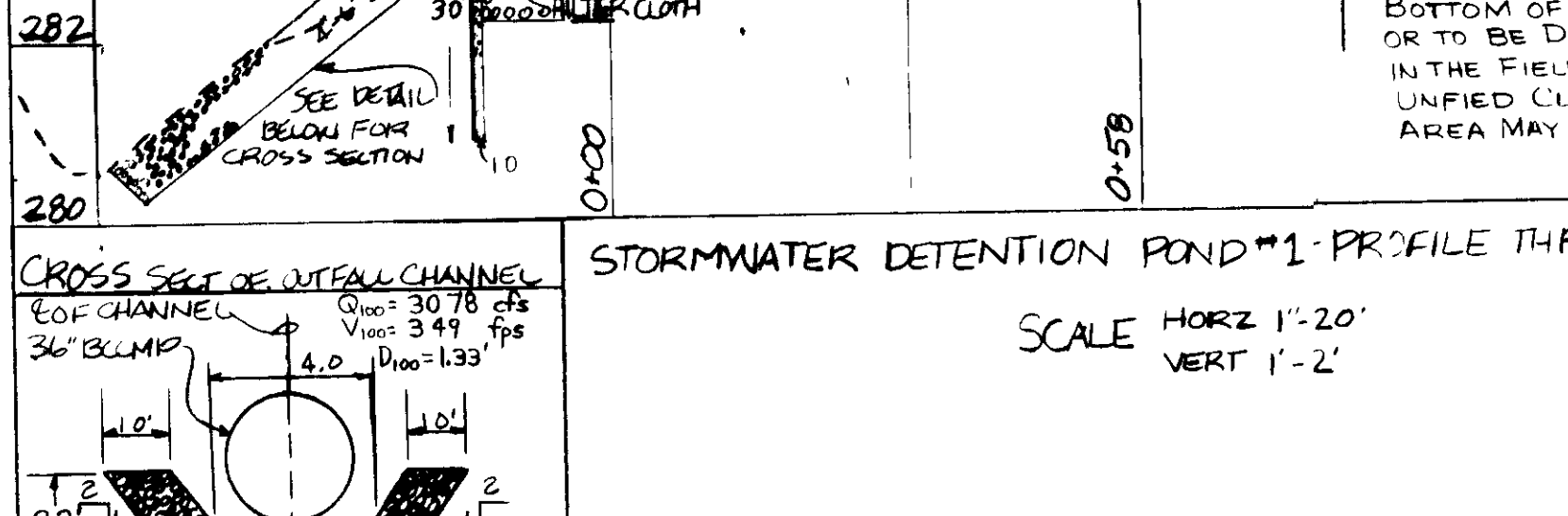
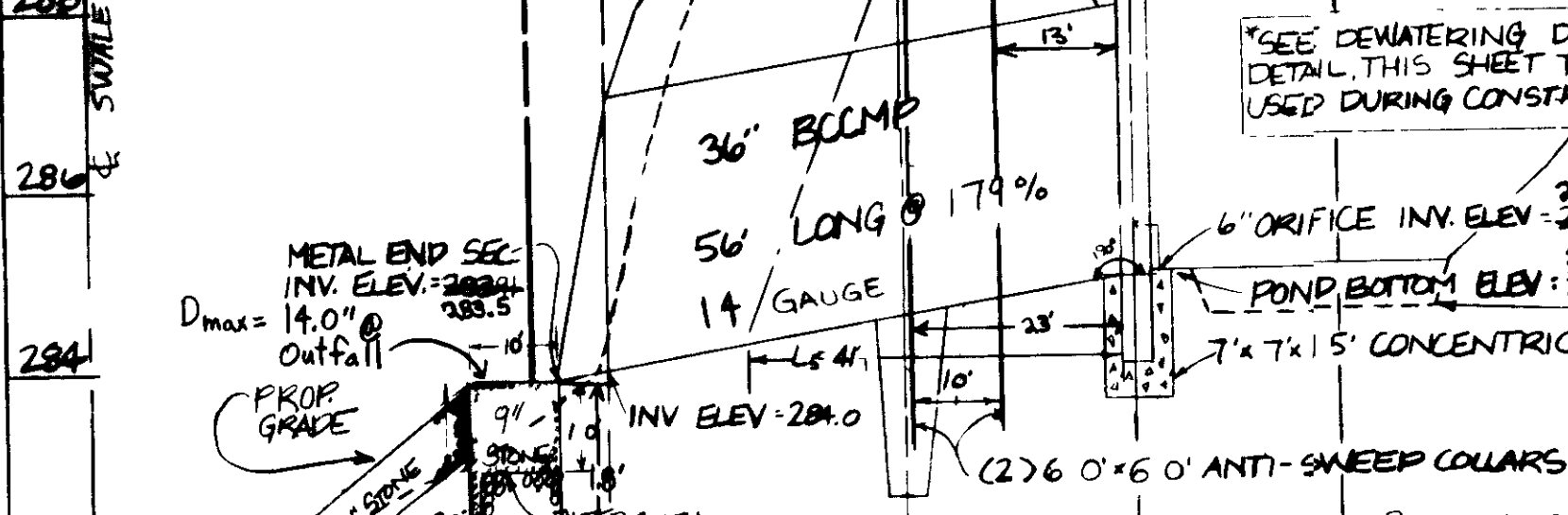
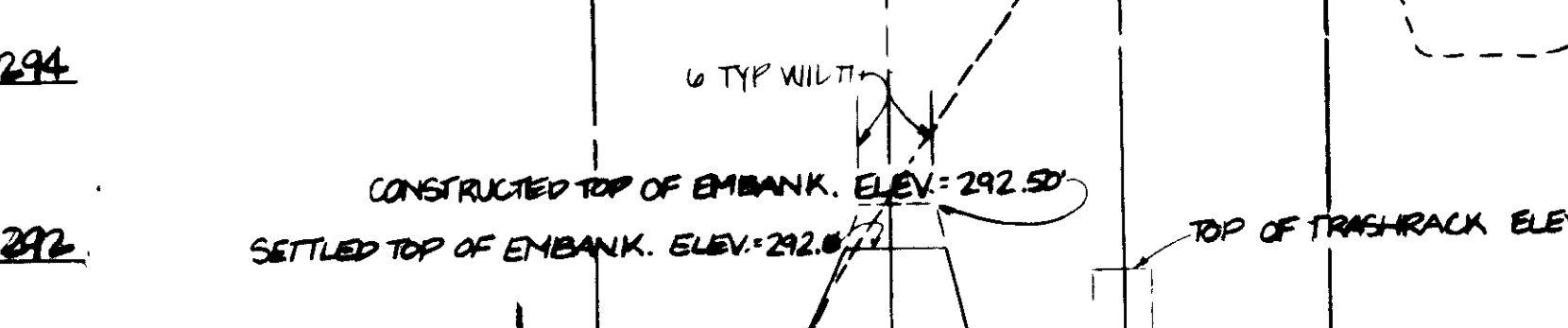
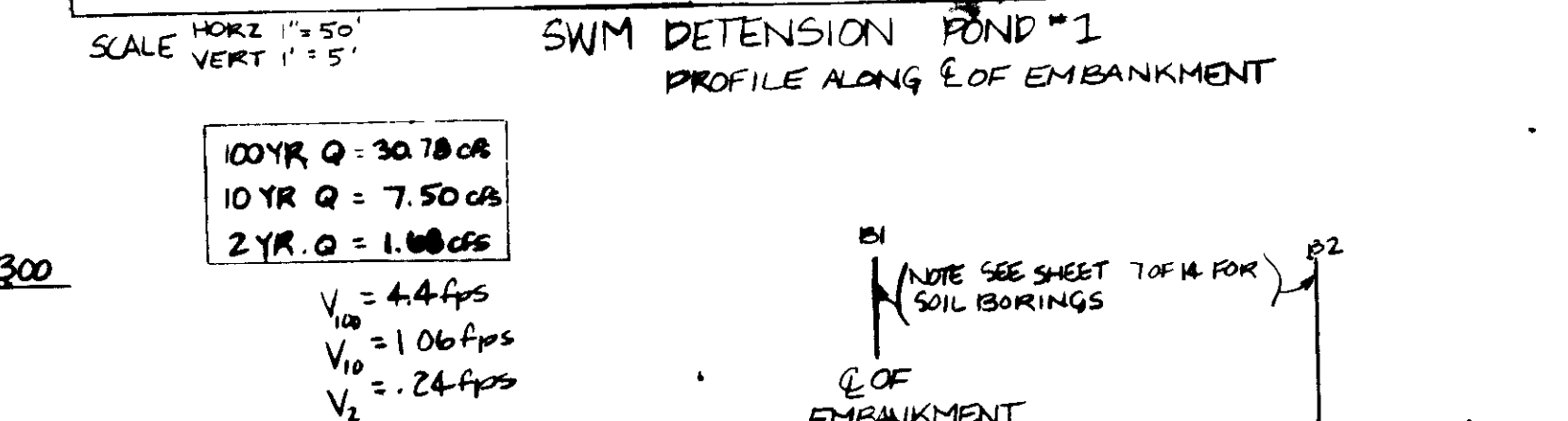
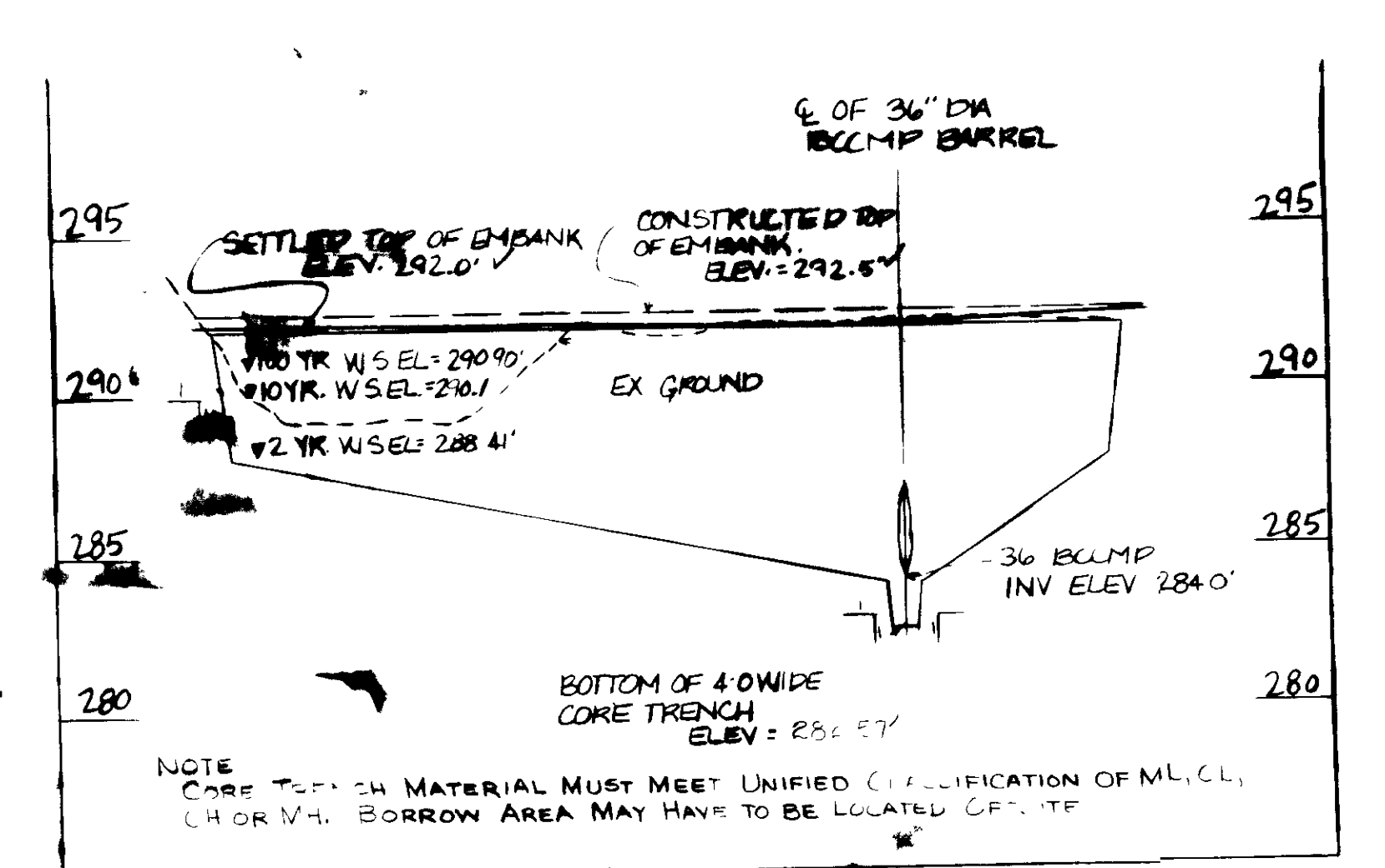
7. **Reinforcing Steel** - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coating. The steel shall be accurately placed and securely tied and braced into position so that no movement of the steel will occur during placement of concrete.

8. **Consolidating** - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces in corners, and around subdrainage items.

9. **Finishing** - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be repaired and completely filled with dry packing mortar.

10. **Protection and Curing** - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Measures may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

11. **Placing Temperature** - Concrete may not be placed at temperatures below 32° F with the temperature falling, or 54° F with the temperature rising.



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 9/19/89  
 DIRECTOR  
 9/1/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 REVISION CHART  
 DATE REVISION  
 JAN 2, 1992 ADDED AS-BUILT POND ELEVATIONS SBT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 8/30/89  
 DIRECTOR  
 8-23-89  
 CHIEF BUREAU OF ENGINEERING  
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 9/1/89  
 COUNTY HEALTH OFFICER

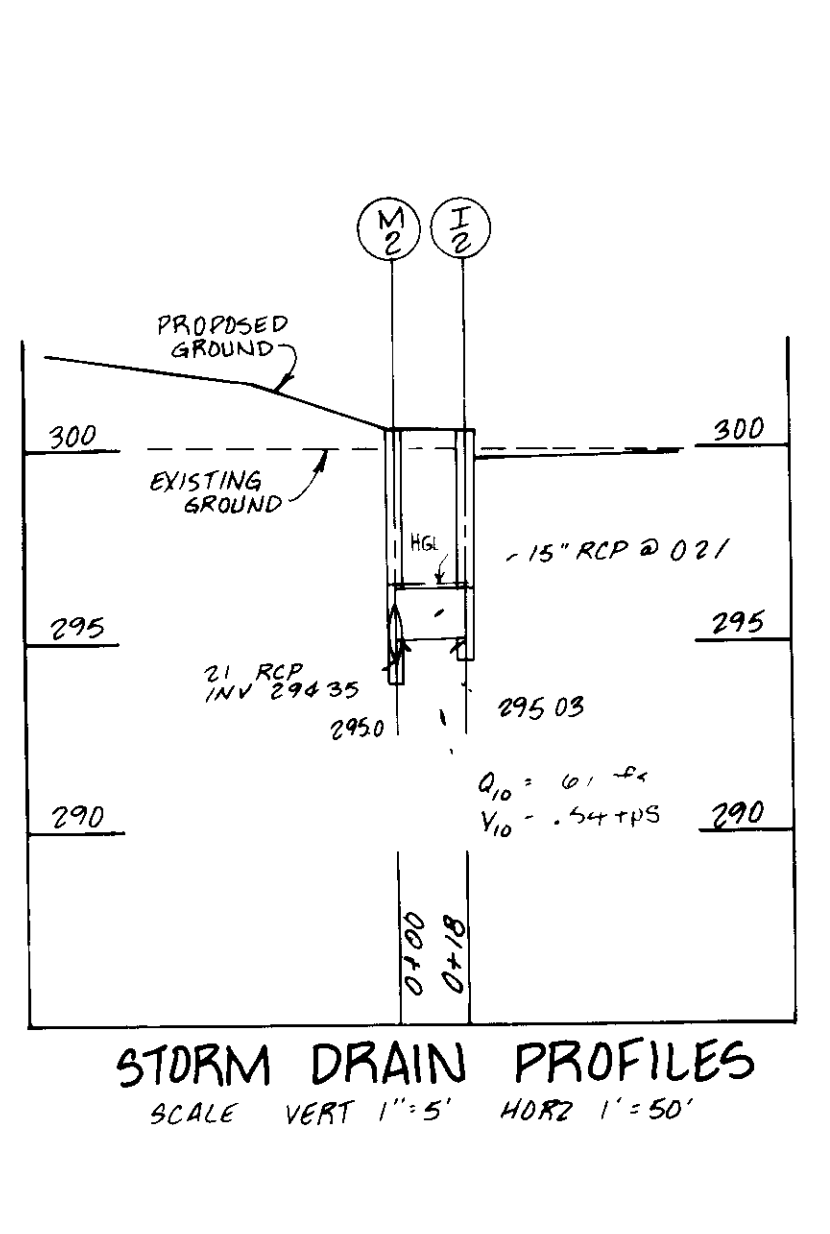
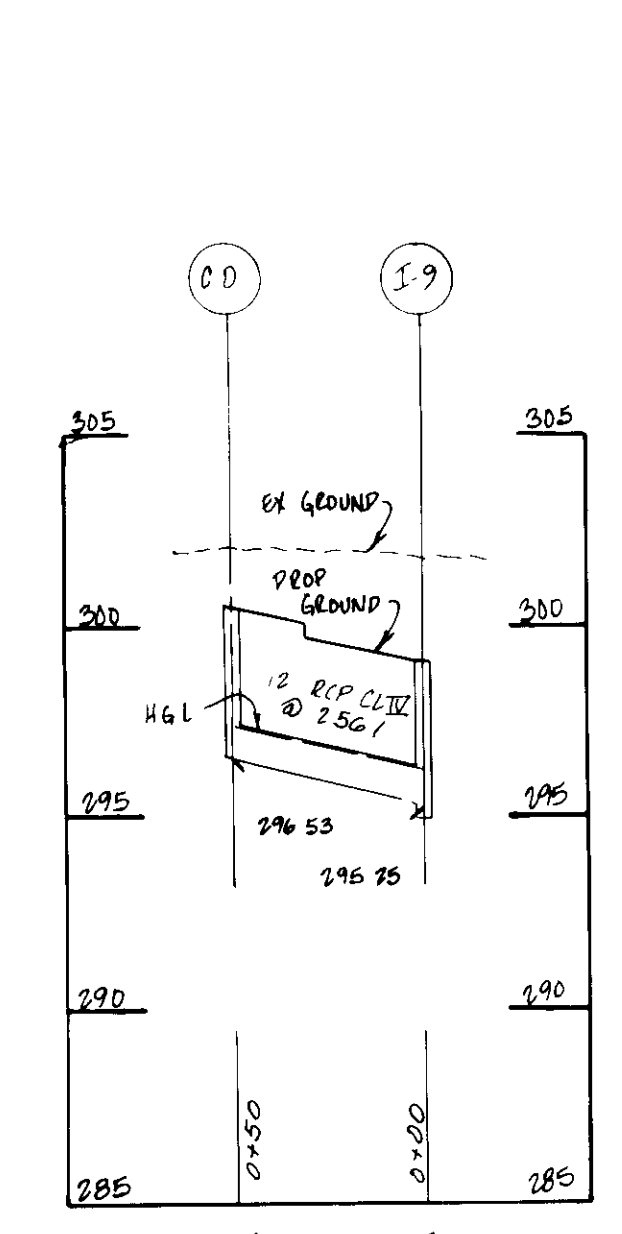
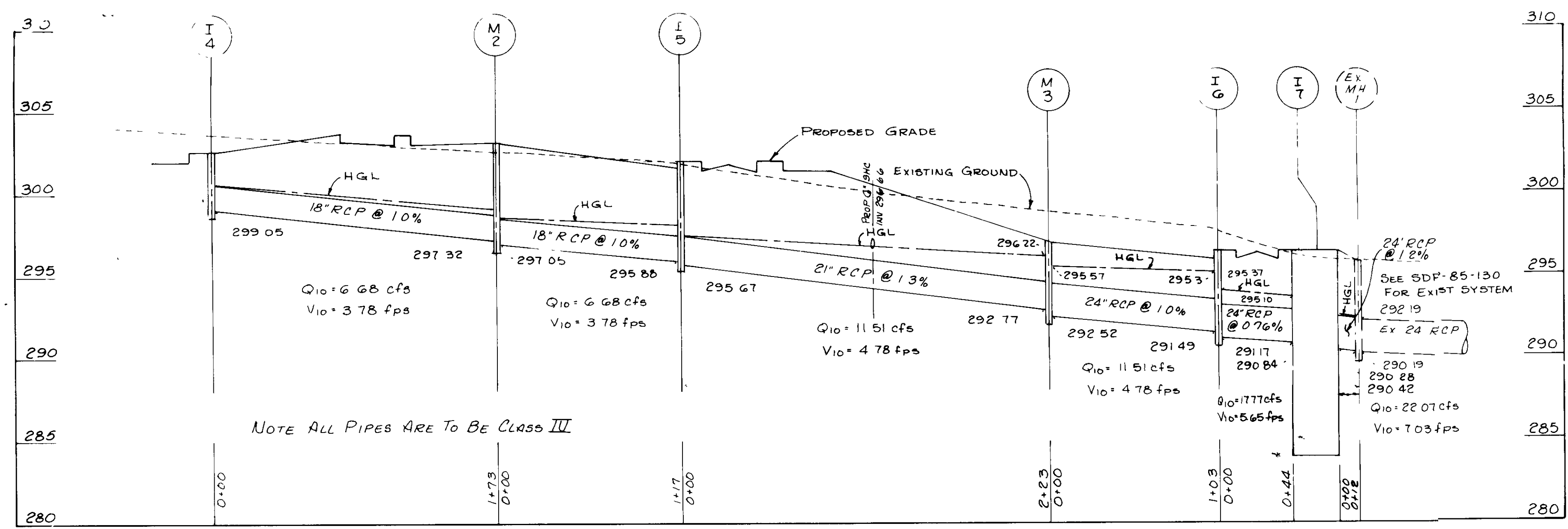
These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.  
 ENGINEERS CERTIFICATE  
 "I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he must provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 9/19/89  
 DIRECTOR  
 9/1/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 REVISION CHART  
 DATE REVISION  
 JAN 2, 1992 ADDED AS-BUILT POND ELEVATIONS SBT

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 9/19/89  
 DIRECTOR  
 9/1/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 REVISION CHART  
 DATE REVISION  
 JAN 2, 1992 ADDED AS-BUILT POND ELEVATIONS SBT

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 9/19/89  
 DIRECTOR  
 9/1/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 REVISION CHART  
 DATE REVISION  
 JAN 2, 1992 ADDED AS-BUILT POND ELEVATIONS SBT

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 9/19/89  
 DIRECTOR  
 9/1/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 REVISION CHART  
 DATE REVISION  
 JAN 2, 1992 ADDED AS-BUILT POND ELEVATIONS SBT

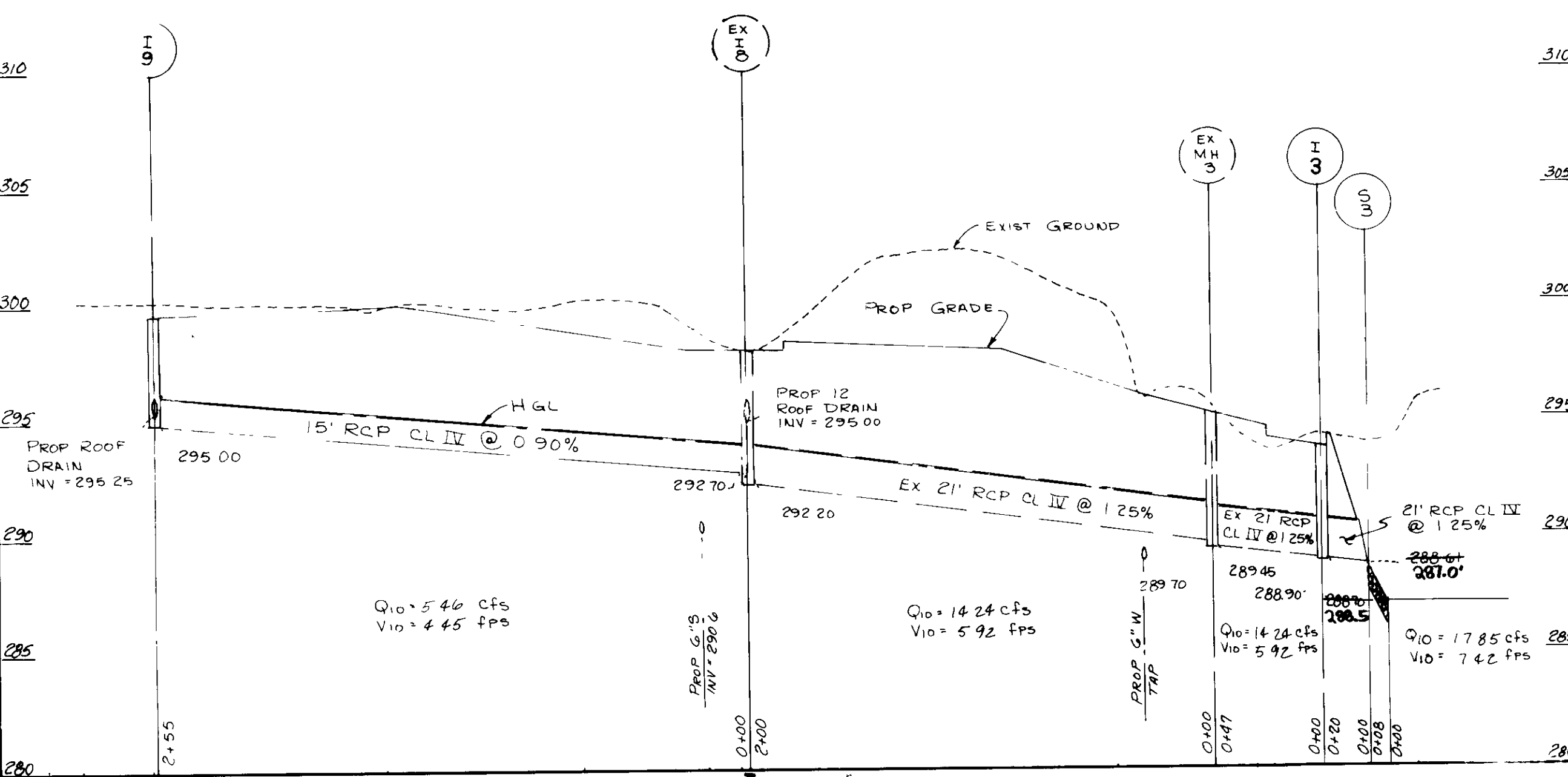
STRUCT WIDTH	N	TYPE	INV IN	INV OUT	TOP ELEV	REMARKS
2'-7" x 2'-7 1/2"	1-2	5" INLET	286.98	286.71	286.5	HO CO STD DETAIL SD 4.22
2'-6" x 10'-0"	1-4	A-18	295.68	295.85	295.68	HO CO STD DETAIL SD 4.82
2'-6" x 10'-0"	1-5	A-18	295.68	295.67	295.68	HO CO STD DETAIL SD 4.82
2'-6" x 10'-0"	1-6	A-18	291.49	291.17	291.48	HO CO STD DETAIL SD 4.82
	1-7	OLE/GRIT	298.84	298.42	298.68	SEE DETAIL SD 4.82
	EX 1-8	DOUBLE*5"	292.78	292.28	292.78	HO CO STD DETAIL SD 4.23
2'-7" x 2'-7 1/2"	1-8	5" INLET	295.88	295.88	295.58	HO CO STD DETAIL SD 4.22
	S-1	CONCRETE		295.4	295.4	HO CO STD DETAIL SD 5.52
	S-2	CONCRETE		295.5	295.5	SEE SDH DETAIL SHEET
	S-3	CONCRETE		295.0	295.0	HO CO STD DETAIL SD 5.52
	M-2	STANDARD MANHOLE	297.32	297.85	297.28	HO CO STD DETAIL SD 5.12
	M-3	STANDARD MANHOLE	292.77	292.52	292.88	HO CO STD DETAIL SD 5.12
	EX M-3	STANDARD MANHOLE	289.78	289.45	289.88	HO CO STD DETAIL SD 5.12



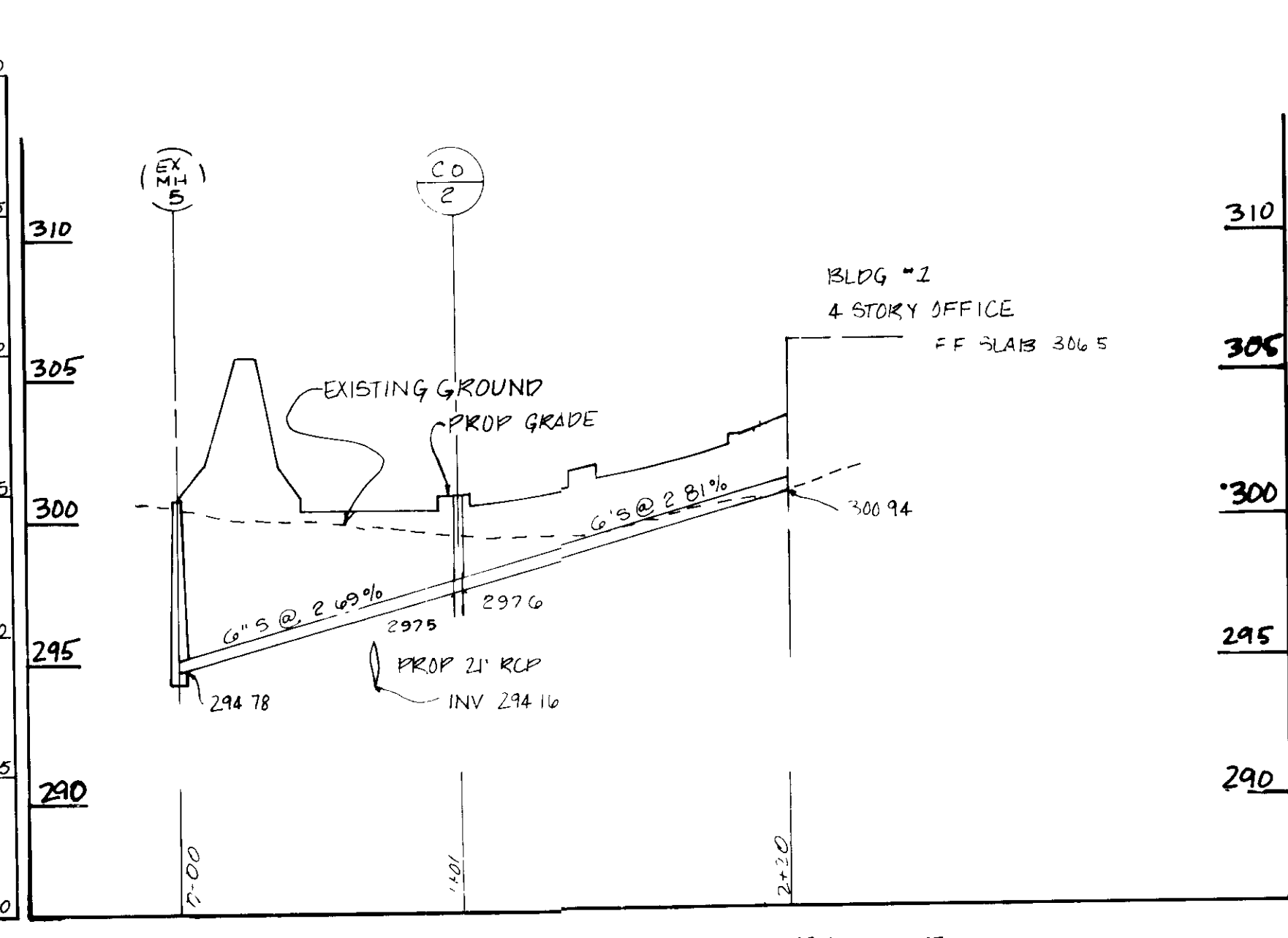
**STORM DRAIN PROFILES**  
 SCALES: HORIZ 1"=50'  
 VERT 1"=5'

BLDG #3 to I-9

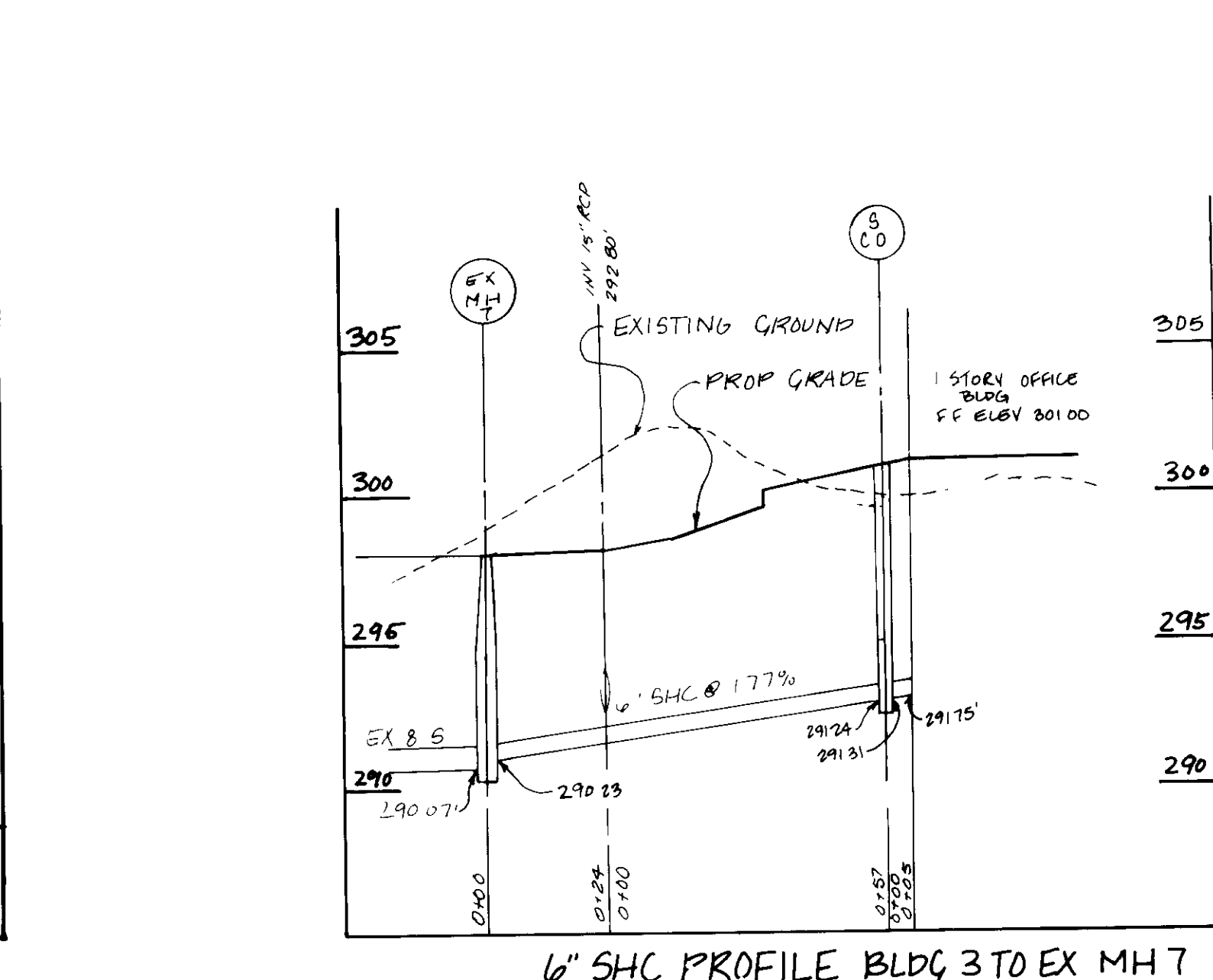
**STORM DRAIN PROFILES**  
 SCALE VERT 1"=5' HORIZ 1"=50'



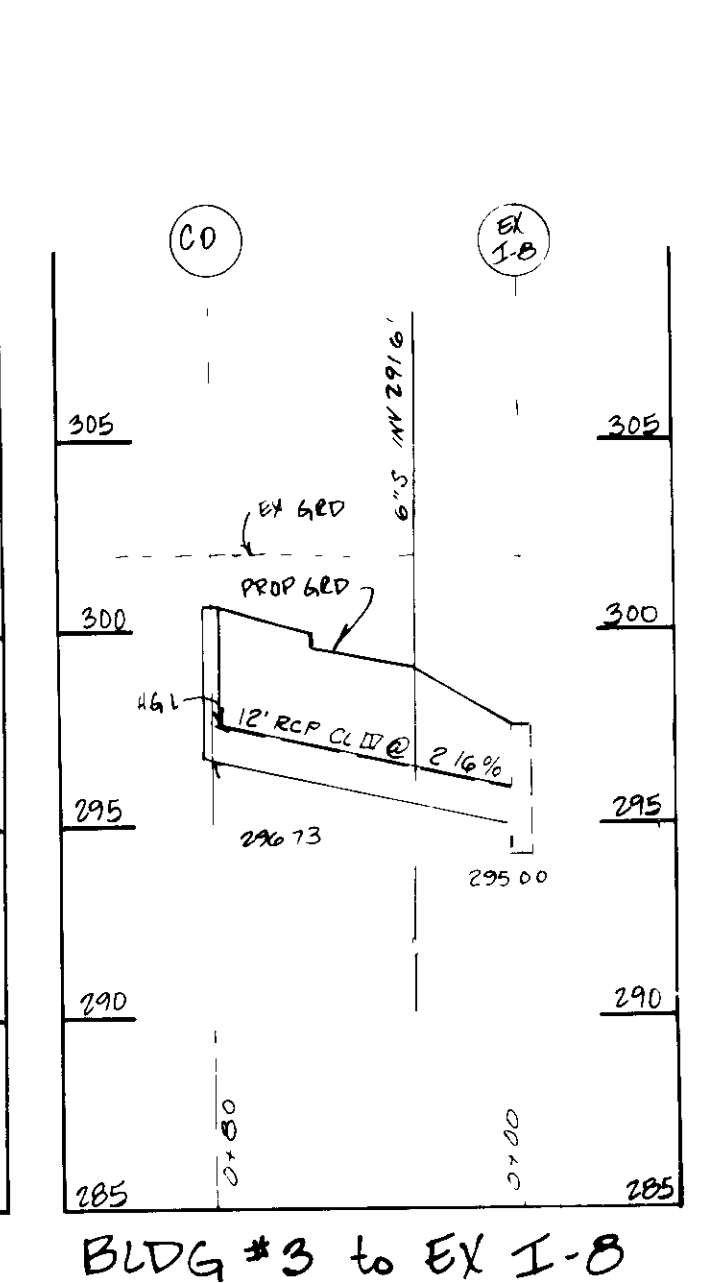
**STORM DRAIN PROFILES**  
 SCALES: HORIZ 1"=50'  
 VERT 1"=5'



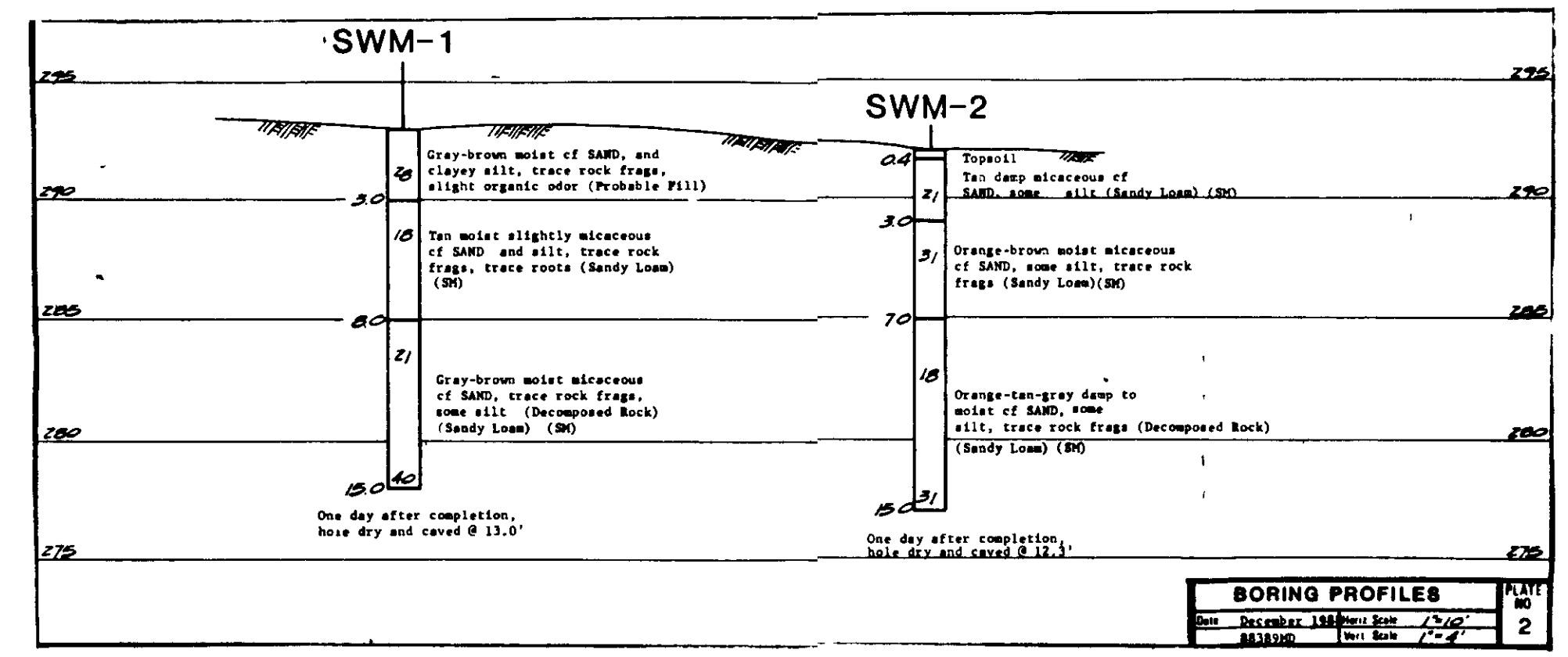
**6" SHC PROFILE BLDG 1 TO EX MH 5**  
 SCALE HORIZ 1"=50'  
 VERT 1"=5'



**6" SHC PROFILE BLDG 3 TO EX MH 7**  
 SCALE HORIZ 1"=30'  
 VERT 1"=5'



**BLDG #3 to EX I-8**  
 SCALE HORIZ 1"=30'  
 VERT 1"=5'



**BORING PROFILES**  
 DATE: December 1988  
 DRAWN BY: J. W. B. / J. W. B.

**APPROVED**  
 HOWARD COUNTY BOARD  
 DATE: 4-12-89  
 LKS

REVIEWED FOR HOWARD SOIL CONSERVATION AND MEETS TECHNICAL REQUIREMENTS  
 DATE: 5-19-89  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT  
 DATE: 5-19-89

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 DATE: 9/1/89  
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 DATE: 9/15/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DATE: 8-23-89  
 CHIEF BUREAU OF ENGINEERING

**DEVELOPERS CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT & 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 DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT  
 DATE: 12/16/88  
 DEVELOPERS SIGNATURE

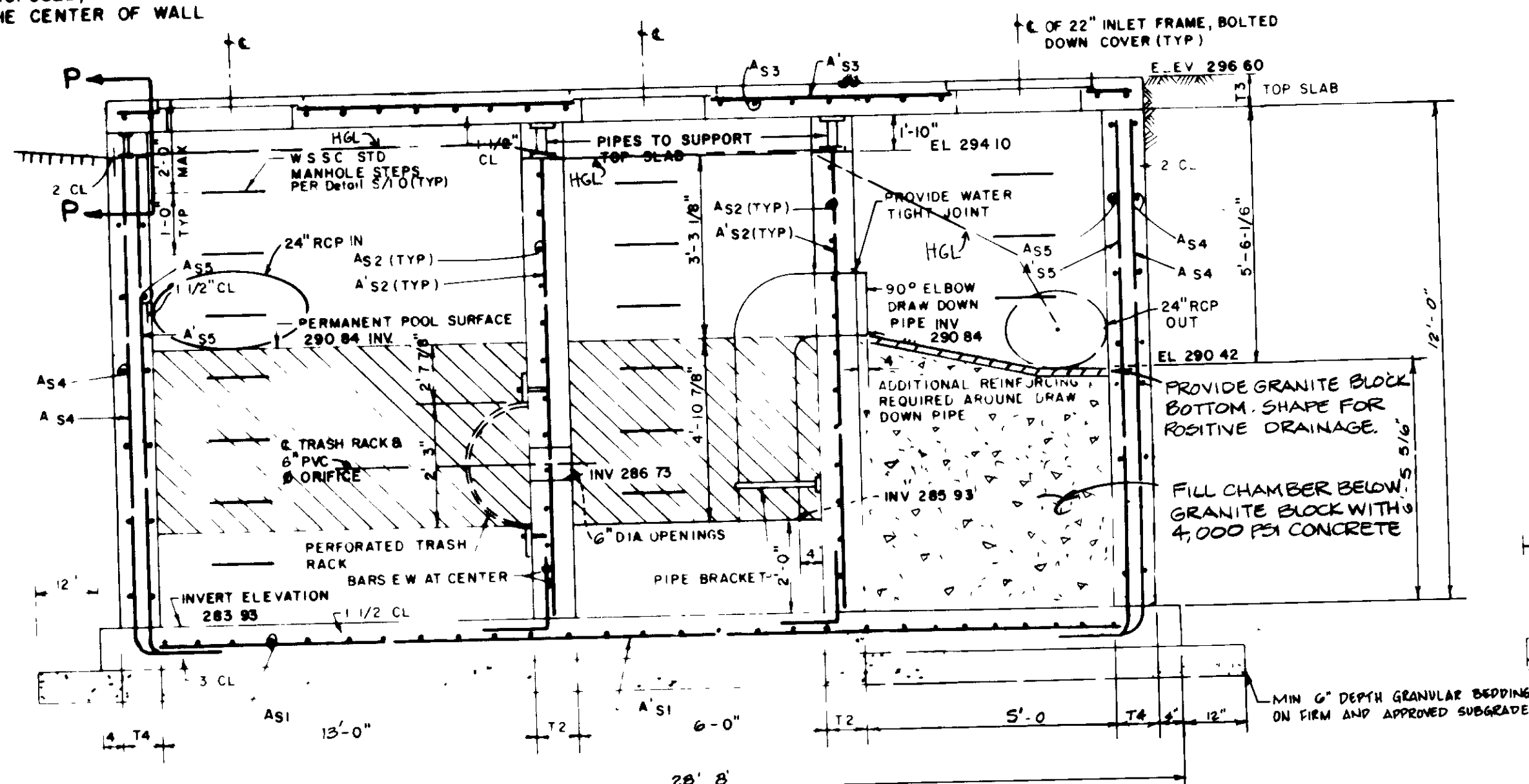
**OWNER/DEVELOPER**  
 TRAMMELL CROW COMPANY  
 7529 STANDISH PLACE  
 ROCKVILLE, MARYLAND 20855  
 (301)340-0901

**STORM DRAINAGE & SEWER PROFILES**  
 FOR  
**VILLAGE OF OWEN BROWN**  
 SECTION 6 AREA 1 PARCEL C-2 & A-2  
 TAX MAP 42 PARCEL 16  
 6TH ELECTION DIST HOWARD CO, MARYLAND

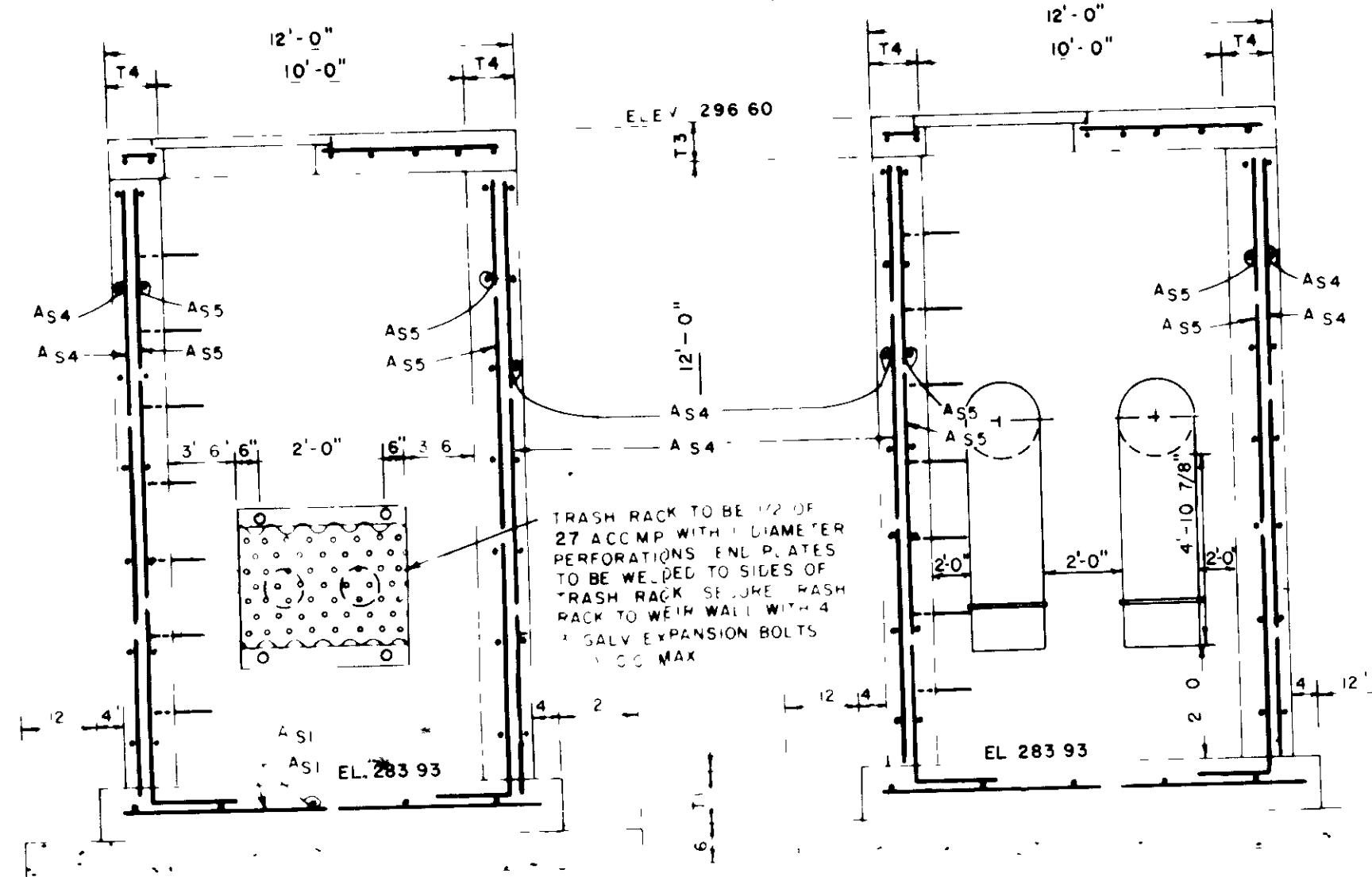
**KIDDE CONSULTANTS, INC.**  
 ENGINEERS, LAND PLANNERS & SURVEYORS  
 8101 SANDY SPRING ROAD / LAUREL, MD 20707  
 (301) 725-0866 / 792-8086  
 DATE: Aug. 1987  
 SCALE: As Shown



NOTE WHERE ONE LAYER OF REINFORCEMENT PROPOSED, PLACE THE REBARS AT THE CENTER OF WALL

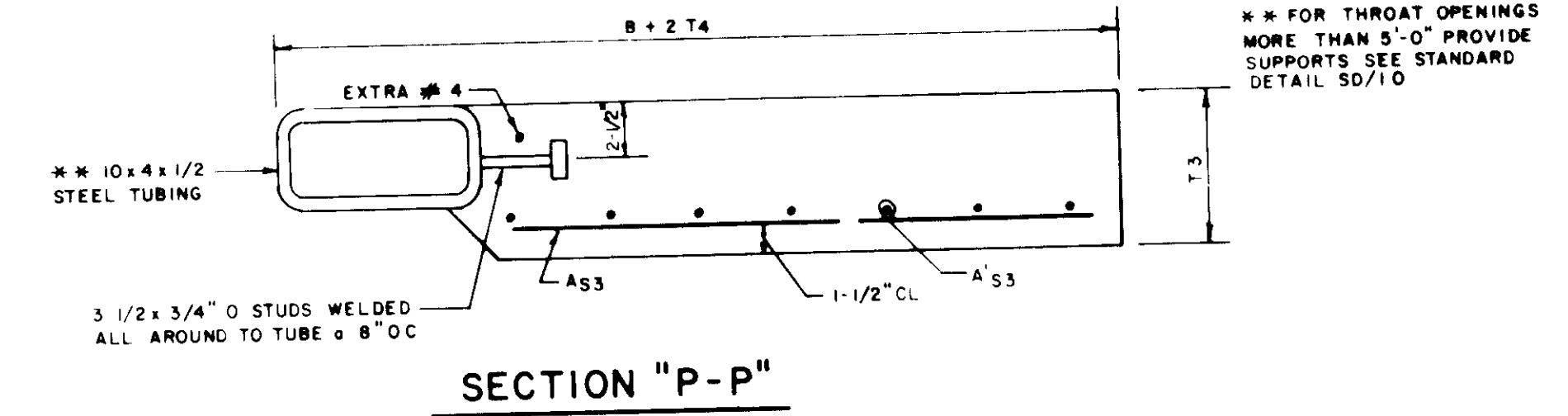


SECTION "A-A"



SECTION "B-B"

SECTION "C-C"

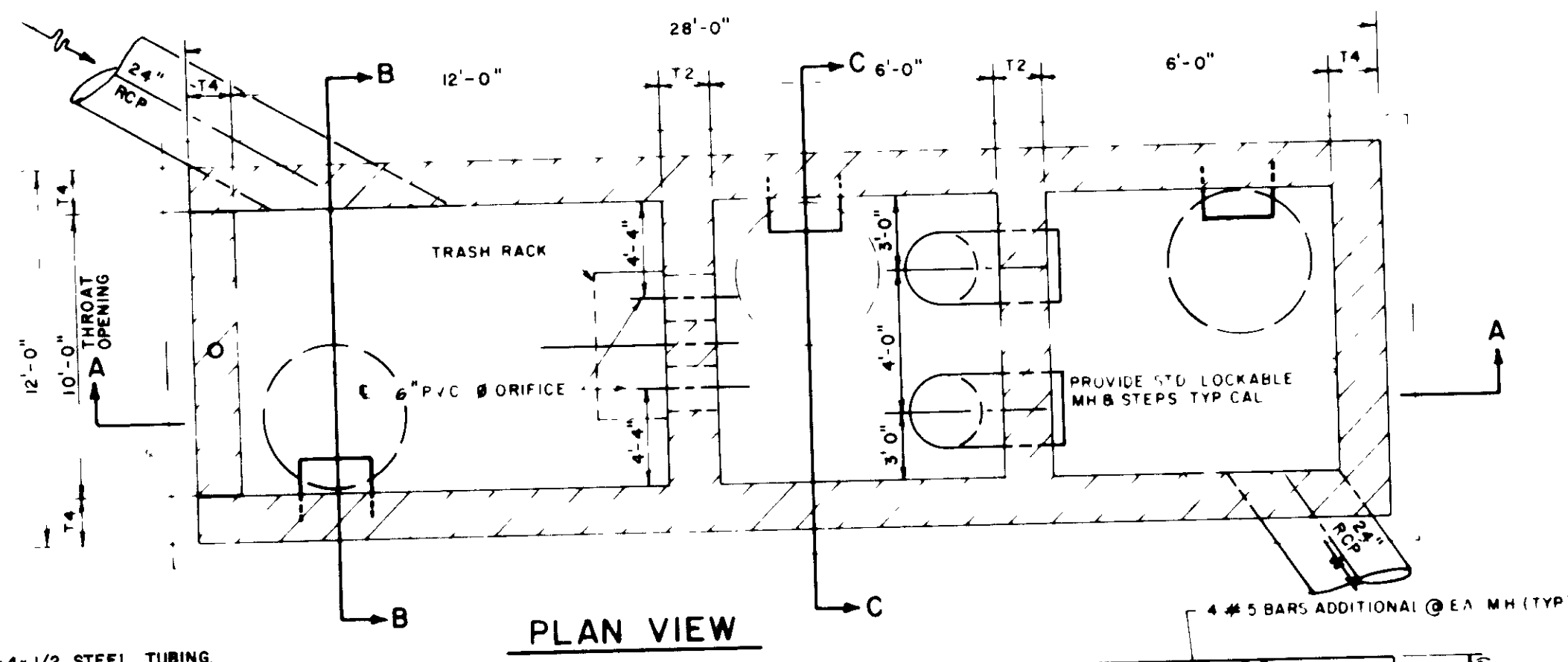


SECTION "P-P"

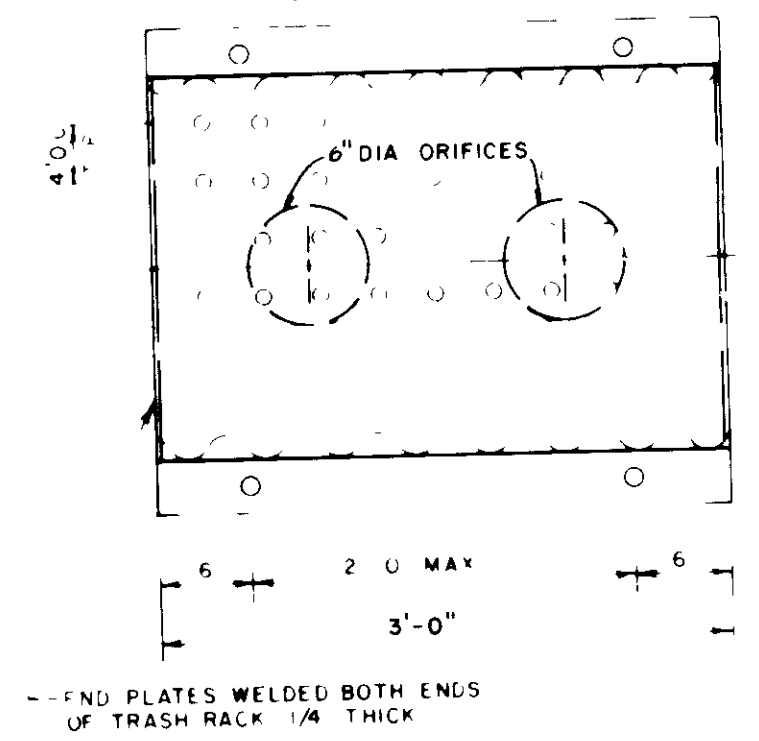
LIMITS		BASE SLAB		PARTITION WALLS		TOP SLAB		OUTER WALLS								
B FT	H FT	L FT	T <sub>1</sub> INS	A'1	A'1	T <sub>2</sub> INS	A'2	A'2	T <sub>3</sub> INS	A'3	A'3	T <sub>4</sub> INS	A'4	A'4	A'5	A'5
5	8	10	6"	#5 @ 7"	#4 @ 12"	8"	#4 @ 6"	#4 @ 6"	6"	#5 @ 6"	#4 @ 6"	8"	#5 @ 5"	#4 @ 12"	—	—
10	12	15														

CAST IN PLACE CONCRETE  $f_c = 4000 \text{ psi}$  @ 28 DAYS REINFORCING STEEL IN ACCORDANCE WITH ASTM A615 GRADE 60  
NOTE FOR SECTION AND DETAILS REFER TO SD/700 AND SD/706

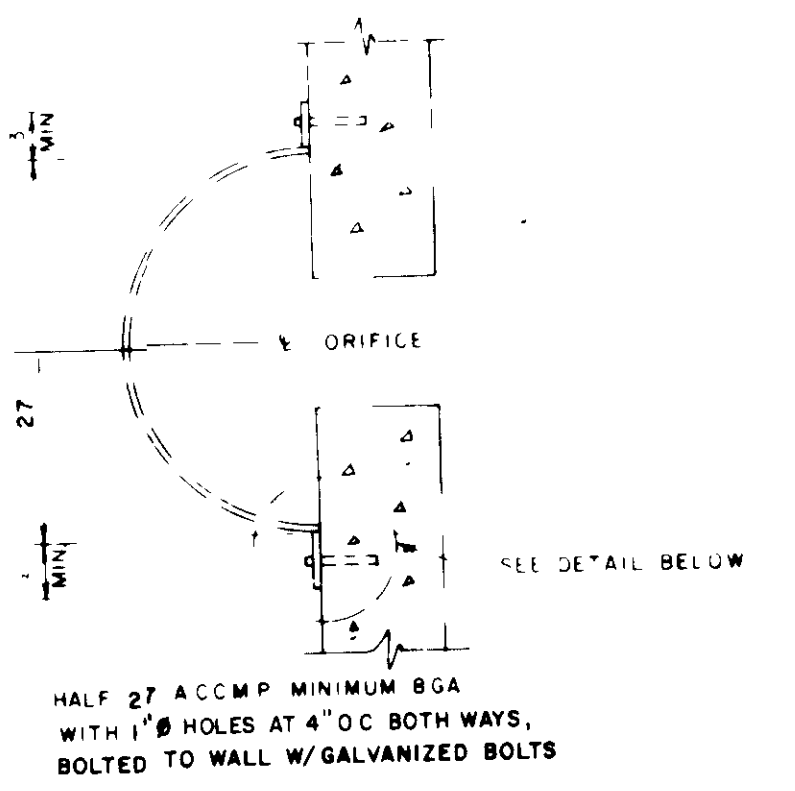
DOWELS	A	B
#4	18	18
#5	27	27
#6	30	30



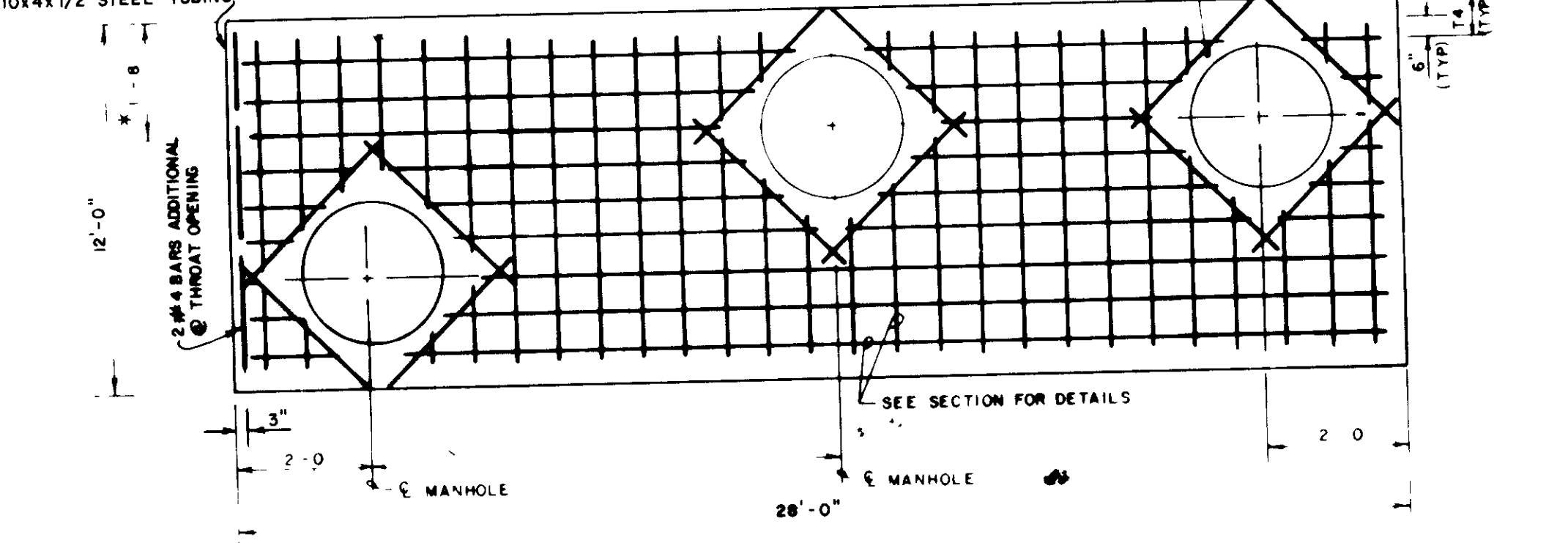
PLAN VIEW



DRAW DOWN PIPE DETAIL



PLAN VIEW TRASH RACK



PLAN VIEW - TOP SLAB DETAIL

OIL / GRIT SEPARATOR

APPROVED  
PLANNING & ZONING  
OF HOWARD COUNTY  
DATE: 4-12-89  
LKS

DATE	REVISION
SAP. 1-16-90	REV. THIRD CHAMBER IN OIL/GRIT SEPARATOR

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS DIRECTOR 9/19/89 DATE	APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT CHIEF BUREAU OF ENGINEERING 9/1/89 DATE
---	---

REVIEWED FOR HOWARD SOIL CONSERVATION AND MEETS TECHNICAL REQUIREMENTS DIRECTOR 5-19-89 DATE	THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION & SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT DIRECTOR 5-19-89 DATE
---	---

ENGINEERS CERTIFICATE  
"I CERTIFY THAT THIS PLAN FOR EROSION & 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"

ENGINEERS SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

DEVELOPERS CERTIFICATE  
"I/WE CERTIFY THAT ALL DEVELOPMENT & CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION OF A PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT"

DEVELOPERS SIGNATURE Paul Reif DATE 12/16/00

DETAIL SHEET

VILLAGE OF OWEN BROWN  
SECTION 6 AREA 1, PARCEL C-2 & A-2  
TAX MAP 42 PARCEL 16  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER:  
TRAMMELL OWEN COMPANY  
7529 STANDISH PLACE  
ROCKVILLE, MARYLAND 20855  
(301) 540-0901

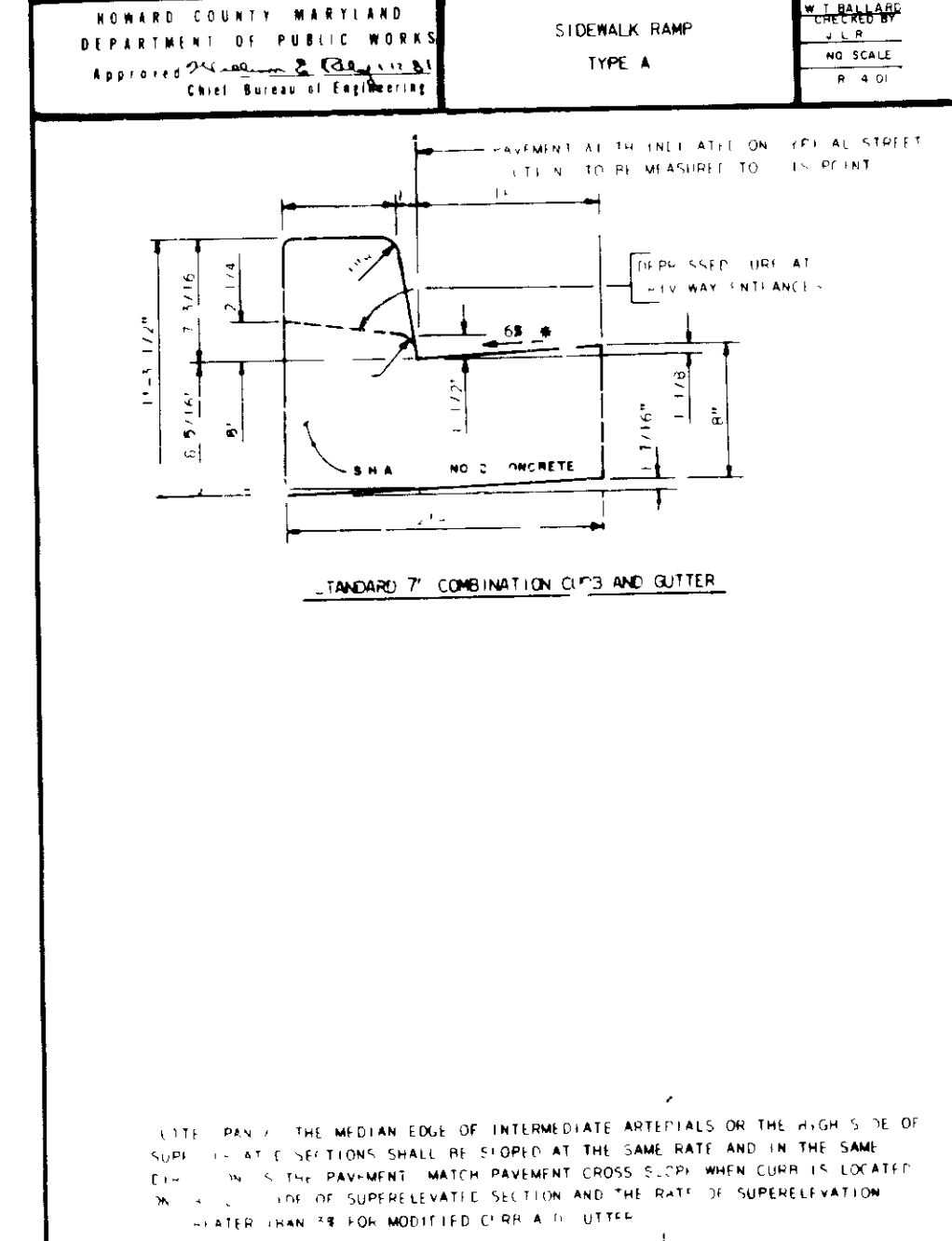
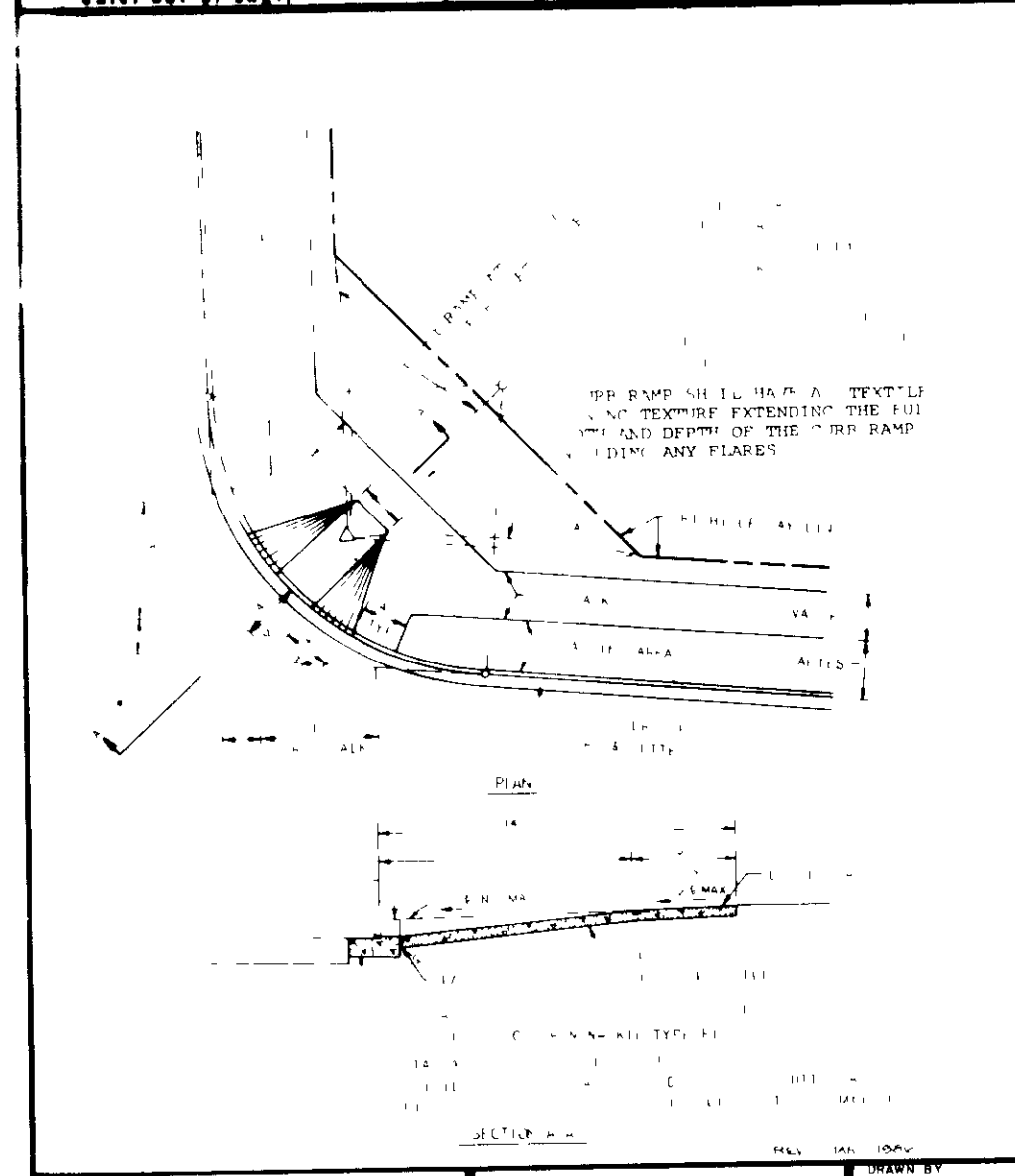
KIDDE CONSULTANTS, INC.  
ENGINEERS • PLANNERS • SURVEYORS  
1100 WEST STREET SUITE 100 LAUREL, MD 20707  
(410) 301-9531 / 792-0066 (Ext.)

DATE NOV, 1988 SCALE 1/8" = 1'-0"

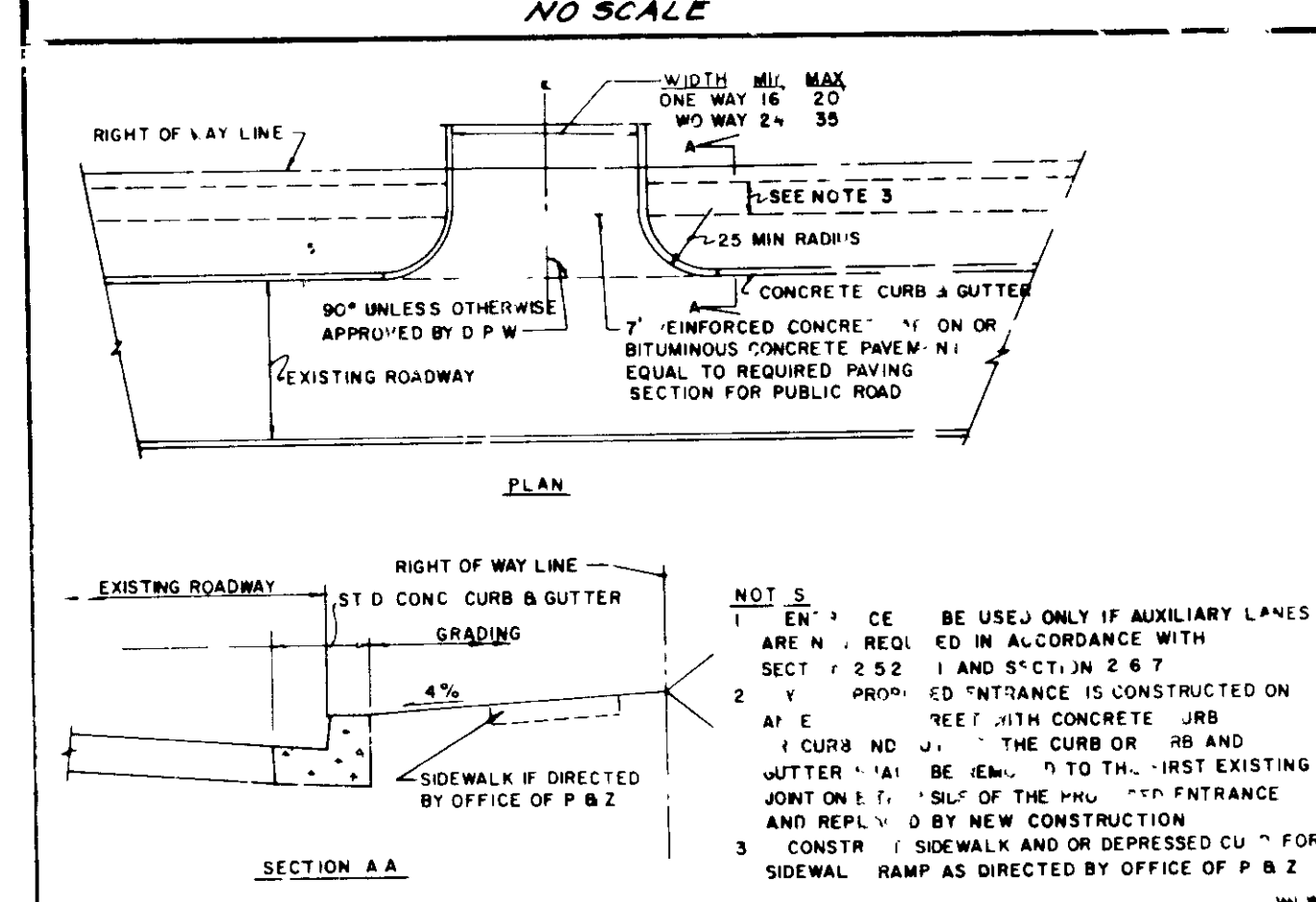
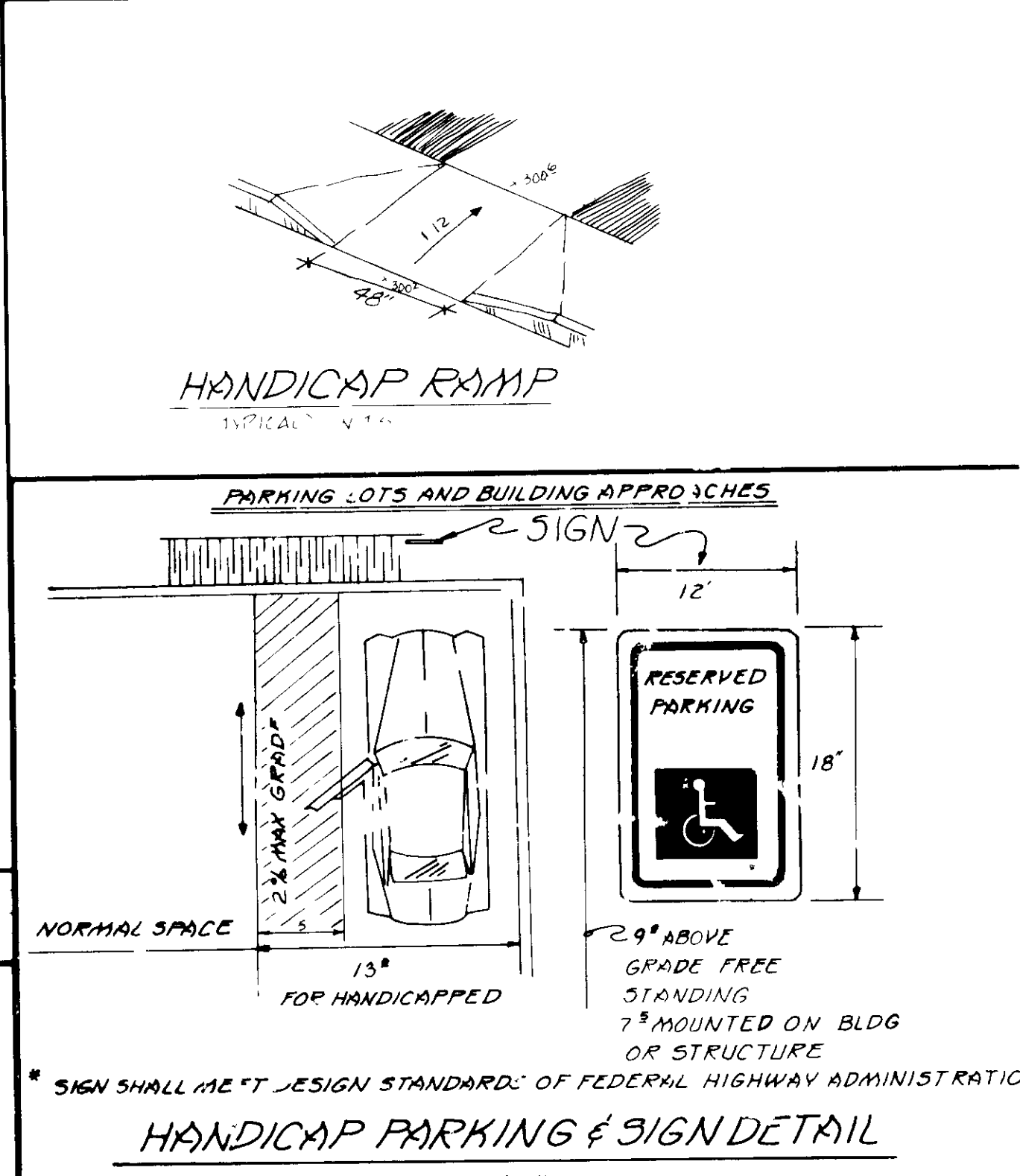
SDP-89-50

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	PAVEMENT MATERIALS	
		FULL DEPTH BIT CONC ALTERNATE	GRANULAR BASE ALTERNATES
P-1	PARKING AREAS AND TRAVELWAYS APARTMENTS AND COMMERCIAL- INDUSTRIAL ZONES WITH NO HEAVY TRUCKS	1" BIT CONC SURFACE 4" BIT CONC BASE	1" BIT CONC SURFACE 2" BIT CONC BASE PRIME 9" CRUSHER RUN BASE COURSE OR 4" BASE GRADED STABILIZED AGGREGATE BASE COURSE
P-2	RESIDENTIAL ZONES LOCAL DR. OR BAY STS ALLEYS AND PRIVATE ROADS SERVING INDIVIDUAL PARKING AREAS APARTMENTS AND COMMERCIAL- INDUSTRIAL ZONES WITH NO MORE THAN 40 HEAVY TRUCKS PER DAY*	1 1/2" BIT CONC SURFACE 5" BIT CONC BASE	1 1/2" BIT CONC SURFACE 2 1/2" BIT CONC BASE PRIME 9" CRUSHER RUN BASE COURSE OR 4" BASE GRADED STABILIZED AGGREGATE BASE COURSE

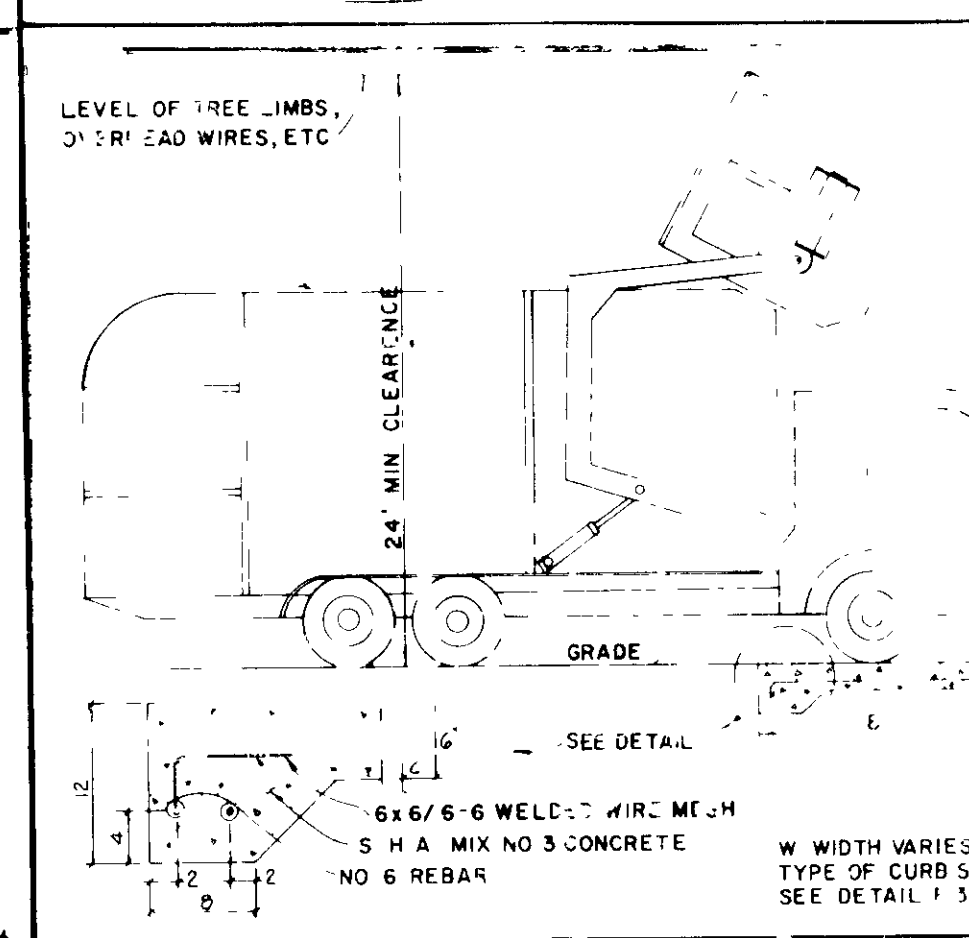
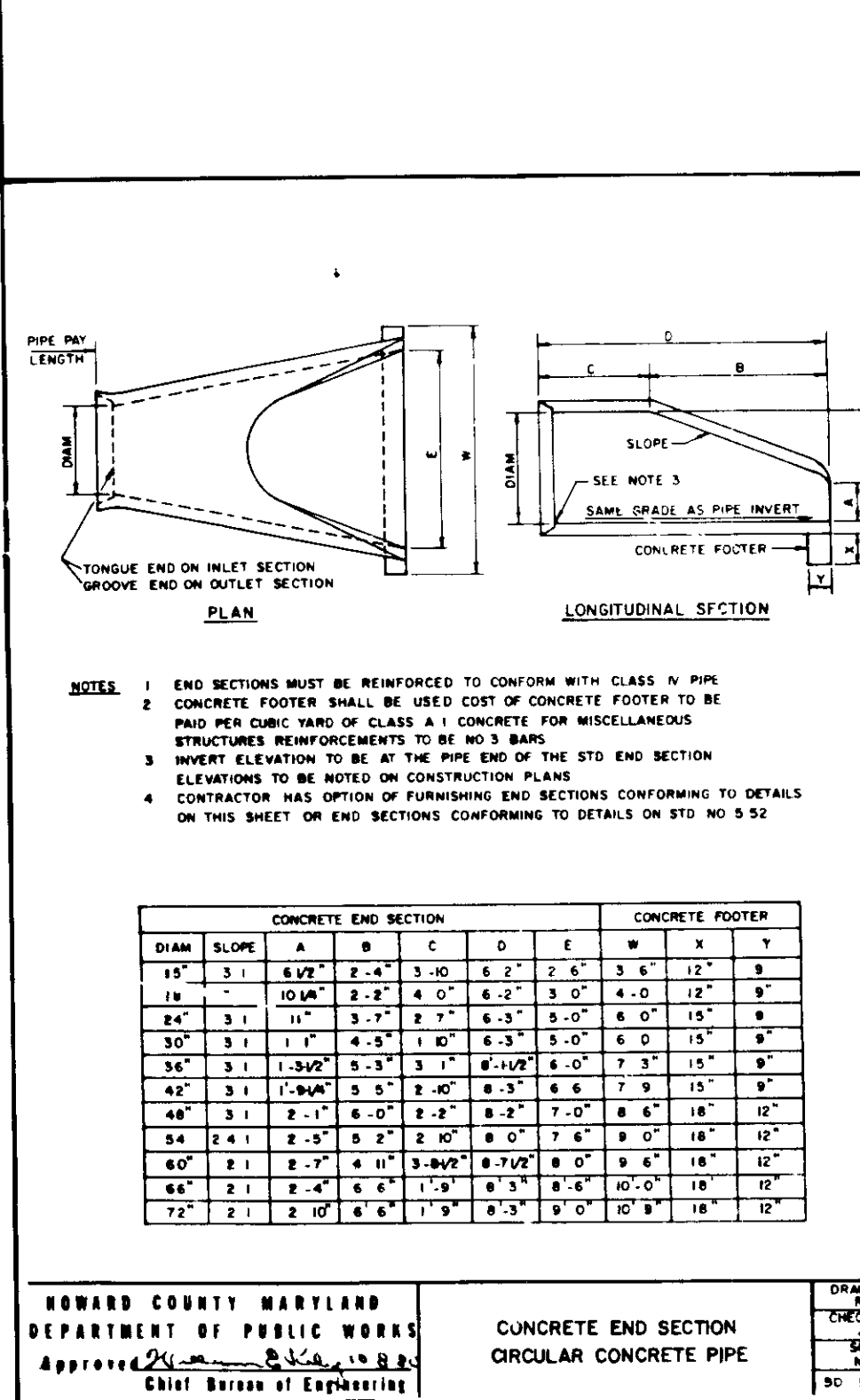
\* HEAVY TRUCKS DEFINED AS THOSE WITH 6 WHEELS OR MORE



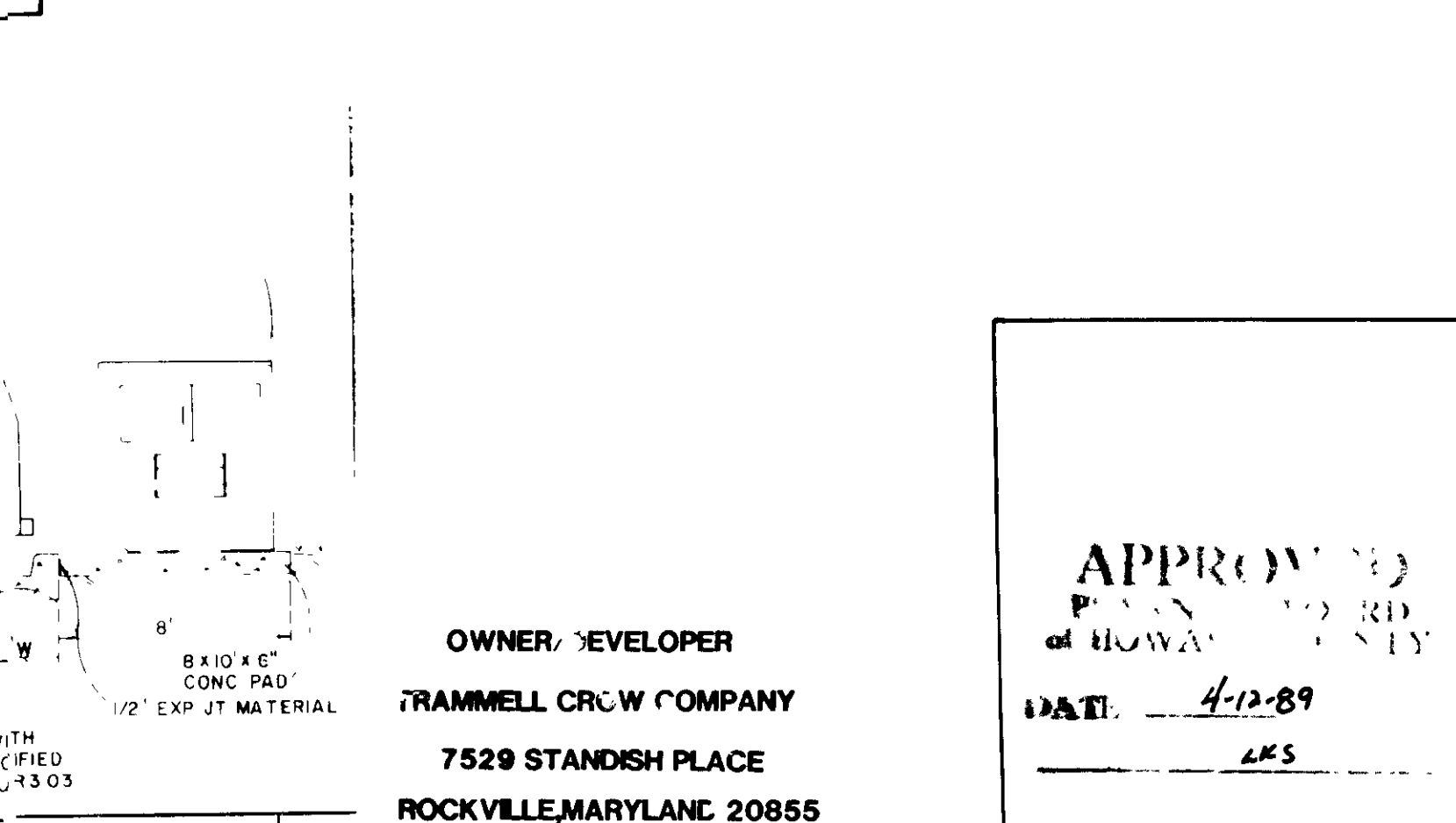
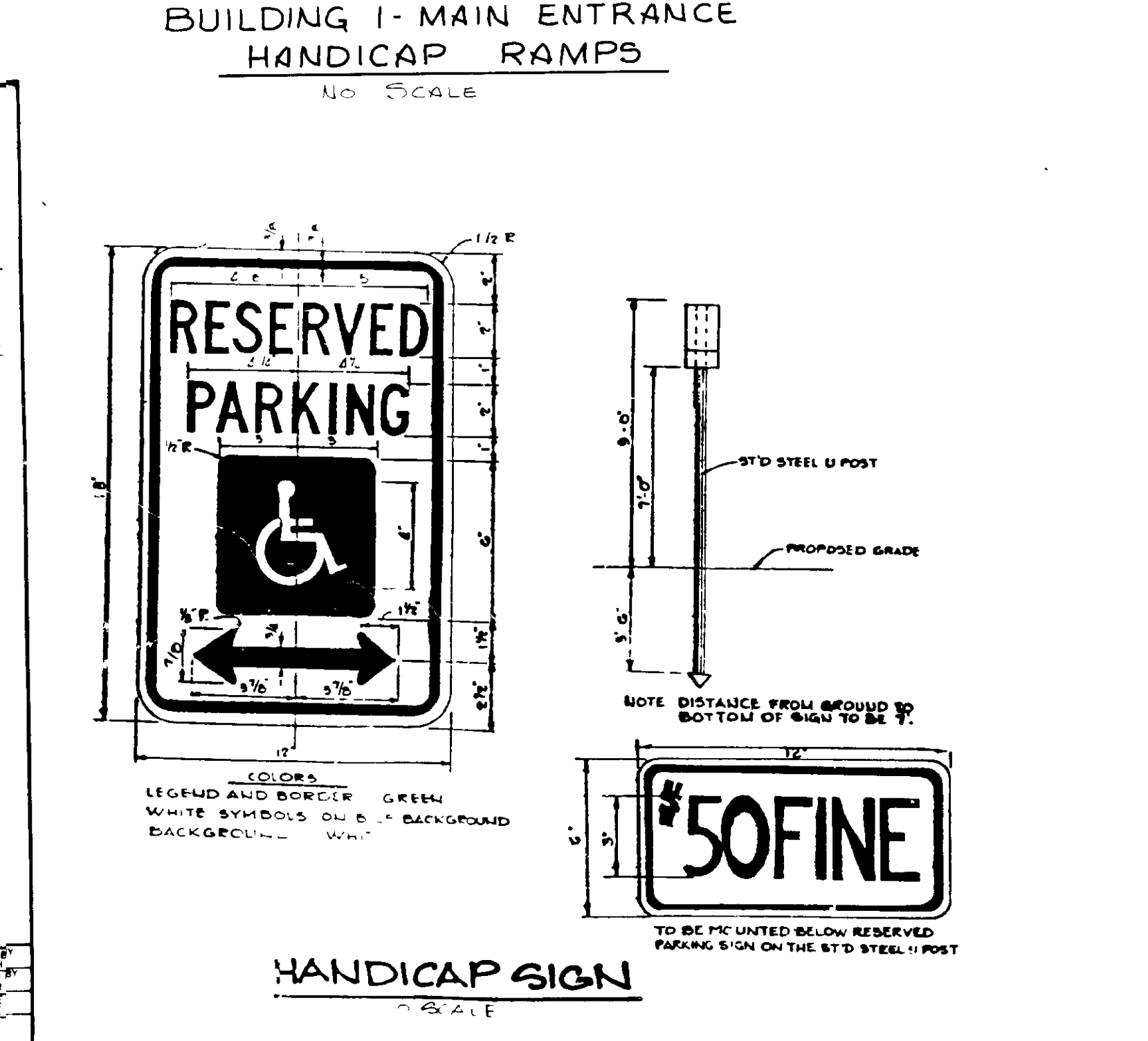
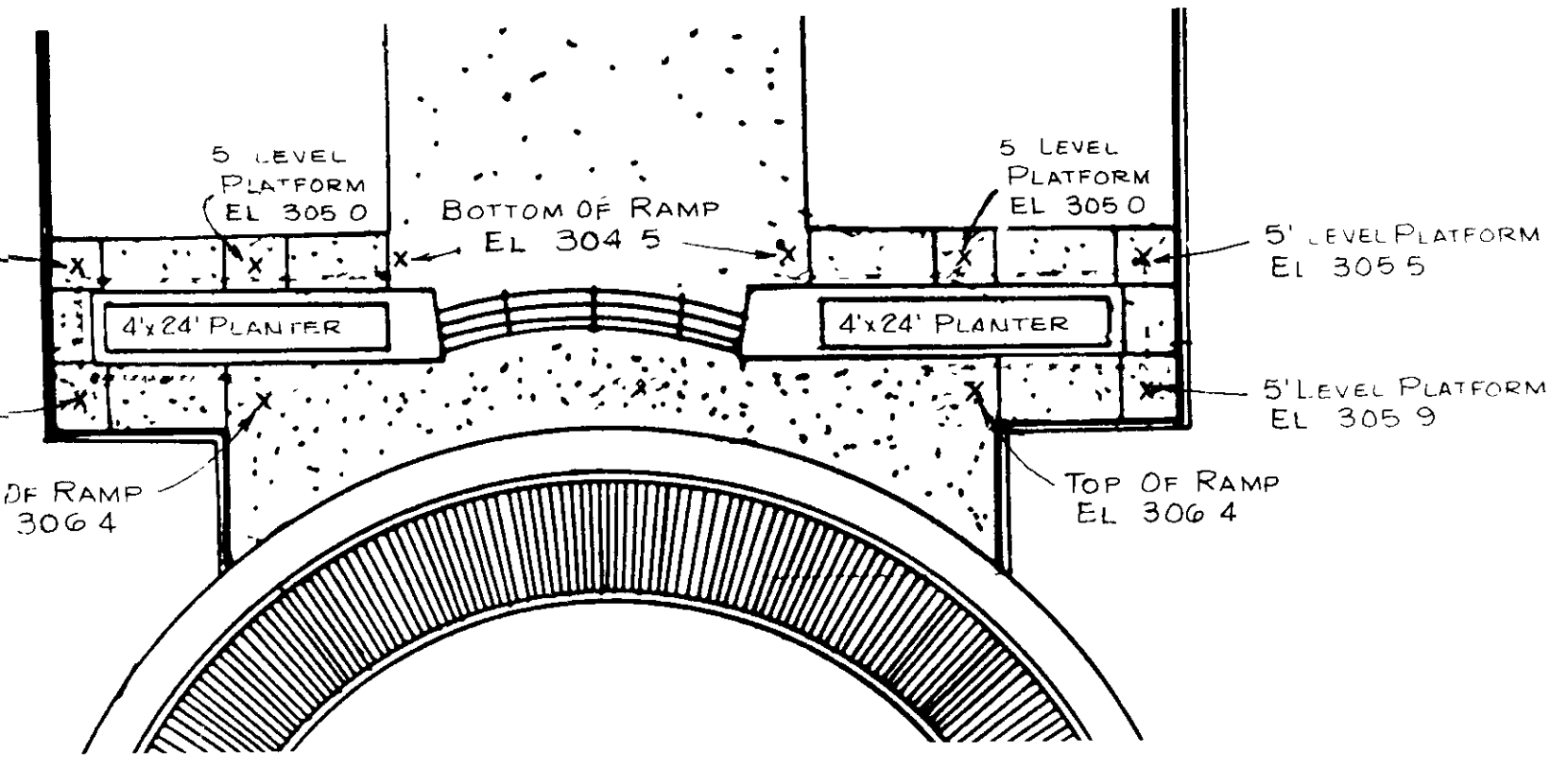
HOWARD COUNTY MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
Approved: [Signature] Chief Bureau of Engineering



HOWARD COUNTY MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
Approved: [Signature] Chief Bureau of Engineering



HOWARD COUNTY MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
Approved: [Signature] Chief Bureau of Engineering



HOWARD COUNTY MARYLAND  
DEPARTMENT OF PUBLIC WORKS  
Approved: [Signature] Chief Bureau of Engineering

OWNER/DEVELOPER  
**TRAMMELL CROW COMPANY**  
7529 STANDISH PLACE  
ROCKVILLE, MARYLAND 20855  
(301) 340-0901

APPROVED  
DATE: 4-12-89  
LKS

**DETAIL SHEET**  
**VILLAGE OF OWEN BROWN**  
SECTION 6 AREA 1, PARCELS C 2 & A 2  
TAX MAP 42 PARCEL 16  
6TH ELECTION DIST HOWARD CO, MARYLAND

**KIDDE CONSULTANTS, INC.**  
ENGINEERS • PLANNERS • SURVEYORS

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 Sedimentation Erosion before beginning the project. I/We authorize periodic inspections by the Howard Soil Conservation District."

Signature of Developer: Paul Reef  
Date: 12/6/88

Signature of Engineer: [Signature]  
Date: [Date]

DATE: AUGUST 1988 SCALE: AS SHOWN

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE & STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.  
Approved: [Signature] Chief Bureau of Engineering

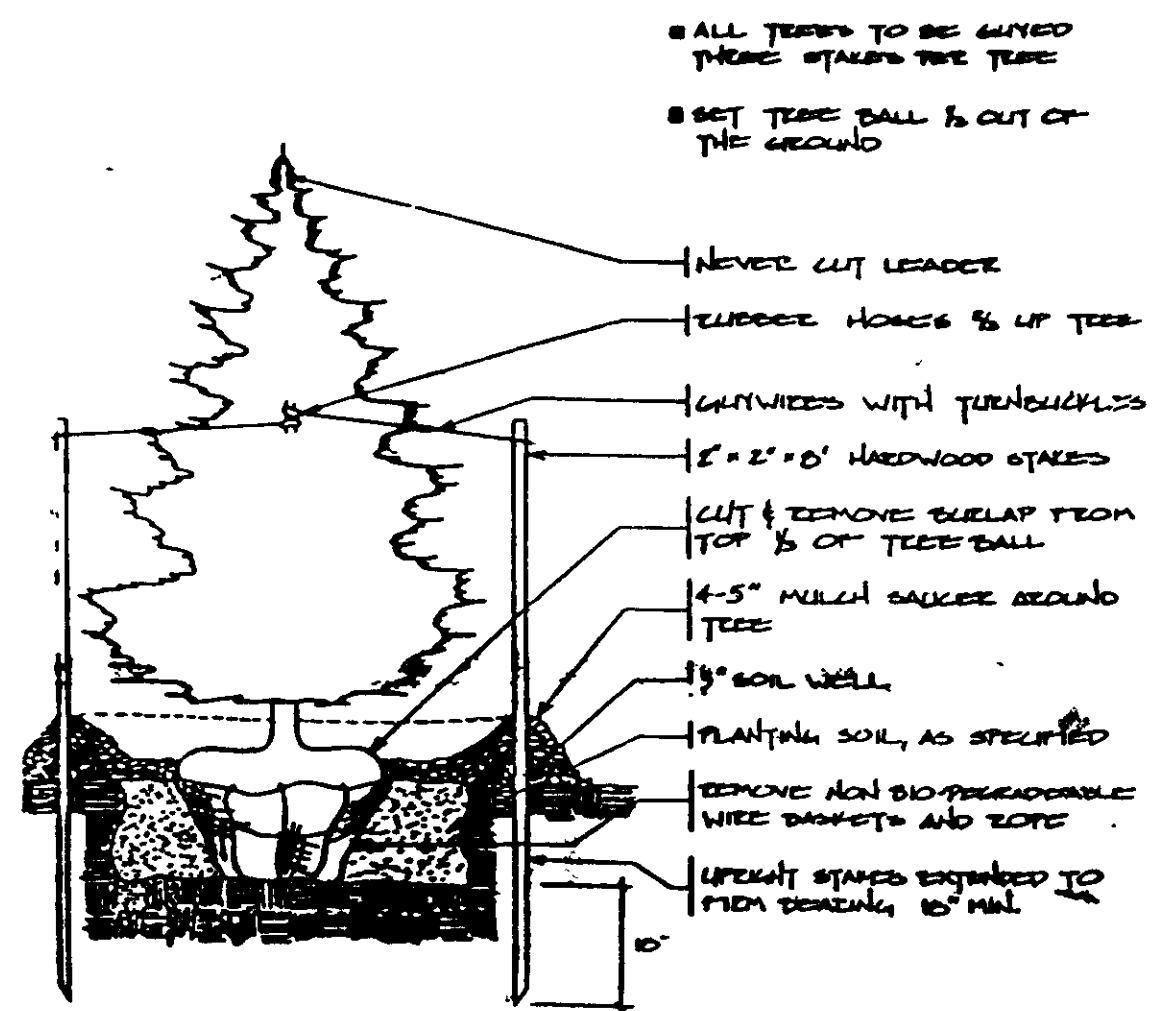
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.  
Approved: [Signature] Health Officer

APPROVED, HOWARD COUNTY OFFICE OF PLANNING AND ZONING.  
Approved: [Signature] Director

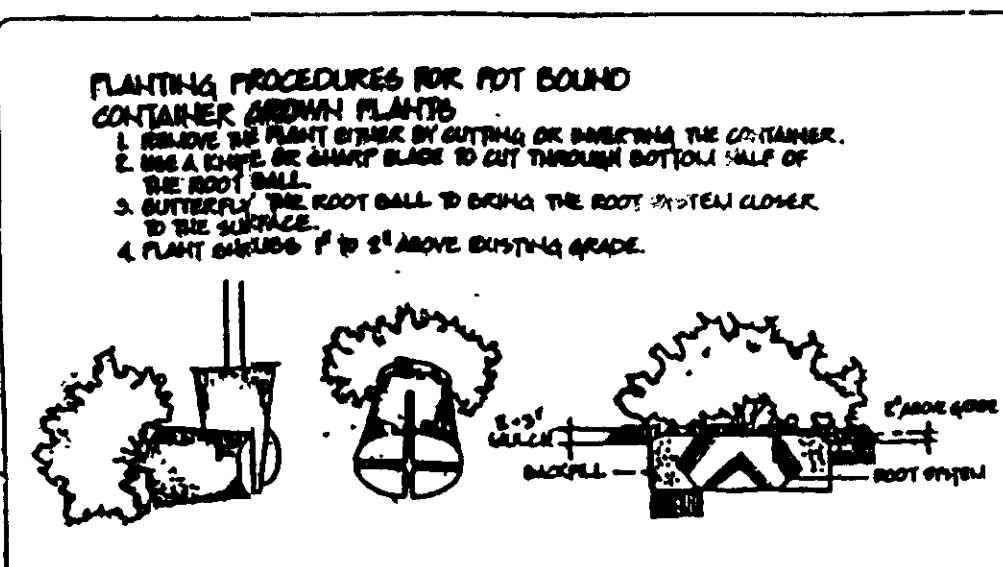
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
Approved: [Signature] District Director

Reviewed for HOWARD S.C.D. and meets Technical Requirements  
Approved: [Signature] District Director

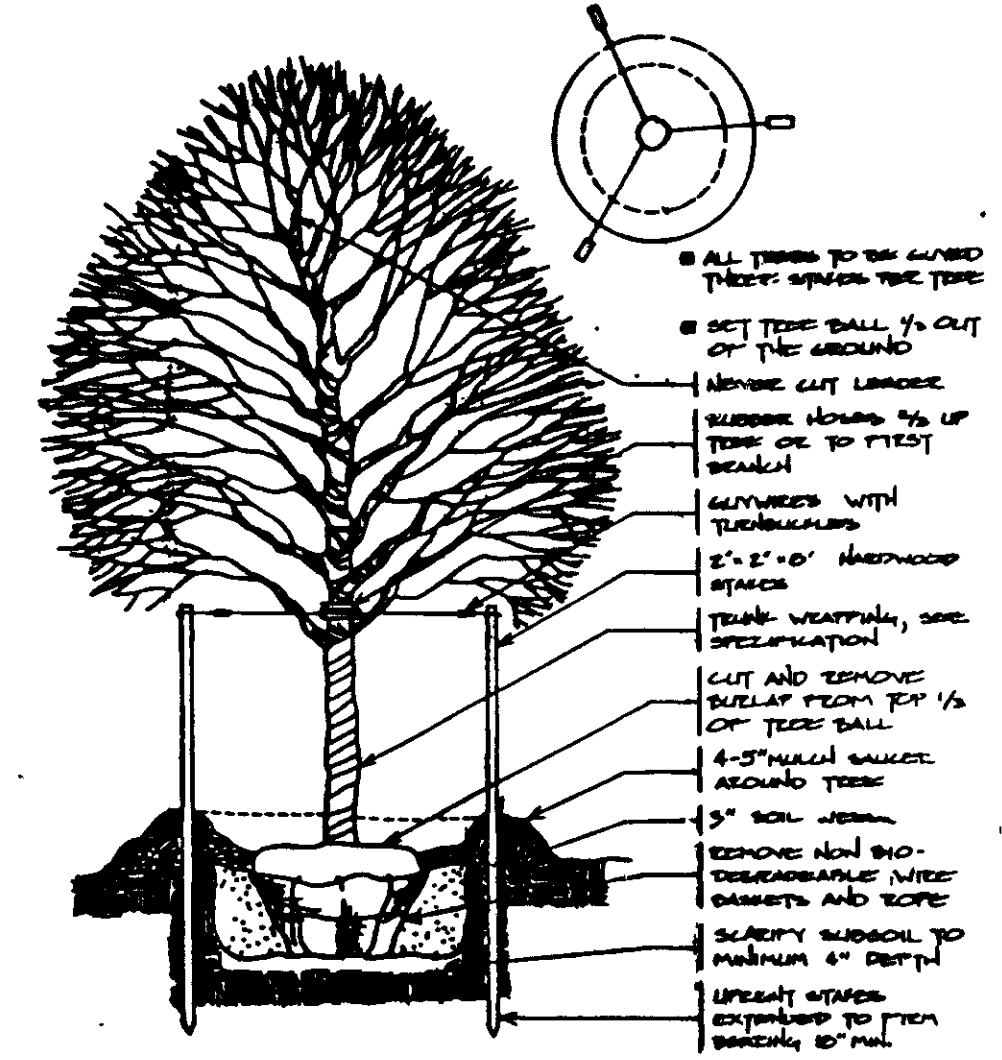




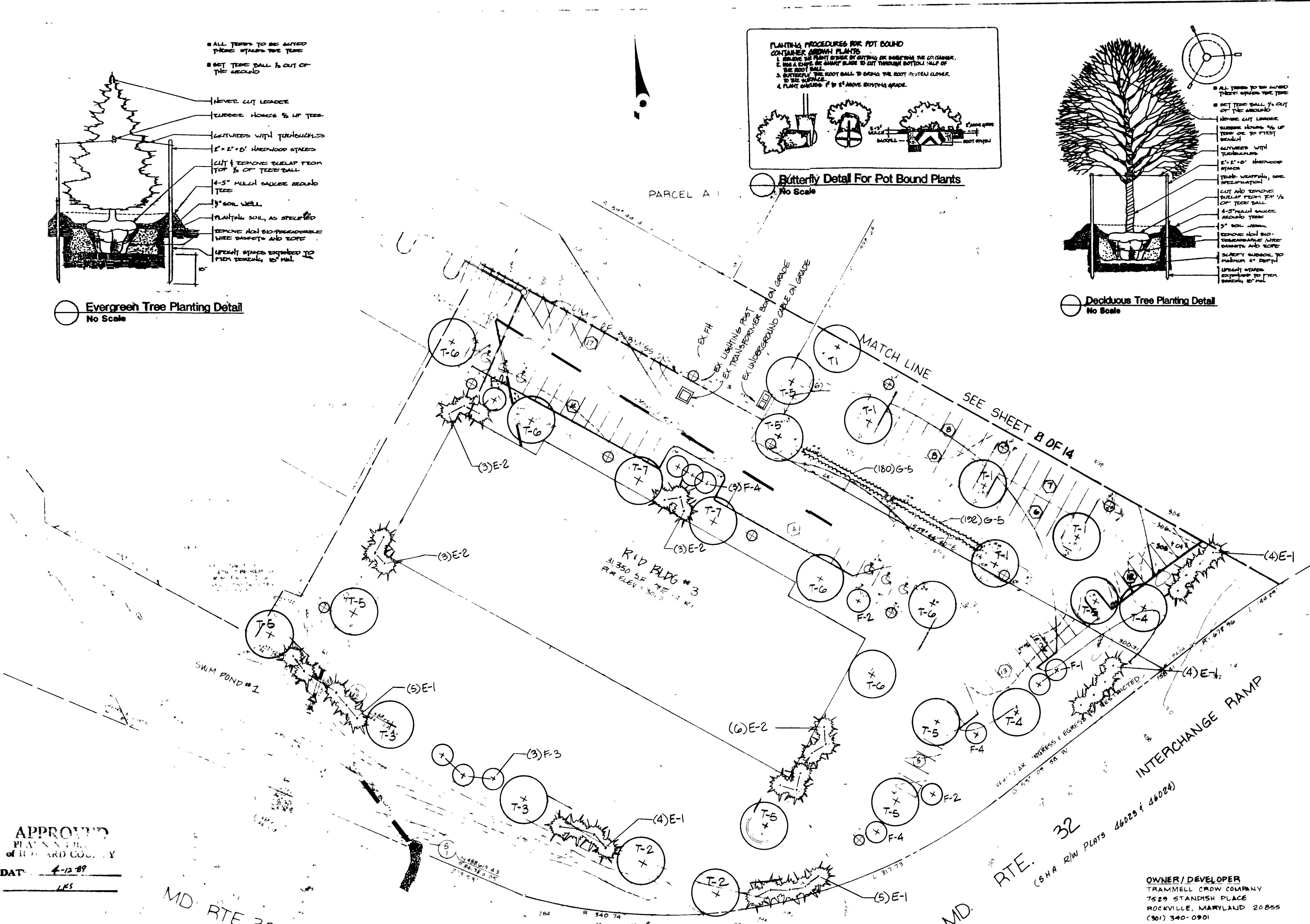
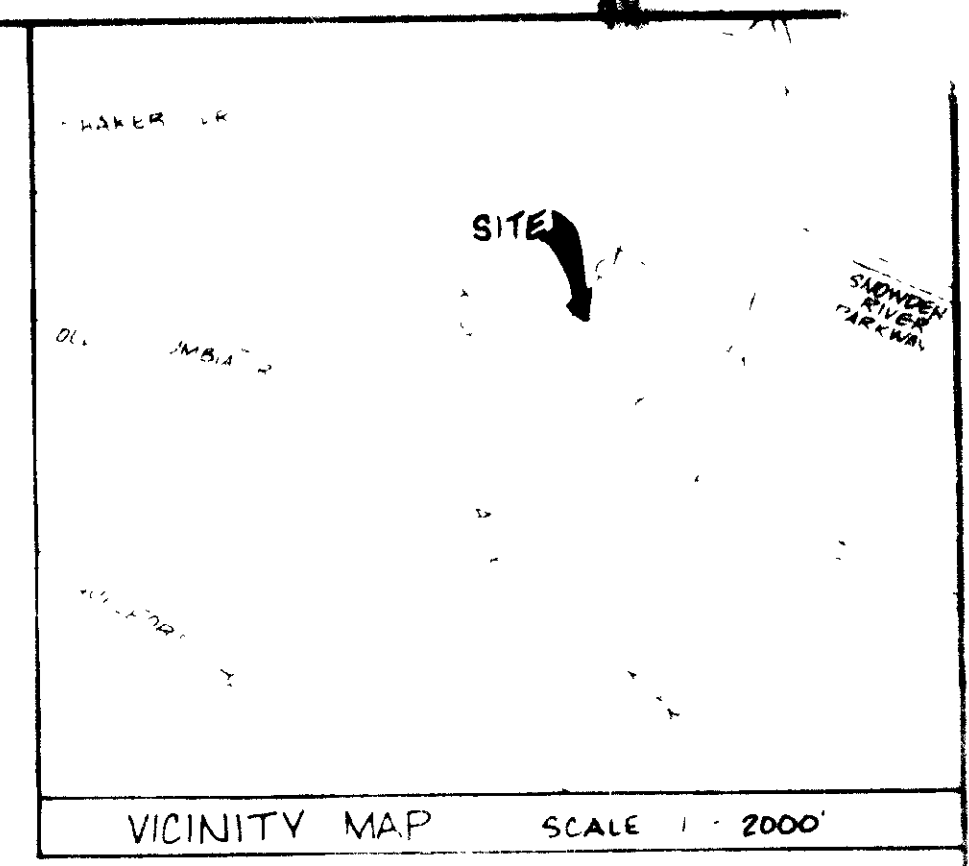
Evergreen Tree Planting Detail  
No Scale



Butterfly Detail For Pot Bound Plants  
No Scale



Deciduous Tree Planting Detail  
No Scale



PLANTING LIST ON THIS SHEET

KEY	QUANTITY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT	REMARKS
T-1	5	ACER SACCHARINUM 'GREEN MOUNTAIN' GREEN MOUNTAIN SUGAR MAPLE	2-1/2"-3"	B&B	
T-2	2	ACER RUBRUM 'RED SUNSET' RED SUNSET GLO.: MAPLE	2-1/2"-3"	B&B	
T-3	2	GLADIOLIA TRI-CANTONIS IRIDIUM BRADSHAWII	3"-3-1/2"	B&B	STUMPED
T-4	2	FRAXINUS LANCEOLATA MARSHALL'S MARSHALL'S SEEDLING ASH	2"-2-1/2"	B&B	
T-5	8	QUERCUS PALMYRIS PINE OAK	2-1/2"-3"	B&B	
T-6	4	QUERCUS PHELLOS WILLOW OAK	2-1/2"-3"	B&B	
T-7	2	GLADIOLIA 'IMPERIAL'/ IMPERIAL BURNINGBUSH	2 1/2"-3"	B&B	
EVERGREEN TREES					
KEY	QUANTITY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT	REMARKS
E-1	22	PIRUS SYRIACA EASTERN WHITE PINE	6'-7"	B&B	10' SPACING
E-2	15	PIRUS SINENSIS JAPANESE BLACK PINE	5'-6"	B&B	10' SPACING
FLOWERING TREES					
KEY	QUANTITY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT	REMARKS
F-1	-0-	CORNUS FLORIDA FLOWERING DOGWOOD	7'-8"	B&B	HEAVY
F-2	3	CORNUS FLORIDA 'RUBRA' PINK DOGWOOD	7'-8"	B&B	15' SPACING
F-3	3	KOELZITERIA PANGICULATA GOLDENRAIN TREE	8'-10"	B&B	15' SPACING
F-4	5	PRUNUS SEROTINA EMANANS EMANANS CHERRY	2"-2-1/2"	B&B	HEAVY
F-5	-0-	PRUNUS YEDONENSIS YOSHINO CHERRY	2"-2-1/2"	B&B	HEAVY
F-6	-0-	CERCIS CANADENSIS REDBUD	8'-10"	B&B	HEAVY
GROUNDCOVERS & SHRUBS					
KEY	QUANTITY	BOTANICAL NAME/ COMMON NAME	SIZE	ROOT	REMARKS
G-1	-0-	DIWIDIA ALAZA/ WINGED BURNINGBUSH	3" Ht.	B&B	1' EDGE SPACING
G-2	-0-	DIWIDIA FORTUNEI 'COLLEAZA' / WINGED BURNINGBUSH		CONT.	11' SPACING
G-3	-0-	DIWIDIA FORTUNEI 'VIRIDIA'	4-6" Ht.	"TREE CONT.	8' SPACING
G-4	-0-	PAQUETANNA VERMICALIS/ JAPANESE BURNINGBUSH		CONT.	11' SPACING
G-5	372	PIRUS NIPPONICA JAPANESE BURNINGBUSH		CONT.	11' SPACING
G-6	-0-	CORONILLA ALLICATA/ CHAMPAGNE CORONILLA	3" Ht.	B&B	4' SPACING

APPROVED  
 PLANNING DEPARTMENT  
 OF HOWARD COUNTY  
 DATE 4-12-89  
 LKS

MD. RTE 32

OWNER/DEVELOPER  
 TRAMMELL CROW COMPANY  
 7529 STANDISH PLACE  
 ROCKVILLE, MARYLAND 20855  
 (301) 340-0901

LANDSCAPING PLAN

VILLAGE OF OWEN BROWN  
 SECTION G AREA 1, PARCEL C & A 2  
 TAX MAP 42 PARCEL 16  
 6TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

KIDDE CONSULTANTS, INC.

ENGINEERS • PLANNERS • SURVEYORS

APPROVED HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 DATE 9/19/89  
 DIRECTOR  
 DATE 9/21/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 LKS

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE  
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DATE 8/30/89  
 DIRECTOR  
 DATE 8-23-89  
 CHIEF BUREAU OF ENGINEERING

REVIEWED FOR HOWARD SOIL CONSERVATION  
 AND MEETS TECHNICAL REQUIREMENTS  
 DATE 5-19-89  
 J. Helm

[Crossed out signature area]

DEVELOPER'S CERTIFICATE  
 I HEREBY CERTIFY THAT THE LANDSCAPING PLAN AND THE LANDSCAPING SPECIFICATIONS HAVE BEEN REVIEWED AND APPROVED BY ME AS THE DEVELOPER OF THE PROJECT AND I AGREE TO HOLD THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS HARMLESS FROM ANY AND ALL CLAIMS OR DAMAGES THAT MAY BE ASSERTED AGAINST THEM BY ANY PARTY.  
 DATE 2/21/89  
 DEVELOPER'S SIGNATURE Paul Reil

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 DATE 9/1/89  
 COUNTY HEALTH OFFICER

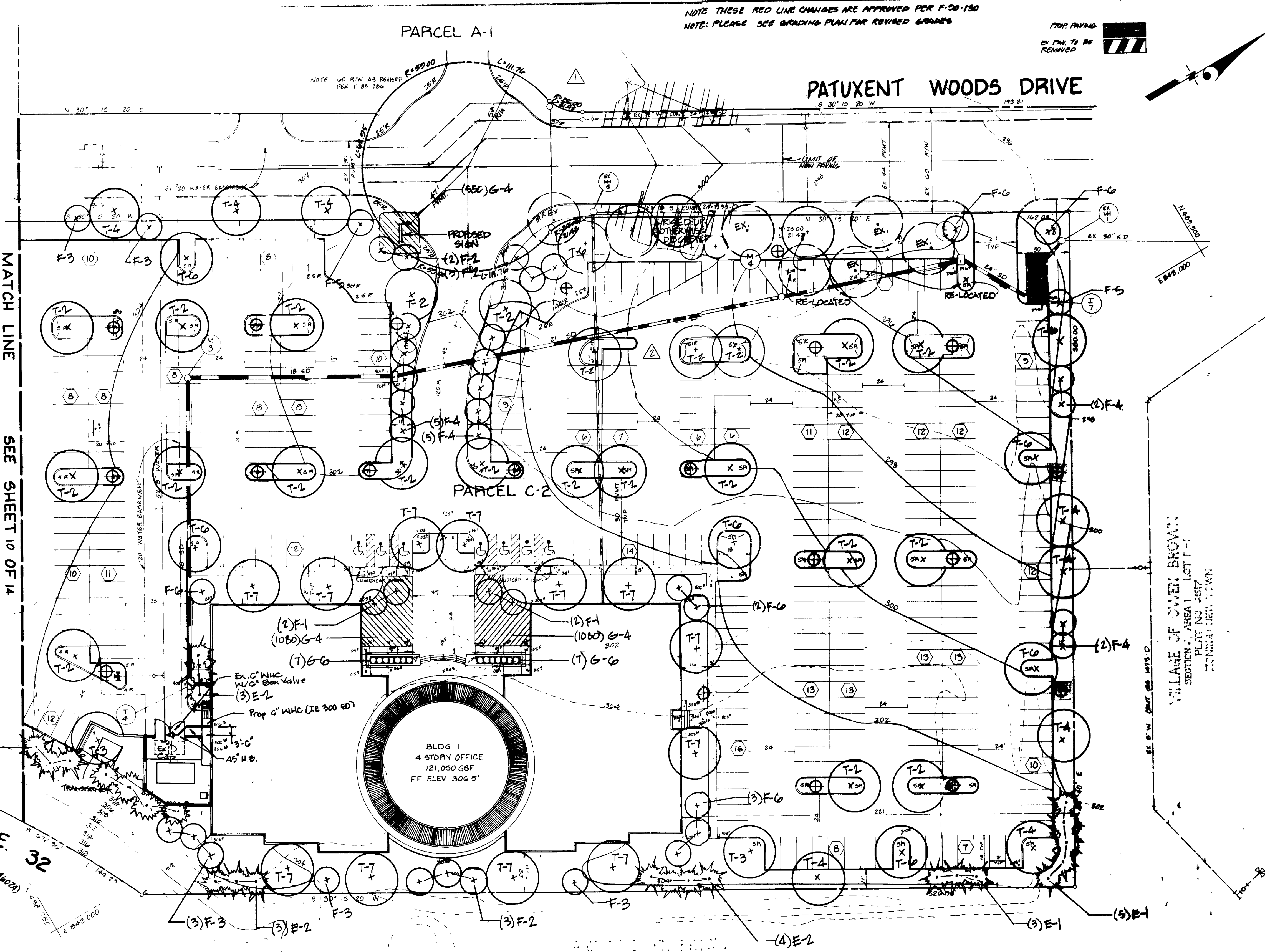
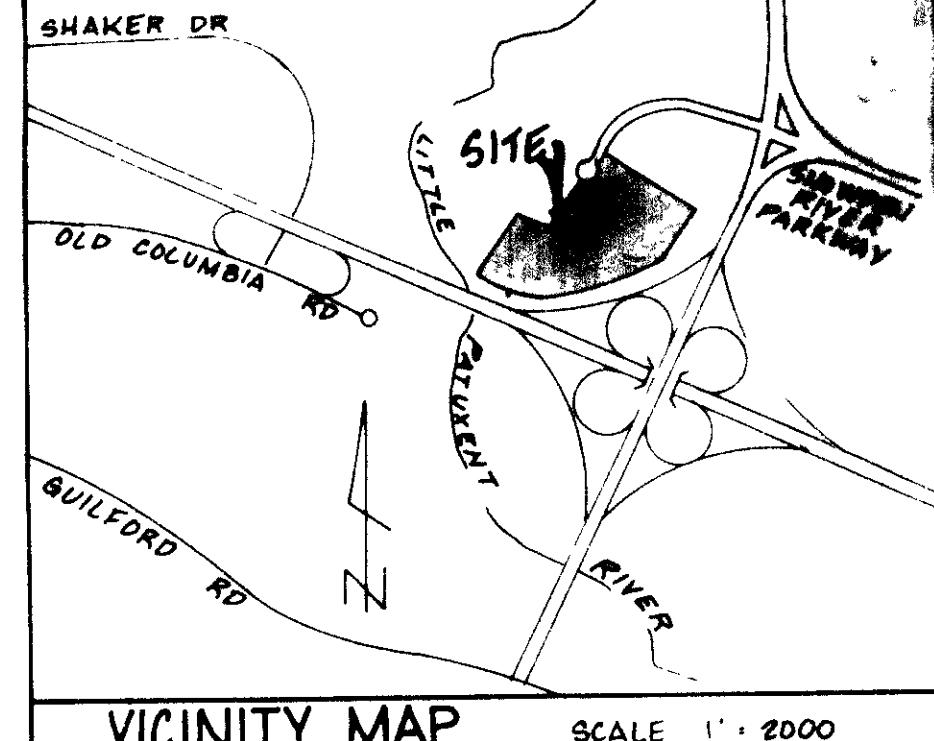
DATE 5-19-89  
 Robert W. Zehn

DATE FEBRUARY 1989 SCALE 1"=30'  
 507-89-50



NOTE THESE RED LINE CHANGES ARE APPROVED PER F-20-130  
NOTE: PLEASE SEE GRADING PLAN FOR REVISED GRADES

TRUCK PARKING  
BY PAV. TO BE  
REMOVED



PLANTING LIST ON THIS SHEET

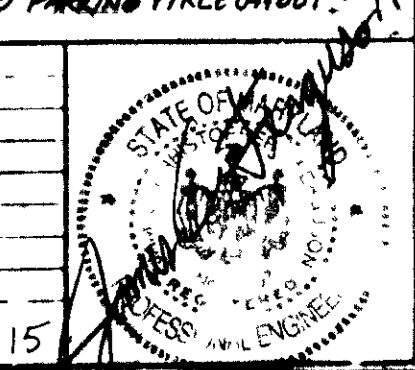
NO.	QUANTITY	SPECIES	SIZE	DATE
1	0	ASH BARKED 'YOUNG BERRY'	3-1/2" F	88
2	23	ASH BARKED 'YOUNG BERRY'	3-1/2" F	88
3	2	OLESTRIA 'SILVER LEAF'	3-1/2" F	88
4	8	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
5	0	QUERCUS 'MORRIS'	3-1/2" F	88
6	8	QUERCUS 'MORRIS'	3-1/2" F	88
7	12	OLESTRIA 'SILVER LEAF'	3-1/2" F	88
8	16	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
9	10	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
10	4	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
11	8	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
12	7	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
13	14	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
14	4	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
15	8	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
16	0	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
17	0	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
18	0	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
19	210	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
20	0	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88
21	14	FRAXINUS LANCEOLATA 'MORRIS'	3-1/2" F	88

LANDSCAPING PLAN

VILLAGE OF OWEN BROWN  
SECTION 6 AREA 1, PARCEL C-2 & A-2  
TAX MAP 42 PARCEL 16  
6TH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

KIDDE CONSULTANTS, INC.

ENGINEERS • PLANNERS • SURVEYORS



DATE: AUGUST, 1989 SCALE: 1" = 50'

APPROVED  
BOARD OF  
COUNTY  
DA: 4-12-89  
LKS

REVISION CHART

7-21-87	INDICATING ADDED TO ENGINEER'S SEALING
2-6-88	REVISED G.W.H.C.

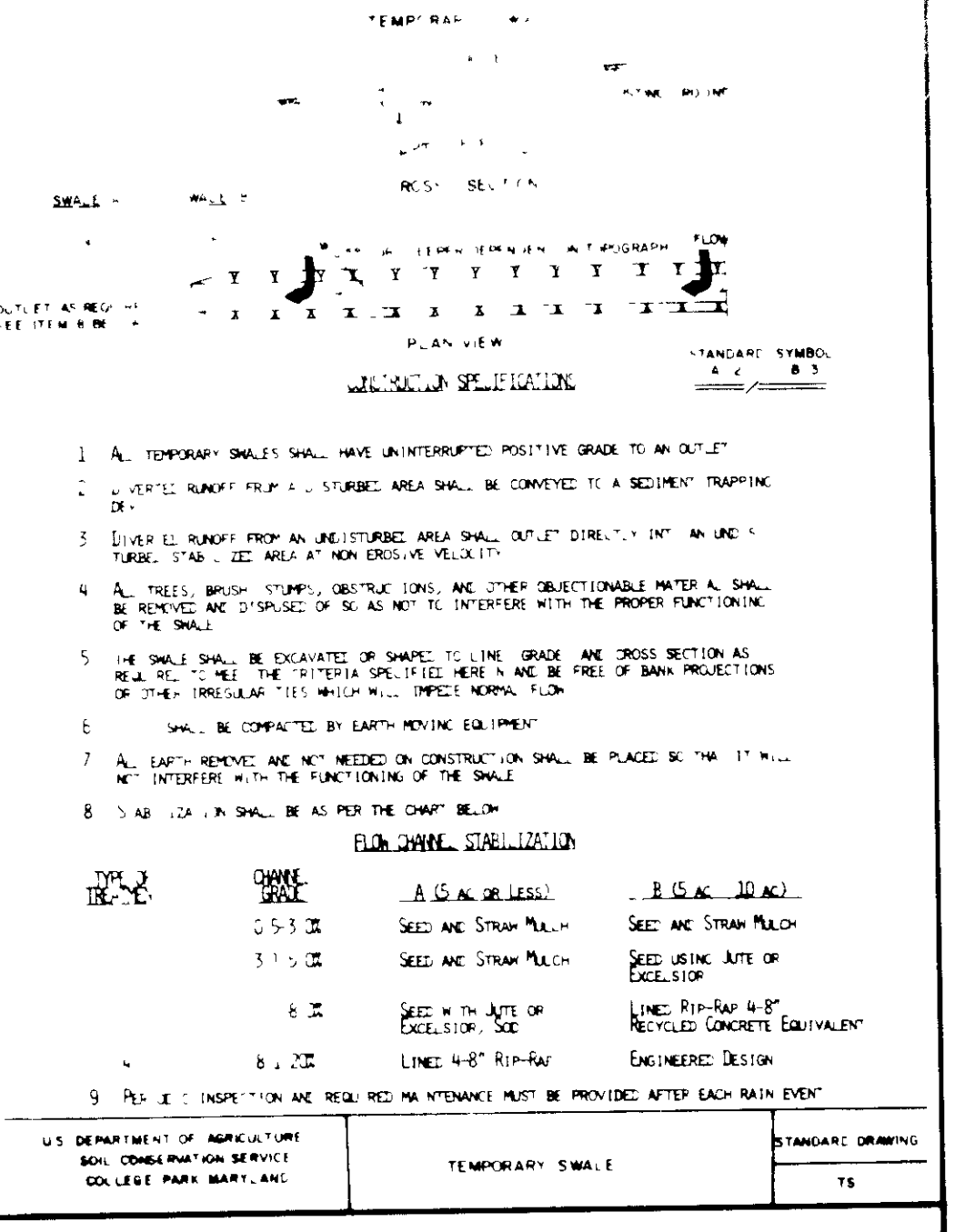
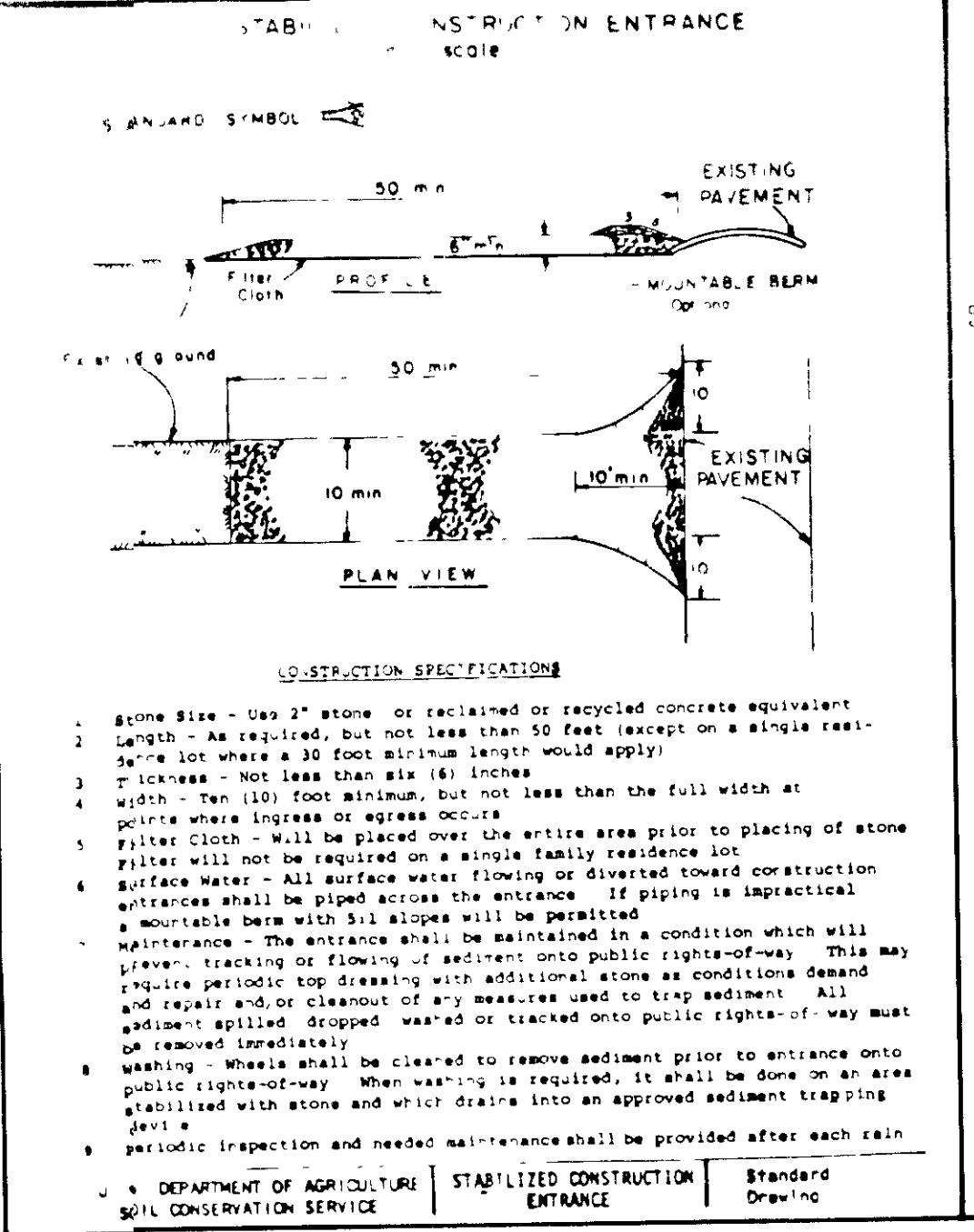
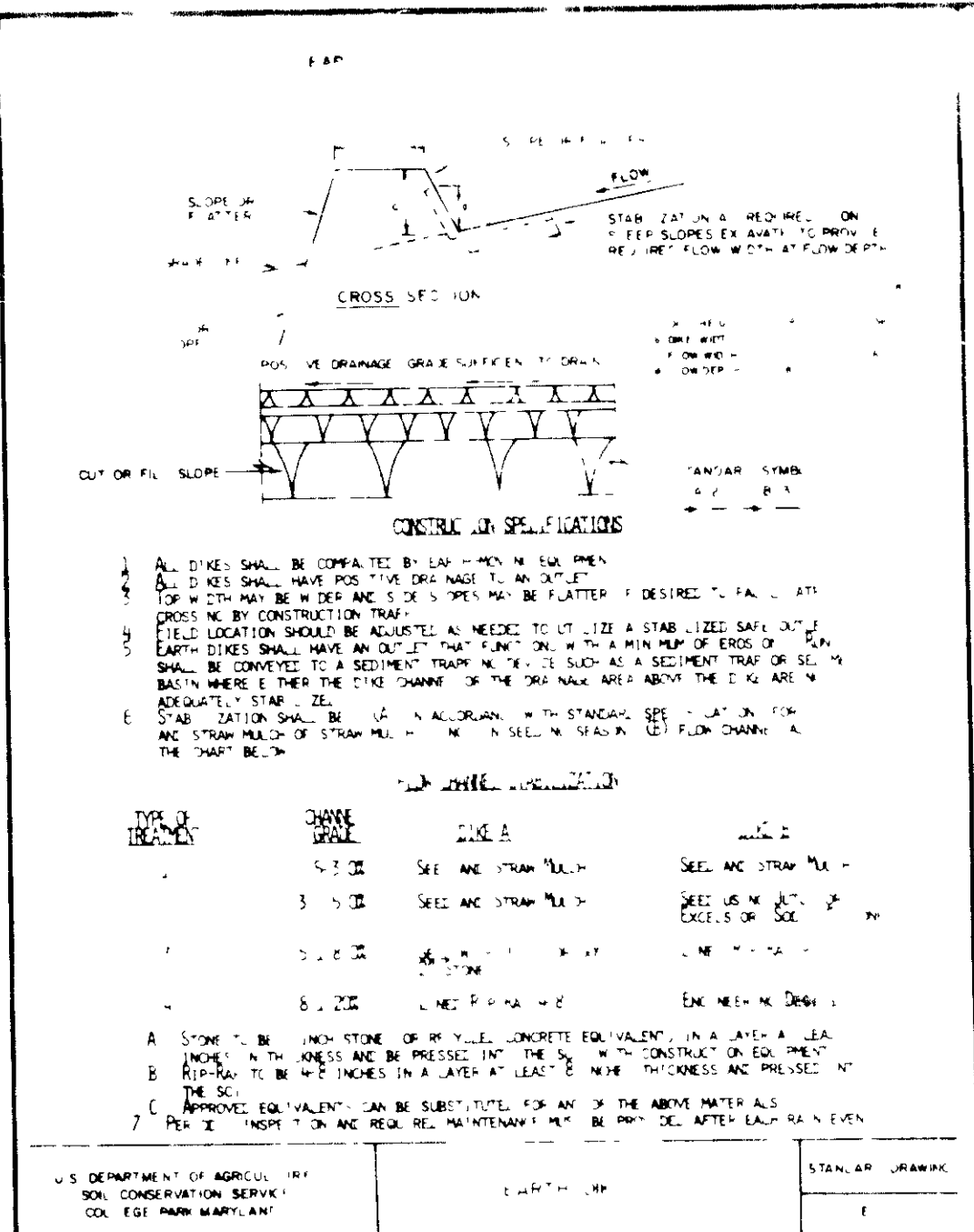
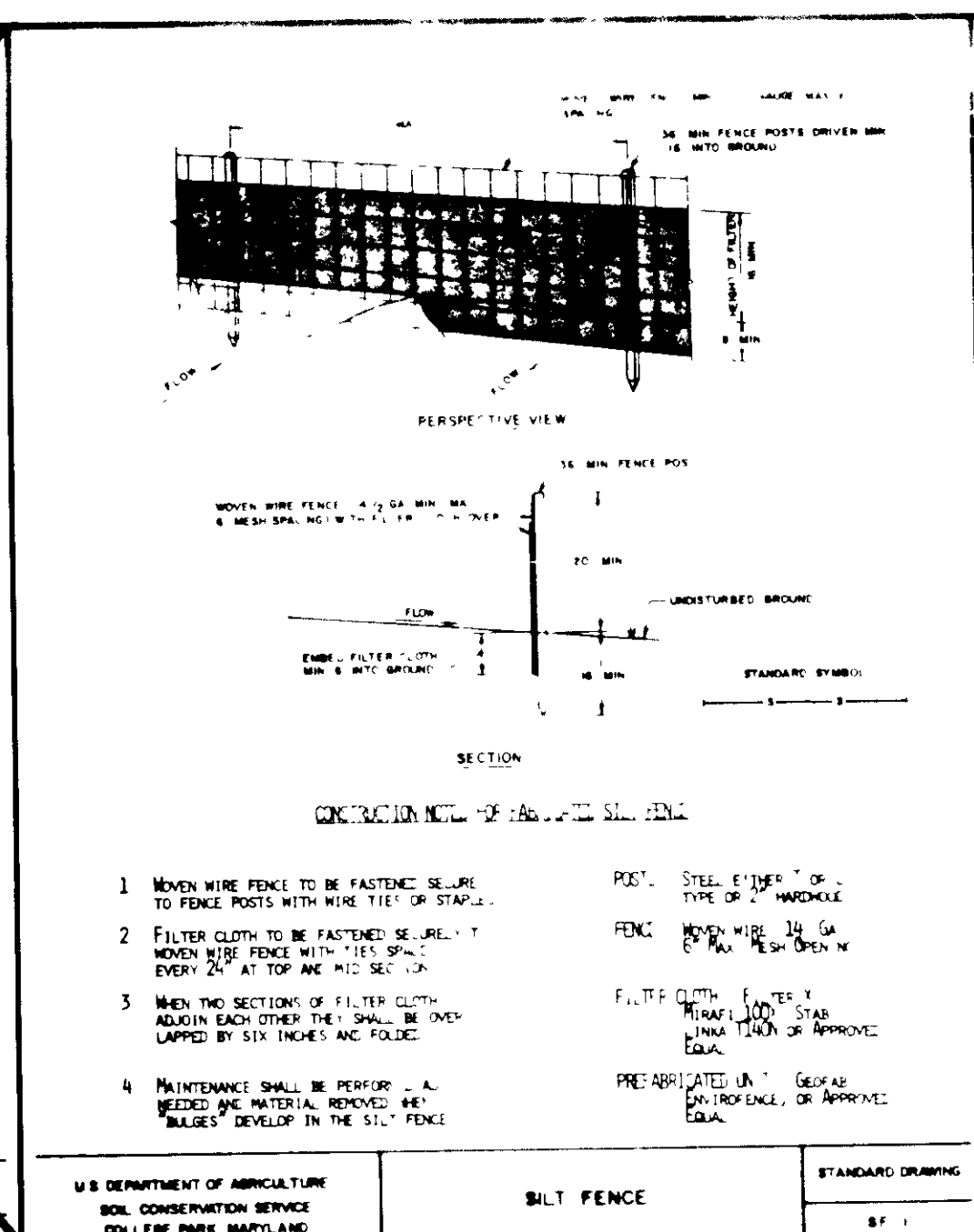
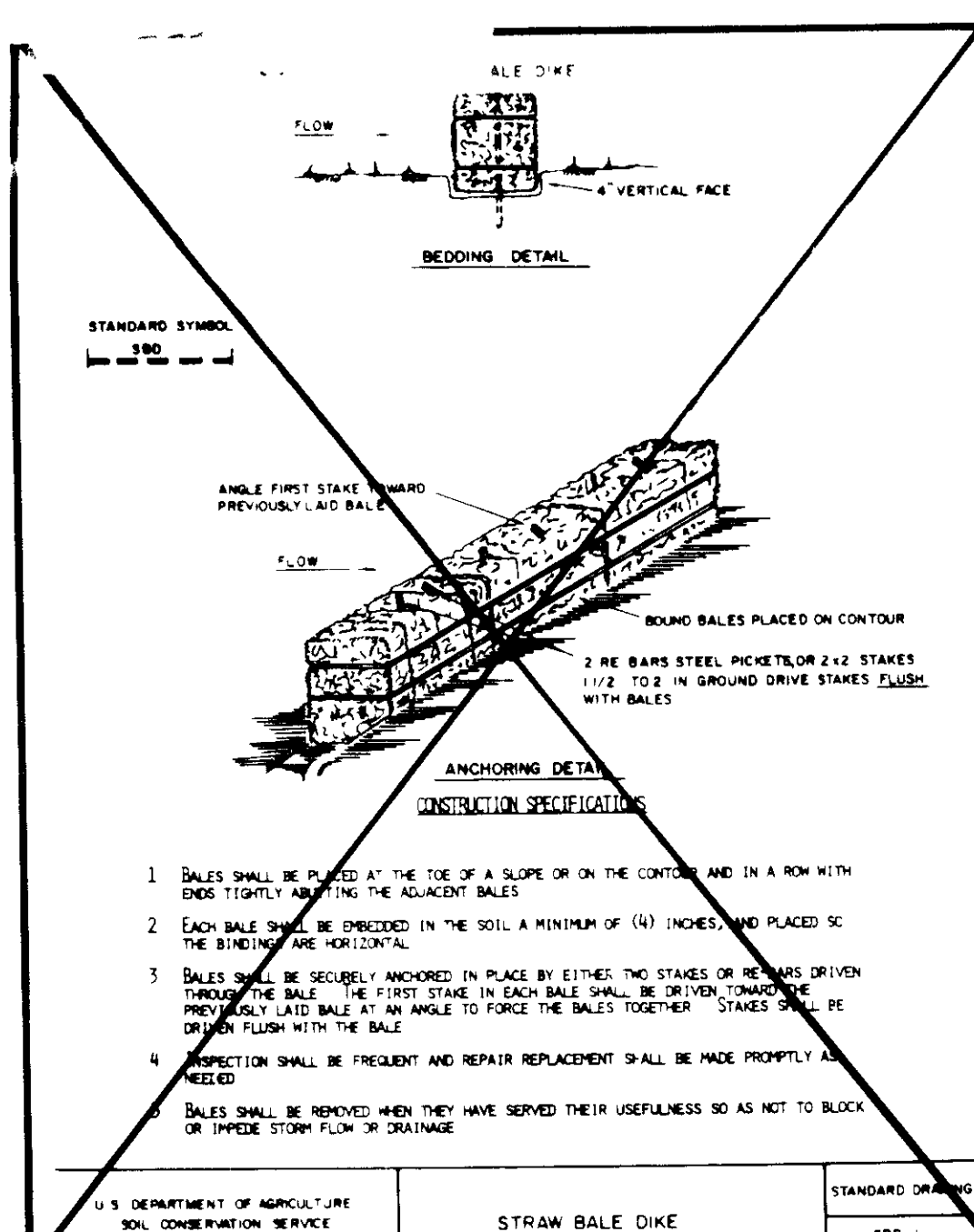
James P. ... 8/30/89  
J. ... 8-29-89  
Joyce M. ... 9/1/89

US SOIL CONSERVATION SERVICE  
5-19-89  
Robert W. Zichner 5-19-89

ENGINEERS CERTIFICATE  
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION & 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.

DEVELOPERS CERTIFICATE  
I/WE CERTIFY THAT ALL DEVELOPMENT & 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 & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.





**PERMANENT SEEDING NOTES**

Apply to grass or hard 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, disking or other acceptable means before seeding.

**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 100 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 25 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period March 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.15 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 well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed and Option (3) Seed with Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

**Mulching** - Apply 1 1/2 to 2 tons per acre (90 to 90 lbs/1000 sq ft) of untreated straw or straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 28 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.

**TEMPORARY SEEDING NOTES**

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

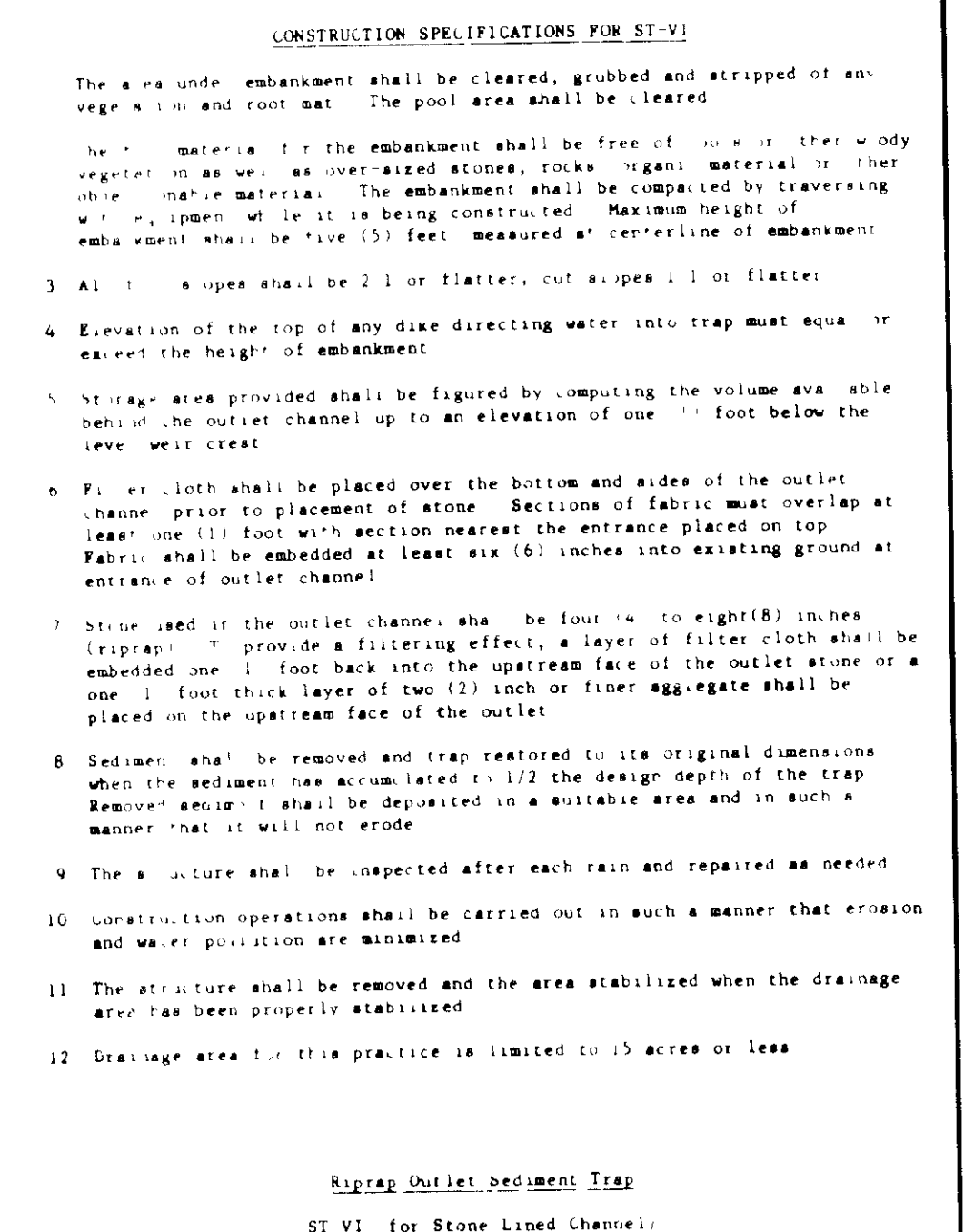
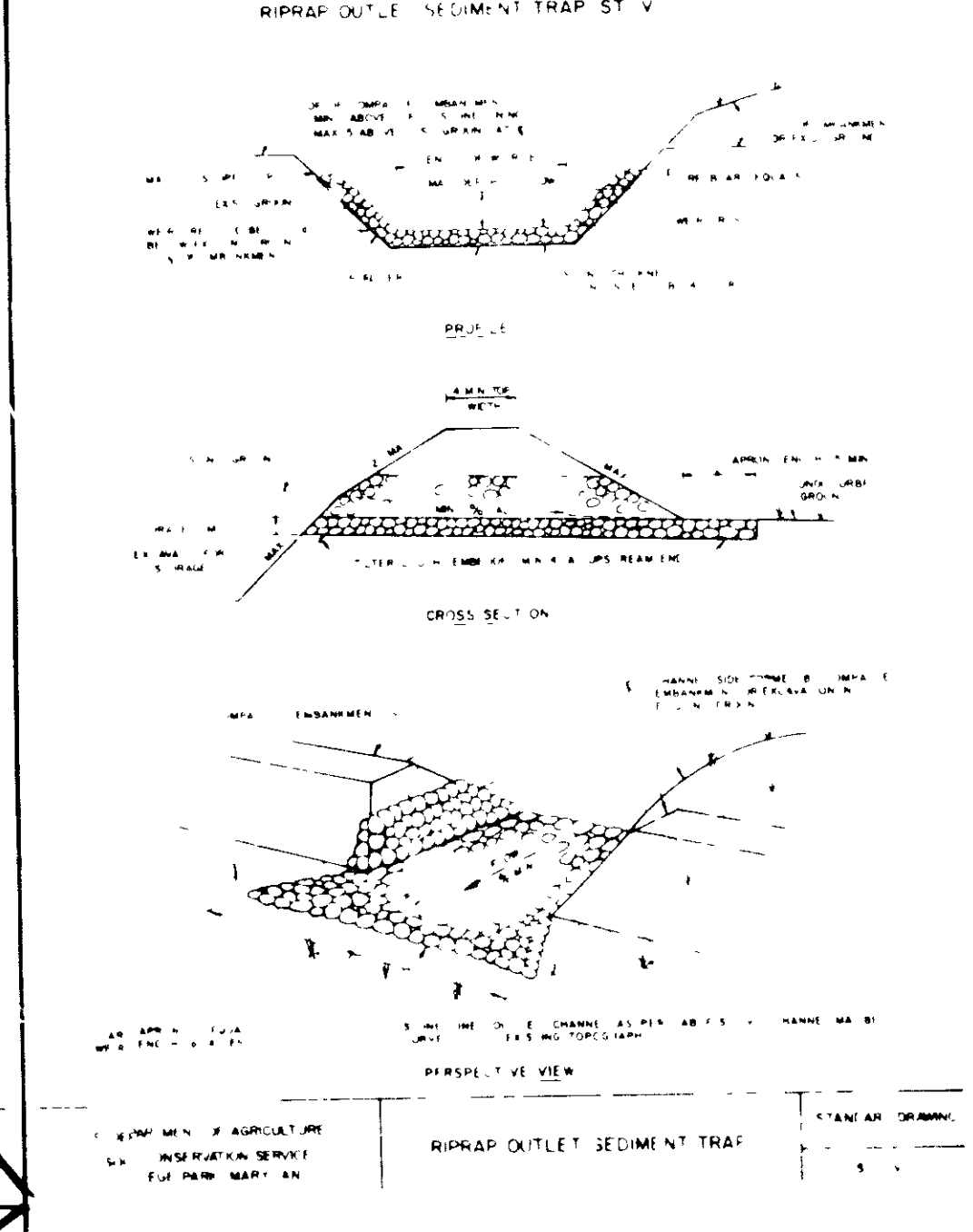
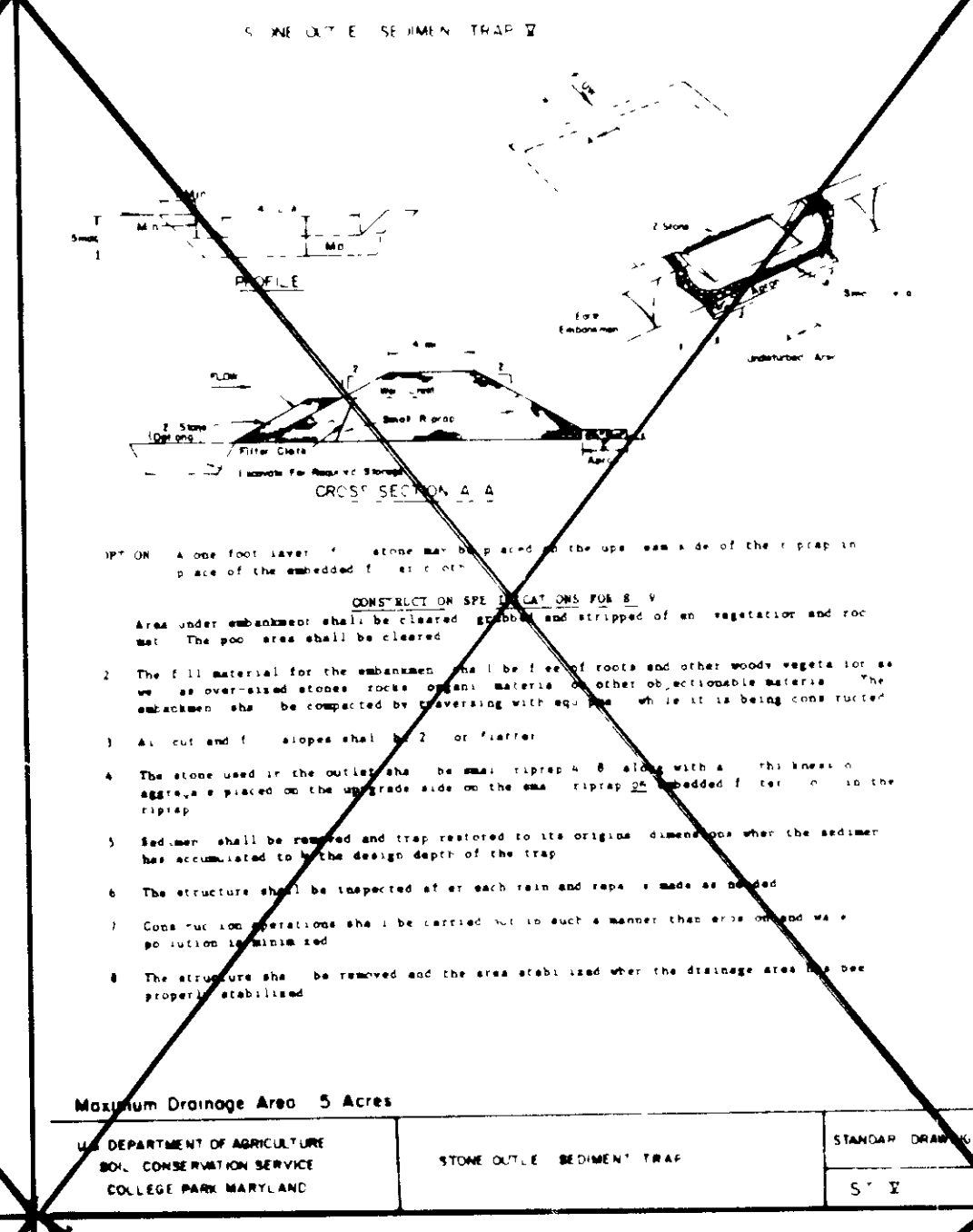
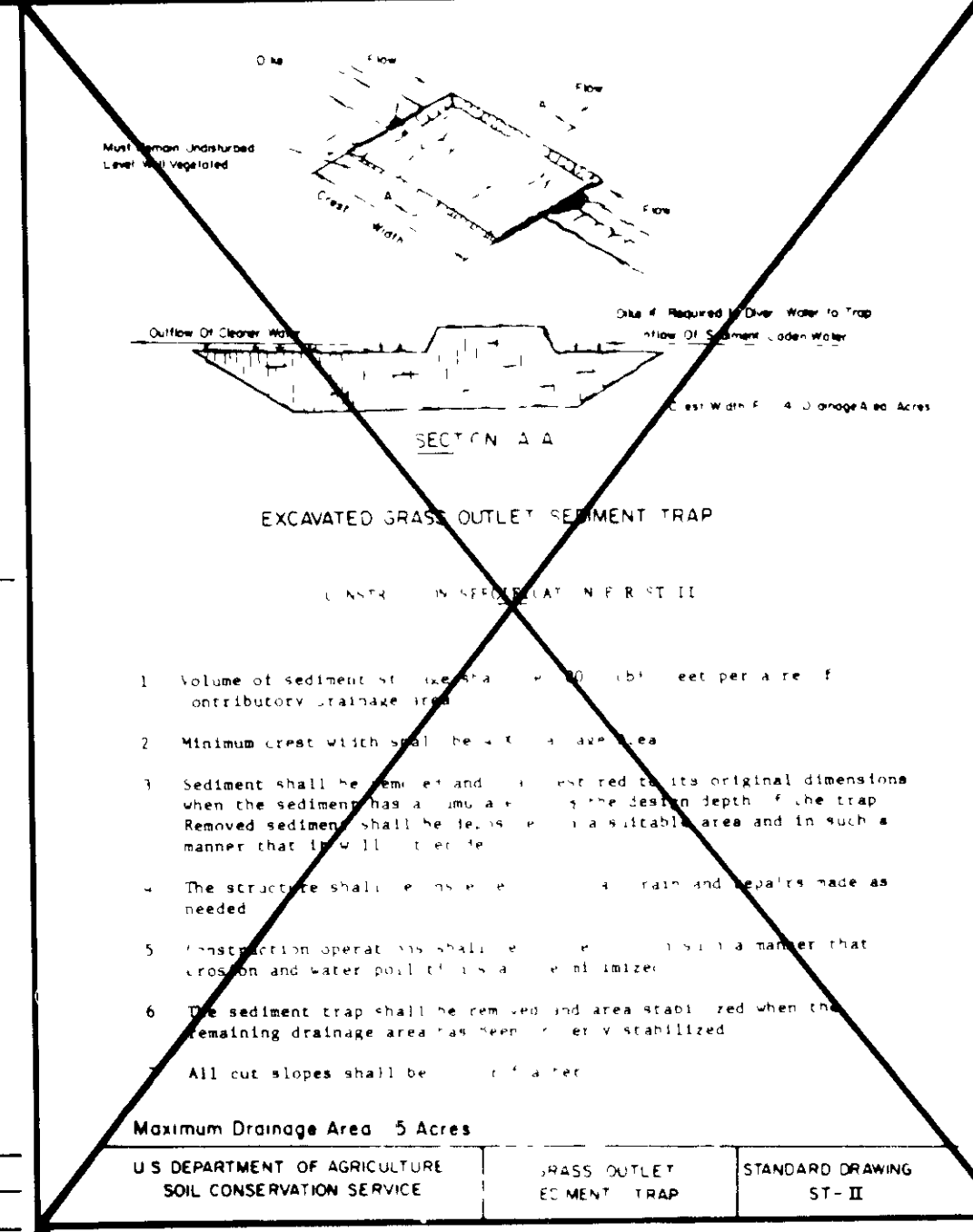
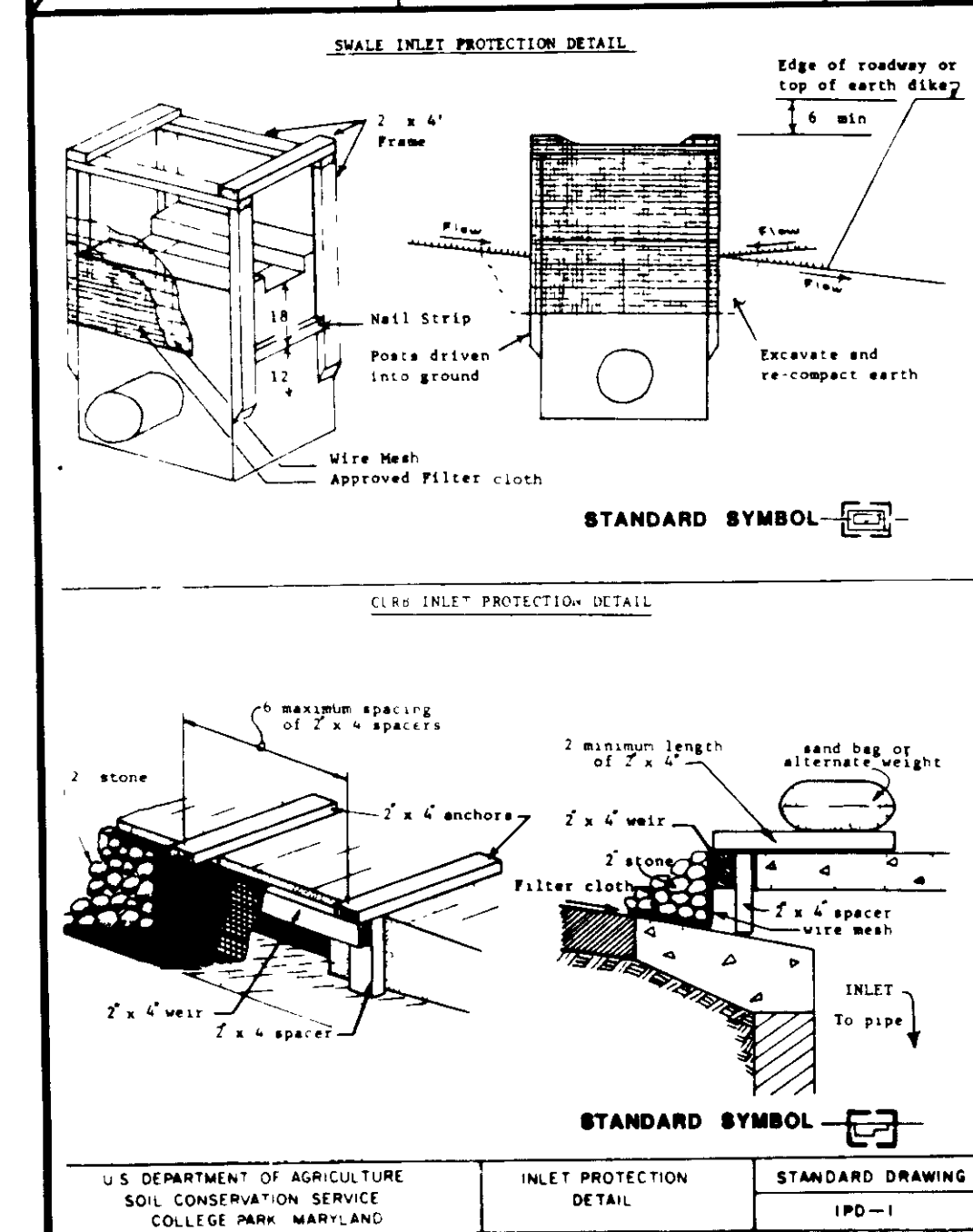
**Seedbed Preparation** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

**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 August 1 thru November 1, seed with 25 lbs per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period March 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (0.07 lbs/1000 sq ft) and 2 lbs per acre of the period November 1 thru February 28, protect site by applying 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring, or use any other acceptable seed and seed as soon as possible in the spring, or use any other acceptable seed.

**Mulching** - Apply 1 1/2 to 2 tons per acre (90 to 90 lbs/1000 sq ft) of untreated straw or straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 28 gallons 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.



**SEDIMENT CONTROL NOTES**

- 1) 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).
- 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) Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, 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 sign 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) and (Sec 56), temporary seeding (Sec 50) and mulching (Sec 52). Temporary stabilization shall 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	14.67 Acres
Area Disturbed	1.77 Acres
Area to be roofed or paved	0.2 Acres
Area to be vegetatively stabilized	1.37 Acres
Total Cut	10,000 cu. yds.
Total Fill	10,000 cu. yds.
Offsite waste/borrow area location	N/A
- 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 DPM 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.

NOTE: FOR SEQUENCE OF CONSTRUCTIONS, SEE SHEET 5 OF 5

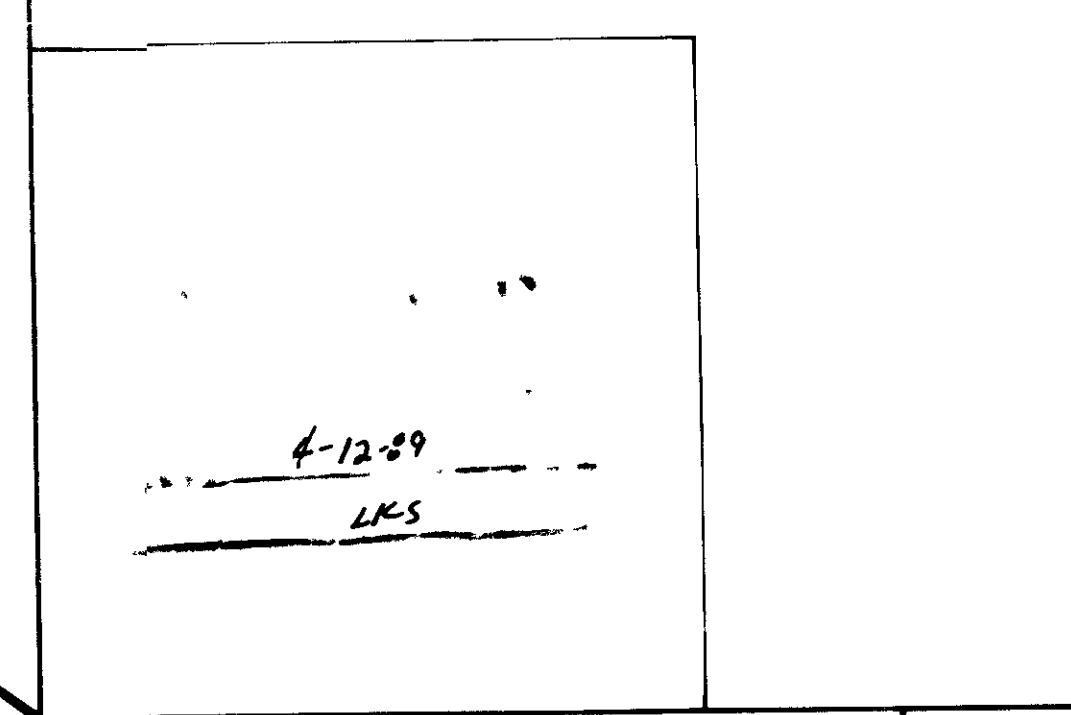
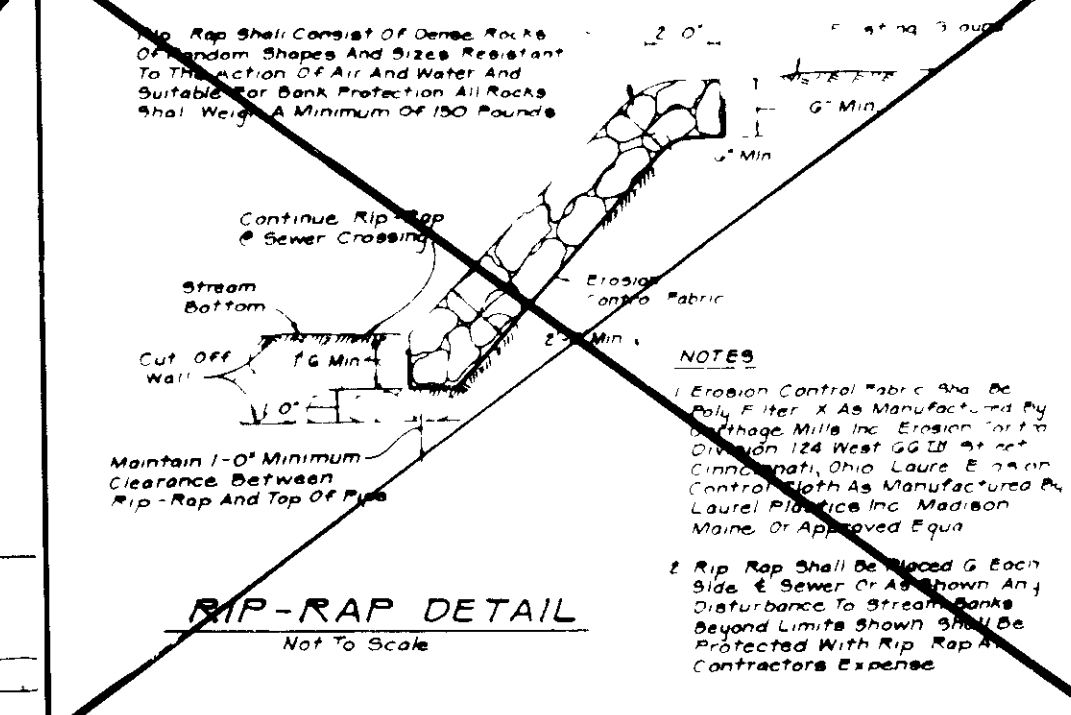
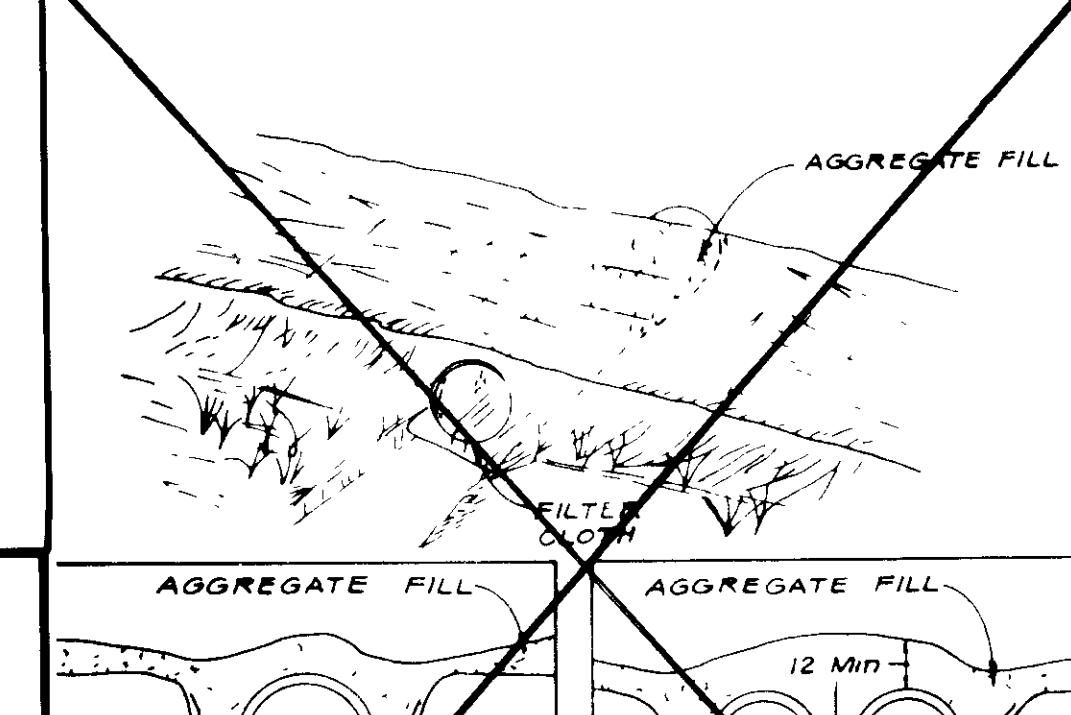
**Construction Specifications**

**Materials**

1. Wooden frame is to be constructed of 2"x4" construction grade lumber.
2. Plywood is to be a minimum thickness of 1/4" construction grade lumber.

**Installation**

1. Cut plywood to extend a minimum of 6" past throat along curb.
2. Attach to anchors in a secure manner which will insure a water tight fit against throat.
3. Brace securely using bands of alternate weight. If not watertight, use approved filter cloth under plywood and attach securely.



**Riprap Outlet Sediment Trap**

ST-VI for Stone lined channel.

Contributing Drainage Area (Acres)	Depth of Channel (Feet)	Length of Weir (ft)
1.5	1.5	4.0
1.5	1.5	5.0
1.5	1.5	6.0
1.5	1.5	7.0
1.5	1.5	8.0
1.5	1.5	9.0
1.5	1.5	10.0
1.5	1.5	11.0
1.5	1.5	12.0
1.5	1.5	13.0
1.5	1.5	14.0
1.5	1.5	15.0
1.5	1.5	16.0
1.5	1.5	17.0
1.5	1.5	18.0
1.5	1.5	19.0
1.5	1.5	20.0

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

*Robert Zeman* 5-19-89  
SIGNATURE DATE

U.S. SOIL CONSERVATION SERVICE

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

*Robert Zeman* 5-19-89  
Approved DATE

**TEMPORARY ACCESS CULVERT**

Not To Scale

**OWNER/DEVELOPER**

**TRAMMELL CROW COMPANY**

**7529 STANDISH PLACE**

**ROCKVILLE, MARYLAND 20855**

(301)340-0901

APPROVED, HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*James C. Ferguson* 9/19/89  
DIRECTOR DATE

*James C. Ferguson* 9/1/89  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED, FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

HOWARD COUNTY HEALTH DEPARTMENT

*James M. Boyd* 9/1/89  
COUNTY HEALTH OFFICER DATE

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

HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

*James M. Boyd* 8/22/89  
DIRECTOR DATE

*James M. Boyd* 8-22-89  
CHIEF BUREAU OF ENGINEERING DATE

**OWNER'S / DEVELOPER'S CERTIFICATION**

"I 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."

Signature: *Trammell Crow* Date: 12/6/89  
Name: *Trammell Crow* Title: *Trammell Crow* Phone No: *975-2000*  
Firm: *Trammell Crow* Complete Address: *9750 Red Branch Rd*

**ENGINEER'S CERTIFICATE**

"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."

*James C. Ferguson* 7/4/89  
REGISTERED PROFESSIONAL ENGINEER No. 5197

*James C. Ferguson*

**SEDIMENT CONTROL DETAIL SHEET**

**VILLAGE OF OWEN BROWN**

**SECTION 6 AREA 1 PARCEL C-2 & A-2**

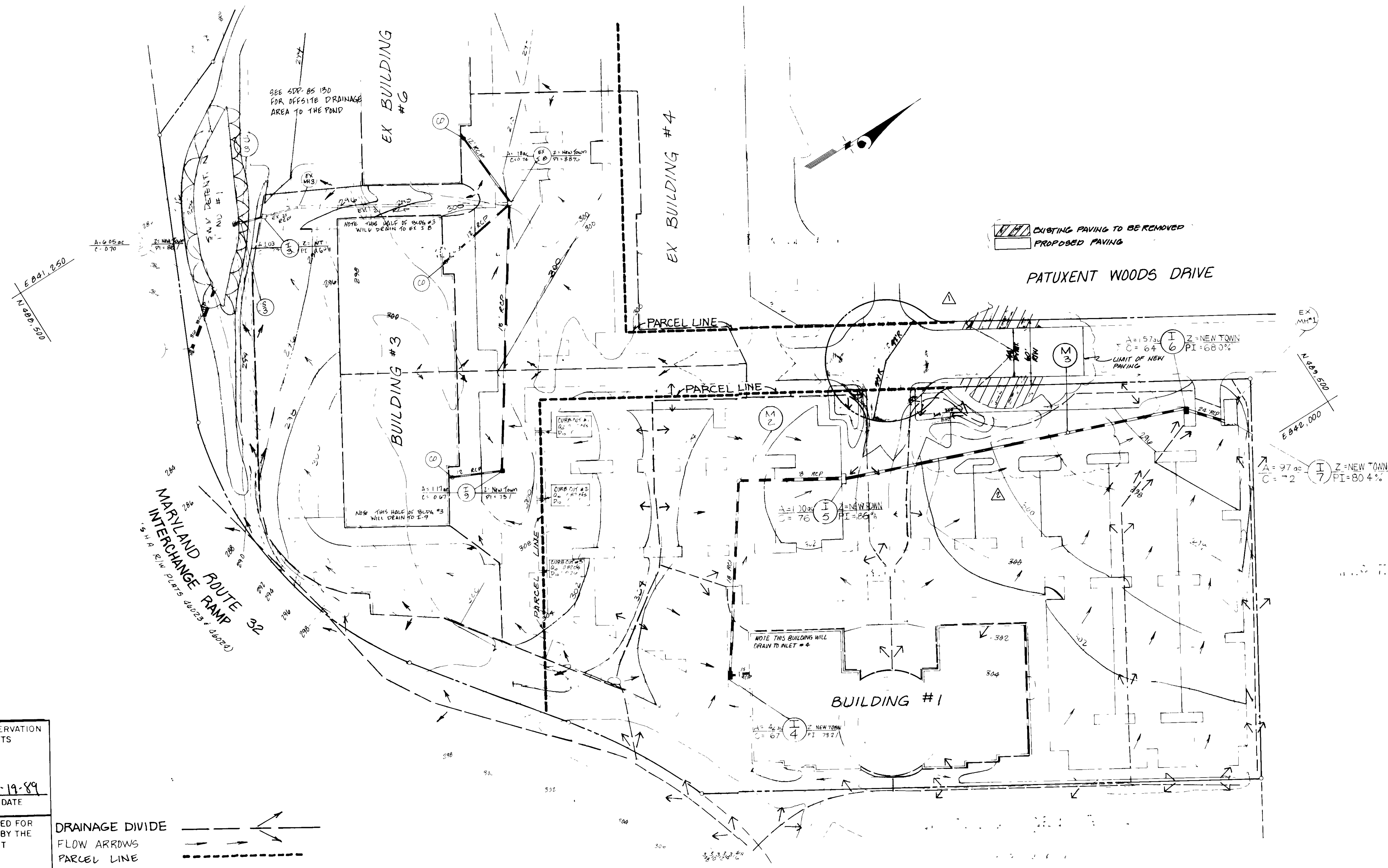
**TAX MAP 42 PARCEL 16**

**6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND**

DISTRICT	DATE	REVISIONS	SHEET	DATE	JOB NUMBER
SDH			2	AUGUST 1988	
OF			5	SCALE AS SHOWN	

SDP-89-50

NOTE: THESE REDLINE CHANGES ARE PER APPROVED F-90-130

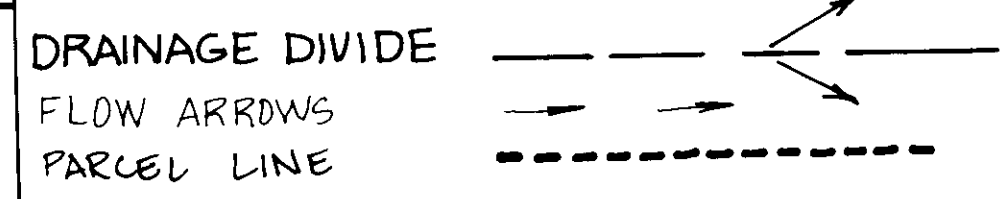


REVIEWED FOR HOWARD SOIL CONSERVATION AND MEETS TECHNICAL REQUIREMENTS

*J. Helms* 5-19-89  
US SOIL CONSERVATION SERVICE DATE

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

*Robert W. Zehn* 5-19-89  
HOWARD SOIL CONSERVATION DISTRICT DATE



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

*James M. ...* 9/1/89  
COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

*[Signature]* 7-19-89  
DIRECTOR DATE

*Frank J. ...* 9/7/89  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

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

*[Signature]* 8/30/89  
DIRECTOR DATE

*[Signature]* 8-29-89  
CHIEF BUREAU OF ENGINEERING DATE

APPROVED  
BOARD OF COUNTY  
4-12-89  
LKS

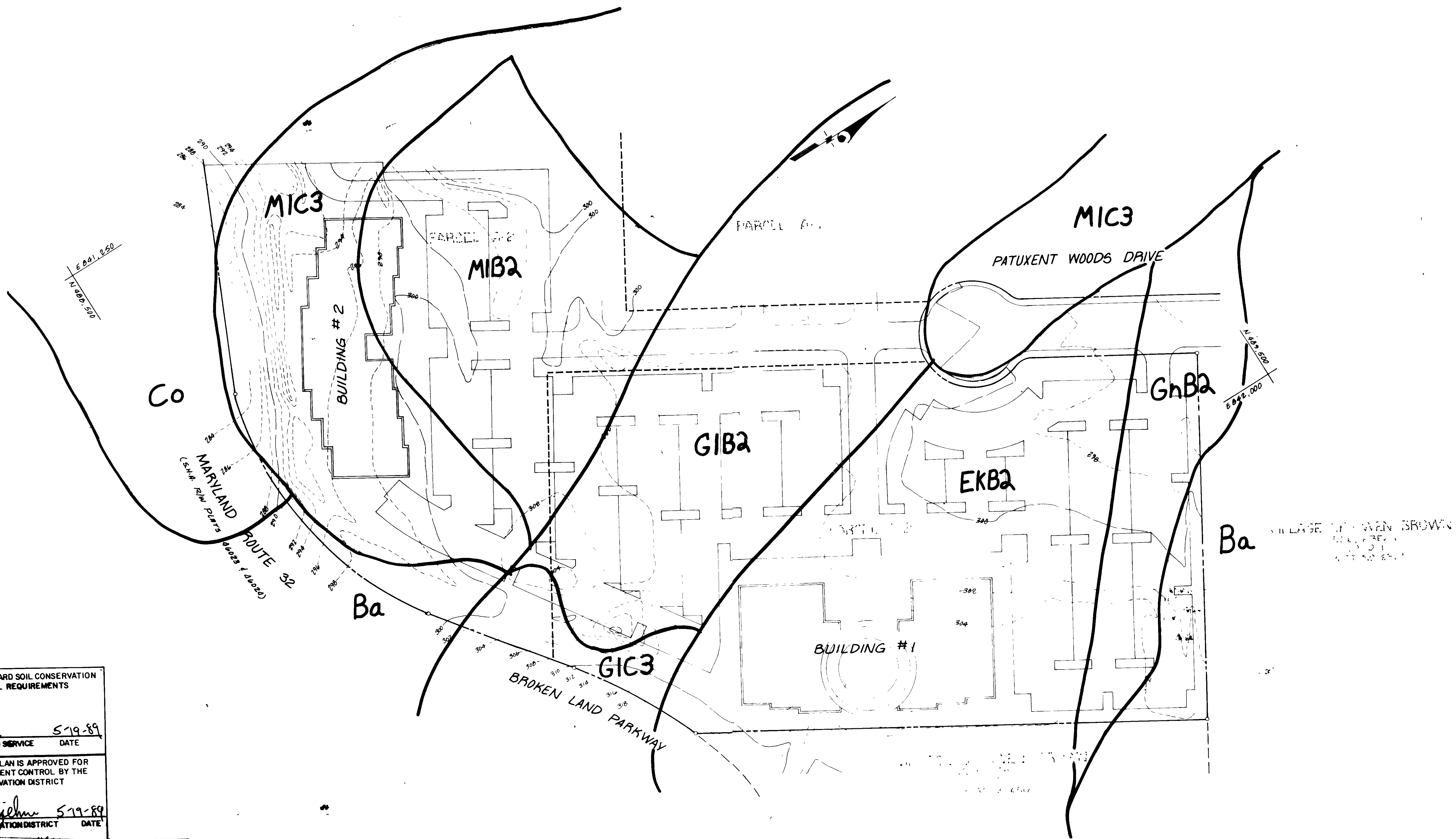
OWNER/DEVELOPER  
TRAMMELL CROW COMPANY  
7520 STANDISH PLACE  
ROCKVILLE, MARYLAND 20855  
(301)340-0901

DRAINAGE AREA MAP  
VILLAGE OF OWEN BROWN  
SEC 6 AREA PARCELS C 2 & A 2  
TAX MAP 82 PARCEL 18  
6TH ELECTION DISTRICT HOWARD COUNTY MD

KIDDE CONSULTANTS, INC.

DATE	REVISION	BY	ENGINEERS • PLANNERS • SURVEYORS
7/11/89	CHANGED CUL-DE-SAC LAYOUT, P. 2	[Signature]	
7/11/89	REVISED PARKING AREA, P. 2	[Signature]	
COMPLETED BY		[Signature]	
DRAWN BY		[Signature]	
CHECKED BY		[Signature]	
DATE			
Draw. No. 13 of 15			
			AUG 1988





REVIEWED FOR HOWARD SOIL CONSERVATION AND MEETS TECHNICAL REQUIREMENTS

*J. Helmer* 5-19-89  
U.S. SOIL CONSERVATION SERVICE DATE

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

*Robert Ziehm* 5-19-89  
HOWARD SOIL CONSERVATION DISTRICT DATE

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

*James M. Anderson* 9/1/89  
DIRECTOR DATE

*David J. Lange* 8/2/89  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

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

*James J. ...* 8/20/89  
DIRECTOR DATE

*...* 8-23-89  
DATE

APPROVED  
PLANNING BOARD  
of HOWARD COUNTY  
DATE 4-12-89  
LKS

MAP SYMBOL	HYDROLOGIC TYPE	DESCRIPTION
MIC3	B	- MANOR LOAM, 8-15% SLOPES MODERATELY ERODED
MIB2	B	- MANOR LOAM, 3-8% SLOPES MODERATELY ERODED
GnB2	C	- GLENVILLE SILT LOAM, 8-15% SLOPES MODERATELY ERODED
G1C3	B	- GLENELG LOAM, 8-15% SLOPES SEVERELY ERODED
G1B2	B	- GLENELG OAM, 3-8% SLOPES MODERATELY ERODED
EKB2	B	- ELIOAK SILT LOAM, 3-8% SLOPES MODERATELY ERODED
3a	D	- BAILE SILT LOAM
Co	C	- CODORUS SILT LOAM

HOWARD COUNTY SOIL SURVEY, SHEET #29

SOILS MAP  
VILLAGE OF OWEN BROWN  
SEC 6 AREA 1 PARCELS C-2 & A-2  
TAX MAP 42 PARCEL 15  
6th ELECTION DISTRICT HOWARD COUNTY, MD

KIDDE CONSULTANTS, INC.

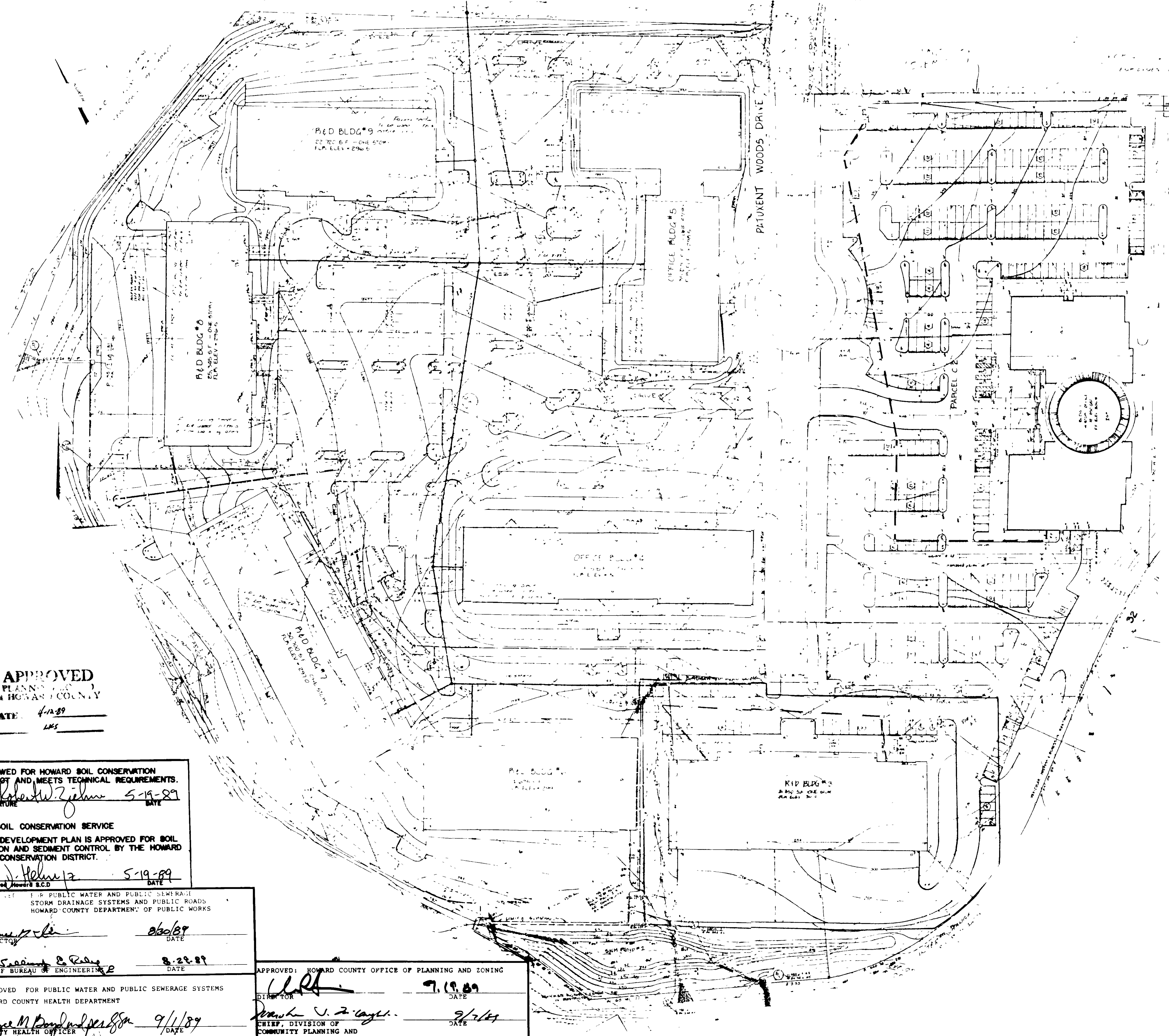
DATE	REVISION	BY

ENGINEERS • PLANNERS • SURVEYORS  
1100 WEST STREET, SUITE 100, LAUREL, MD 20707  
WASH. 301-953-1821 / 792 BURG. RD.

OWNER/DEVELOPER  
TRAMMELL CROW COMPANY  
7889 STAMMERS PLACE  
ROCKVILLE, MARYLAND 20855  
800-449-5801

DATE AUG, 1989 SCALE 1" = 50'

Drwg. No 14 of 15



1. The proposed development shall be in accordance with the following requirements:  
 2. The proposed development shall be in accordance with the following requirements:  
 3. The proposed development shall be in accordance with the following requirements:  
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 48. The proposed development shall be in accordance with the following requirements:  
 49. The proposed development shall be in accordance with the following requirements:  
 50. The proposed development shall be in accordance with the following requirements:

**APPROVED**  
 PLANNING BOARD  
 OF HOWARD COUNTY  
 DATE: 4-12-89  
 LKS

REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.  
 Signature: Robert W. Zehner  
 DATE: 5-19-89  
 U.S. SOIL CONSERVATION SERVICE  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Signature: J. Helms  
 DATE: 5-19-89  
 Approved: Howard S.C.D.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS  
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 Signature: James P. ...  
 DATE: 8/30/89  
 Signature: ...  
 DATE: 8-22-89  
 CHIEF BUREAU OF ENGINEERING

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS  
 HOWARD COUNTY HEALTH DEPARTMENT  
 Signature: ...  
 DATE: 9/1/89  
 COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING  
 Signature: ...  
 DATE: 9-19-89  
 Signature: ...  
 DATE: 9/7/89  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT  
 LKS

**DEVELOPERS CERTIFICATE**  
 I/WE CERTIFY THAT ALL DEVELOPMENT & 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 & EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Signature: Paul Reif  
 DATE: 4/17/89  
 DEVELOPERS SIGNATURE

**SITE PLAN OVERVIEW**  
 AS APPROVED UNDER SDP-85-130  
**PATUXENT WOODS CROSSING**  
 VILLAGE OF OWEN BROWN, SEC. 6, AREA 1  
 TAX MAP 42 PARCEL 16  
 6TH ELECTION DISTRICT HOWARD COUNTY, MD

**KIDDE CONSULTANTS, INC.**

DATE	BY	BY	ENGINEERS • PLANNERS • SURVEYORS
			THINKING • DRAWING • CHECKING • LABELING • MEETING
Drawg No. 15215			DATE
			SCALE

Signature: ...