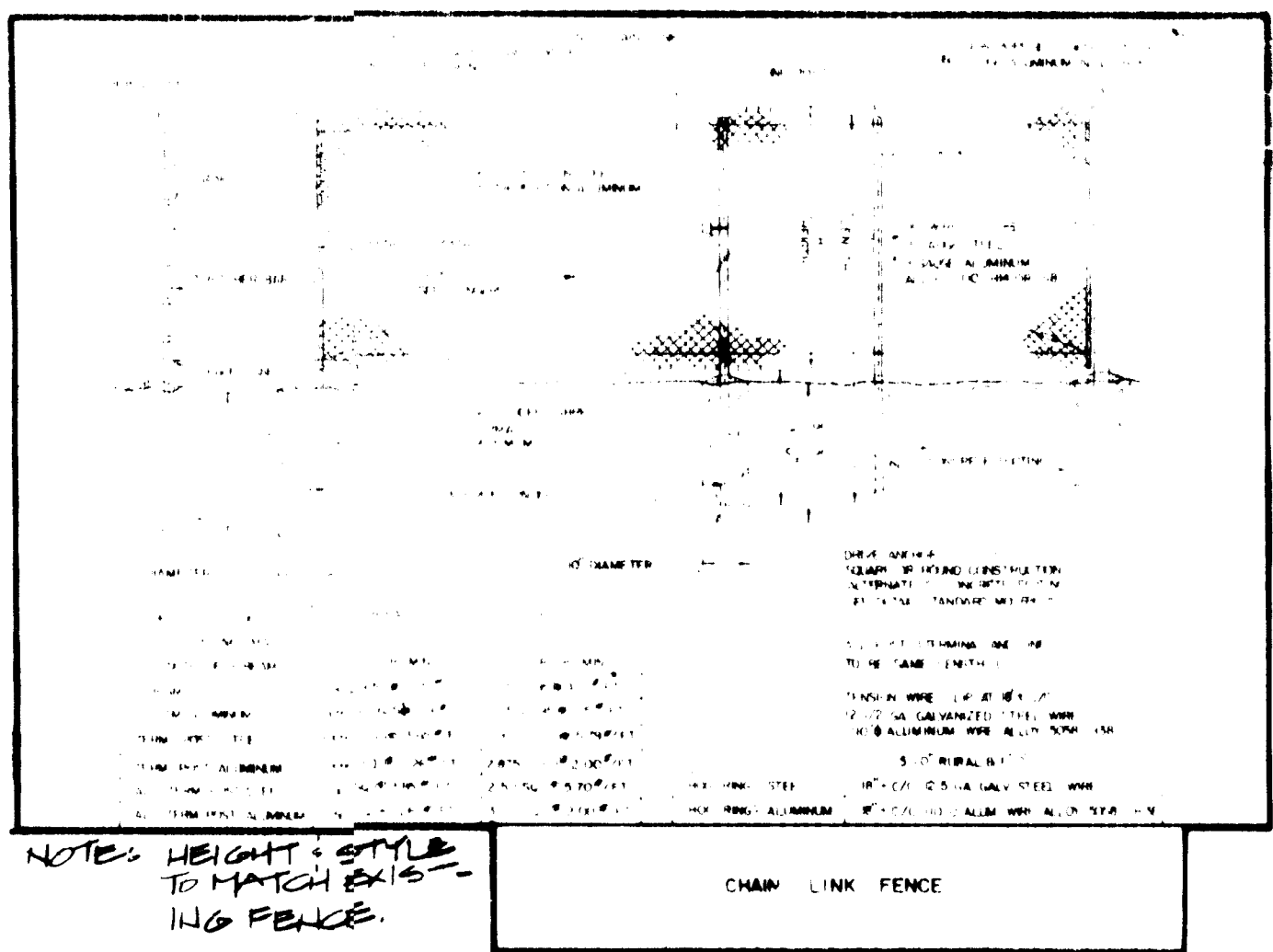
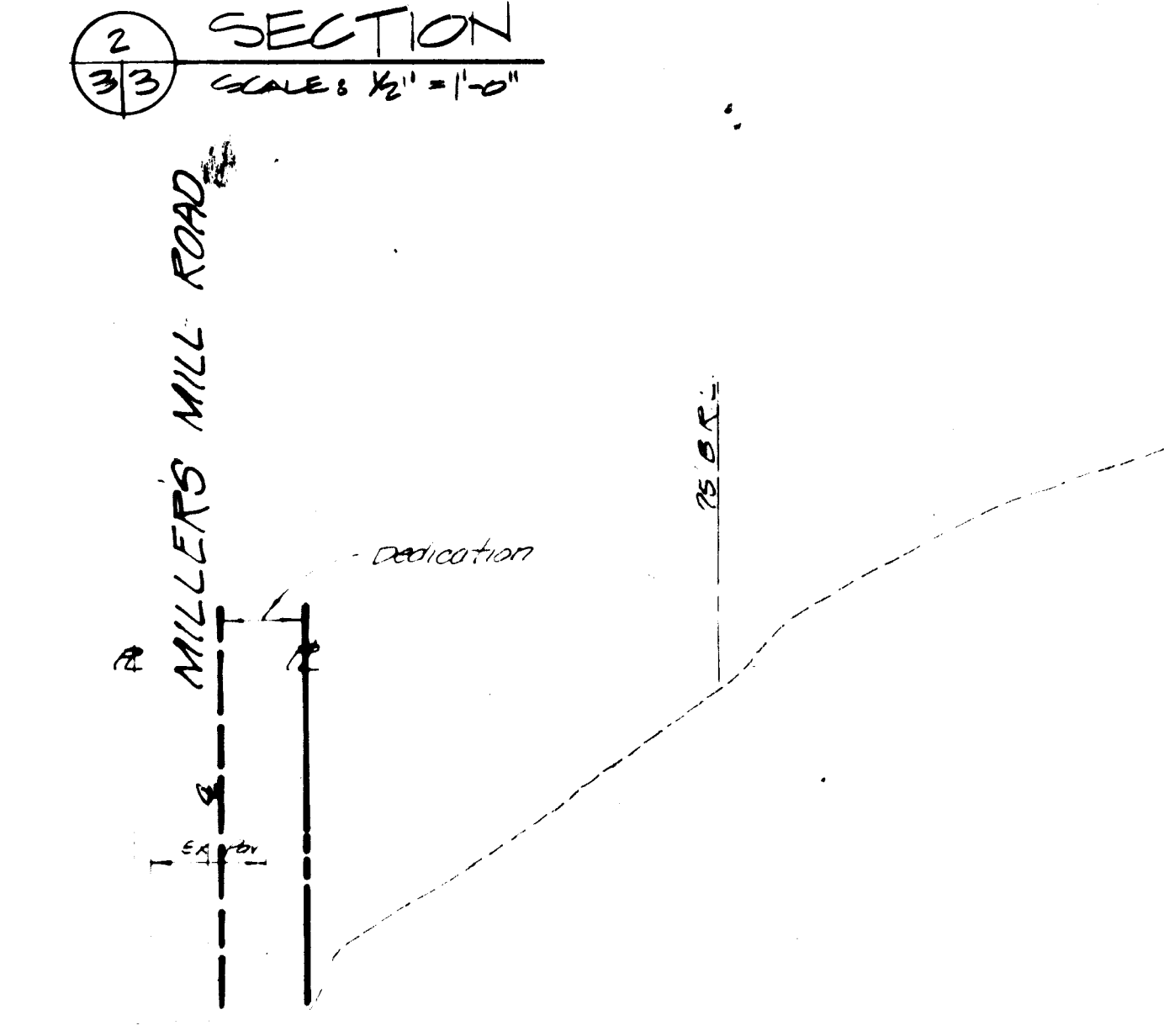
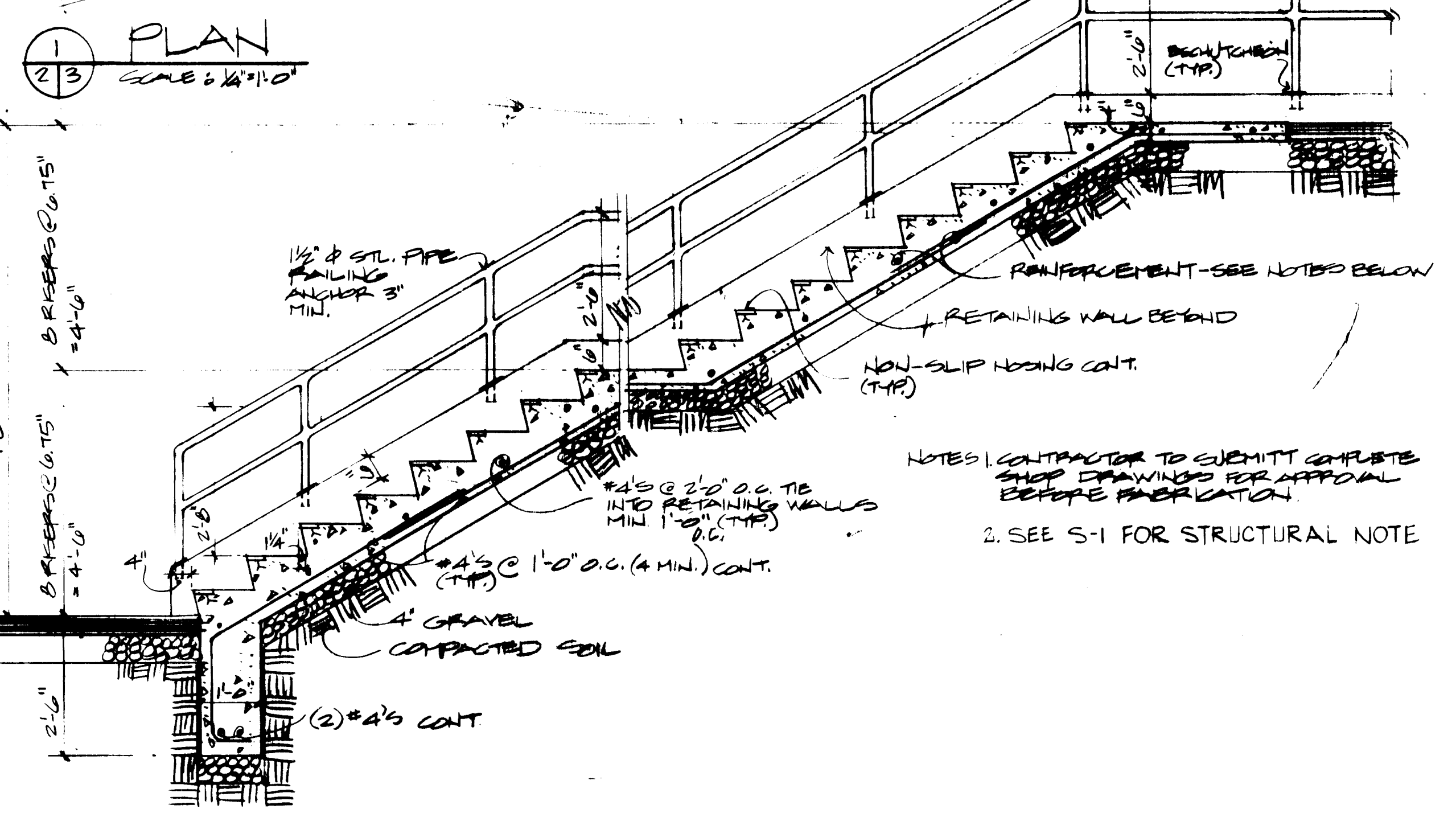
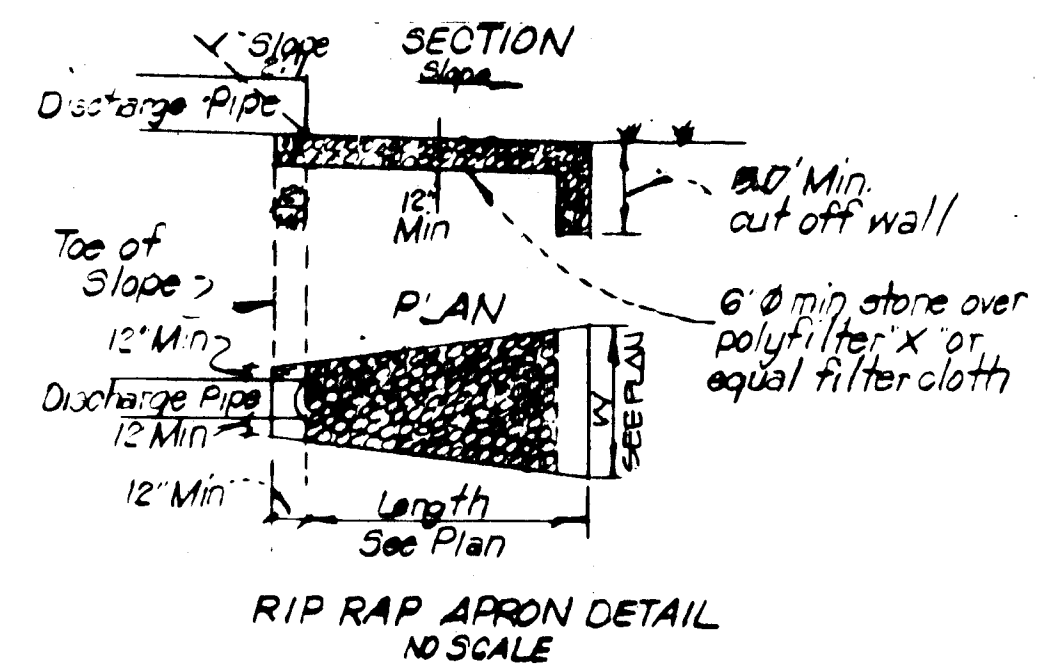
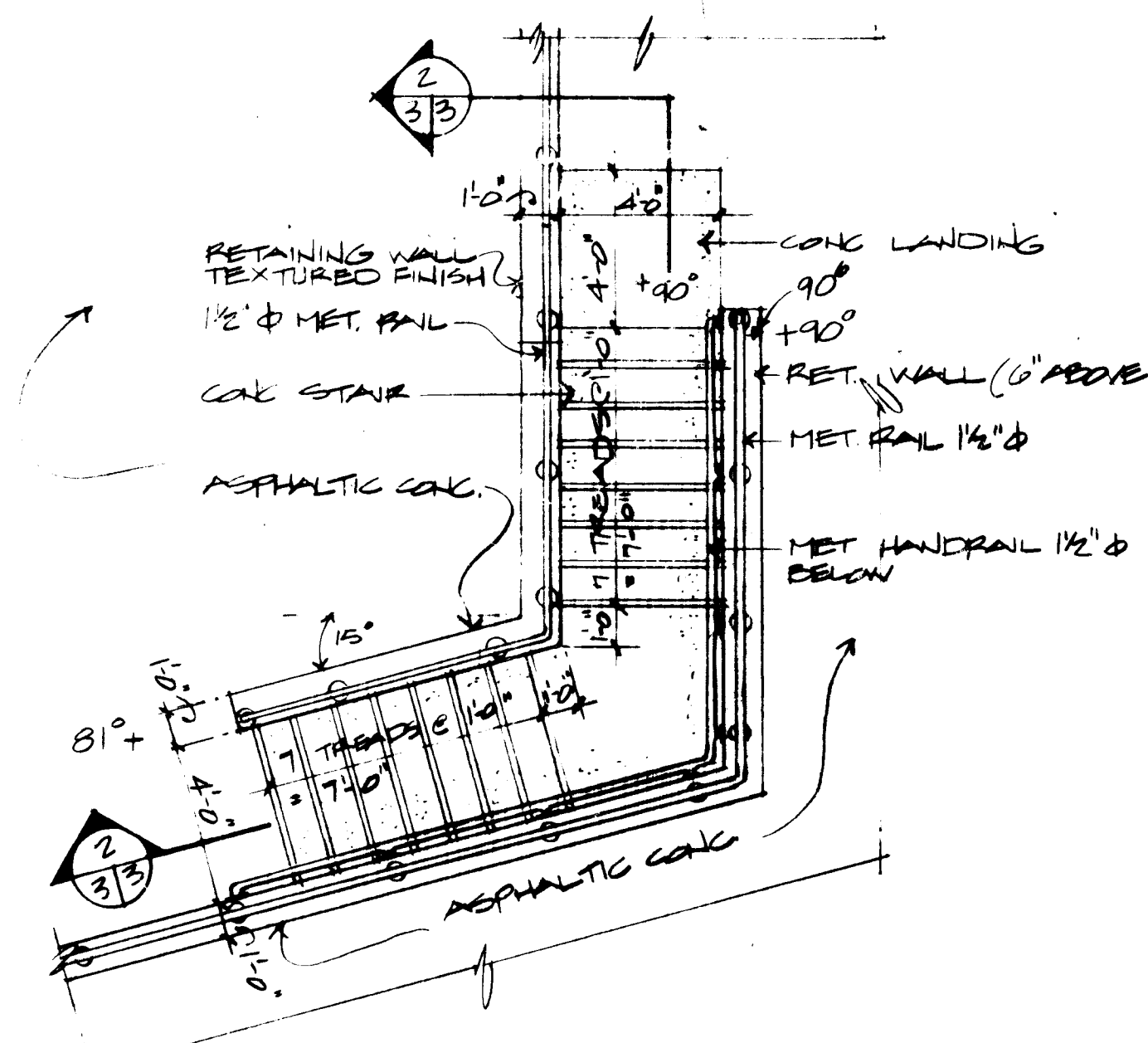
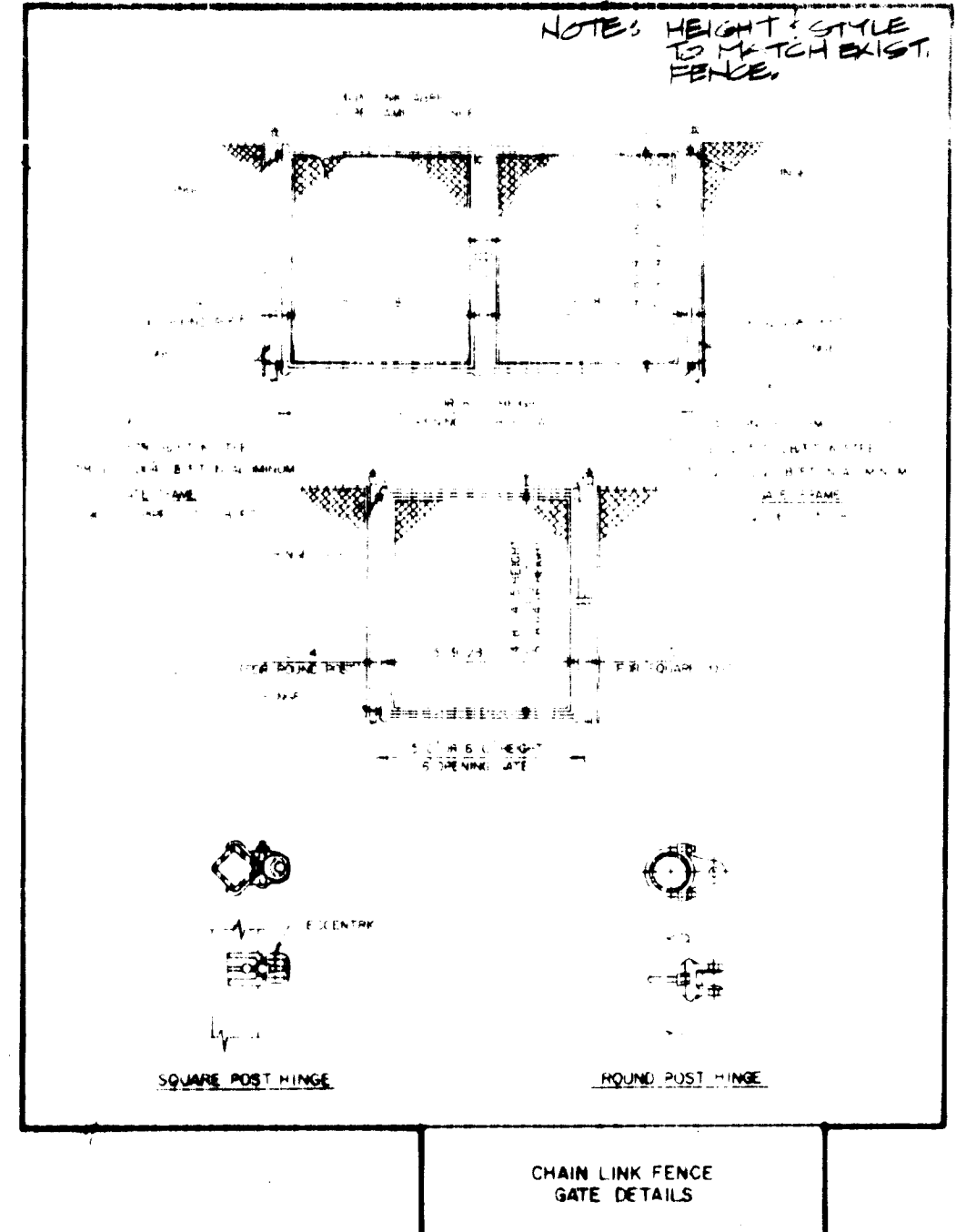


SEDIMENT CONTROL

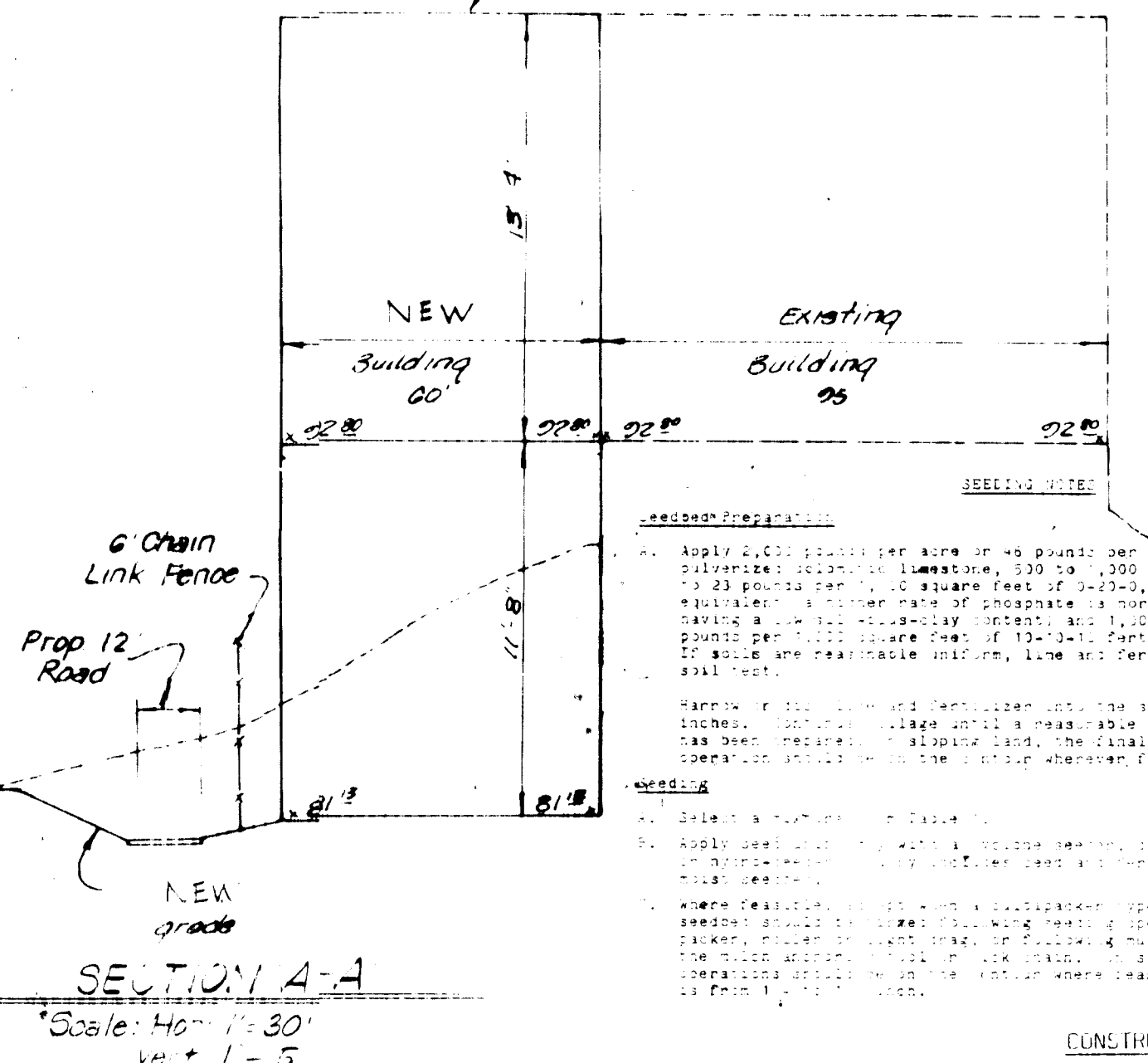
- All sediment control measures to be adjusted to meet field conditions at time of construction and to be constructed prior to any grading or disturbance of existing surface material.
- Periodic inspection and maintenance of all sediment control structures must be provided to insure intended purpose is accomplished.



NOTE
 FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 1) 7 CALENDAR DAYS FOR A PERIMETER SEDIMENT CONTROL STRUCTURE, DIKES, SWALES, DITCHES PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1
 2) 14 CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS IN THE PROJECT SITE.



NO.	DESCRIPTION	DATE	BY	CHECKED
1	Issue for Review	8/15/84	JTB	JTB
2	Issue for Construction	9/25/84	JTB	JTB
3	Issue for Review	10/1/84	JTB	JTB
4	Issue for Construction	10/2/84	JTB	JTB
5	Issue for Review	10/2/84	JTB	JTB
6	Issue for Construction	10/2/84	JTB	JTB
7	Issue for Review	10/2/84	JTB	JTB
8	Issue for Construction	10/2/84	JTB	JTB
9	Issue for Review	10/2/84	JTB	JTB
10	Issue for Construction	10/2/84	JTB	JTB
11	Issue for Review	10/2/84	JTB	JTB
12	Issue for Construction	10/2/84	JTB	JTB
13	Issue for Review	10/2/84	JTB	JTB
14	Issue for Construction	10/2/84	JTB	JTB
15	Issue for Review	10/2/84	JTB	JTB
16	Issue for Construction	10/2/84	JTB	JTB
17	Issue for Review	10/2/84	JTB	JTB
18	Issue for Construction	10/2/84	JTB	JTB
19	Issue for Review	10/2/84	JTB	JTB
20	Issue for Construction	10/2/84	JTB	JTB



CONSTRUCTION SEQUENCE
 1. Obtain necessary permits
 2. Install sediment control facilities
 A) Excavate basin
 B) Excavate basins & diversions
 C) Install straw bale dikes
 D) Install overflow structure & pipe
 E) Install rip-rap apron
 F) Block openings in overflow structure with plywood covered with filter cloth
 G) Place #2 stone around overflow structure to elevation 662.75 at natural angle of repose.
 H) Stabilize all disturbed areas of basin except for basin bottom
 3. Clear site as per plan
 4. Install new septic system
 5. Remove existing septic system
 6. Grade site
 7. Install footings, foundations, and retaining walls
 8. Backfill excavation
 9. Construct addition
 10. Install new paving
 11. Fine grade disturbed area
 12. Stabilize disturbed area
 13. Install new fence
 14. Remove sediment control facility as when approved by sediment control inspector
 A) Remove stone, plywood & filter cloth
 B) Clear sediment from basin
 C) Remove straw bale dikes & SCE
 D) Stabilize disturbed areas

APPROVED
 DIVISION OF LAND USE & ZONING
 HOWARD COUNTY
 DATE 5-22-84
 JTB

ENGINEER'S 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 ADVISED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 E. L. ROGERS Md. Reg. PE #12114
 9-25-84

DEVELOPER'S CERTIFICATE
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
 Ronald Platteau
 GTE/SPRINT COMMUNICATIONS
 9-25-84

9-28-84
 JTB

10-1-84
 John Byrd
 10-2-84
 John Byrd

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 J. Peter McNeil
 U.S. SOIL CONSERVATION SERVICE
 9-25-84

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 J. Peter McNeil
 HOWARD SOIL CONSERVATION DISTRICT
 9-25-84

NO.	REVISIONS	DATE
1	UPDATE PLAN AS PER HOCO.MD.	8/15/84
2	REVISED S INLET	8/20/84
3	UPDATE PLANS	9-13-84
4	REVISED PLANS AS PER H. SCC	9-24-84

DEVELOPMENT CONSULTANTS GROUP, INC.
 12408 ROUTE 108
 CLARKSVILLE, MD. 21029
 301-596-8970 301-988-9830

TOC EXPANSION
 COOKSVILLE, MARYLAND
 12408 ROUTE 108
 CLARKSVILLE, MD. 21029
 301-596-8970 301-988-9830

GTE/SPRINT COMMUNICATIONS
 2000 1/2 Profile Street
 2/3/84
 4100 1/2 Subdivisory Lot 1, PG 30, 610
 7th Map 8, Block 22 Parcel 377
 5th Election District
 Howard County Maryland

DIVERSIFIED ENGINEERING, INC.
 914 Silver Spring Avenue
 SILVER SPRING, MARYLAND 20910
 (301) 588-8400
 D.E. PROJ. NO. 833
 SHEET 2 OF 3
 CKV-440-002

CONSTRUCTION SPECIFICATIONS
FOR
PONDS

These specifications are appropriate to ponds within the scope of the Standard for practice 378, SOIL CONSERVATION SERVICE, MARYLAND, CONSTRUCTION SPECIFICATIONS FOR PONDS.

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and shore breaks 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, fences, 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 dam and reservoir as 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 embankment and other designated areas.

II. EARTH FILL

Material

The fill material shall be taken from local sources. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) by 1 foot.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials 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 portions of the embankment.

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 sheepfoot, 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.

Cutoff Trench

A cutoff trench shall be excavated along or parallel to the centerline of the embankment 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. The side slopes of the trench shall be 1 to 1. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. 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 hand tampers or other compaction equipment. The material needs to fill completely all spaces 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.

IV. PIPE LAYOUT

All pipes shall be installed in accordance with the following:

A. Reinforced Concrete Pipe

1. Material - Reinforced concrete pipe shall be made of a minimum of 4000 psi concrete and shall be in accordance with the latest ASTM Specification for Reinforced Concrete Pipe.
2. Bedding - All bedding shall be in accordance with the latest ASTM Specification for Bedding of Reinforced Concrete Pipe.
3. Laying Pipe - Reinforced concrete pipe shall be placed with the bell end up, unless otherwise specified on the plans. The bedding shall be placed so that all spaces under the pipe are filled. The bedding shall be compacted to the required density and shall be in accordance with the latest ASTM Specification for Bedding of Reinforced Concrete Pipe.
4. Backfilling - Backfilling shall be in accordance with the latest ASTM Specification for Backfilling of Reinforced Concrete Pipe.
5. Other Details - All other details shall be in accordance with the latest ASTM Specification for Reinforced Concrete Pipe.

V. CONCRETE

1. Materials

- a. Cement - 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, scales, 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 one-quarter inch sieve. Limestone sand shall not be used.
- d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
- e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet 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 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.
3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of 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 predicted 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 mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

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

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

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

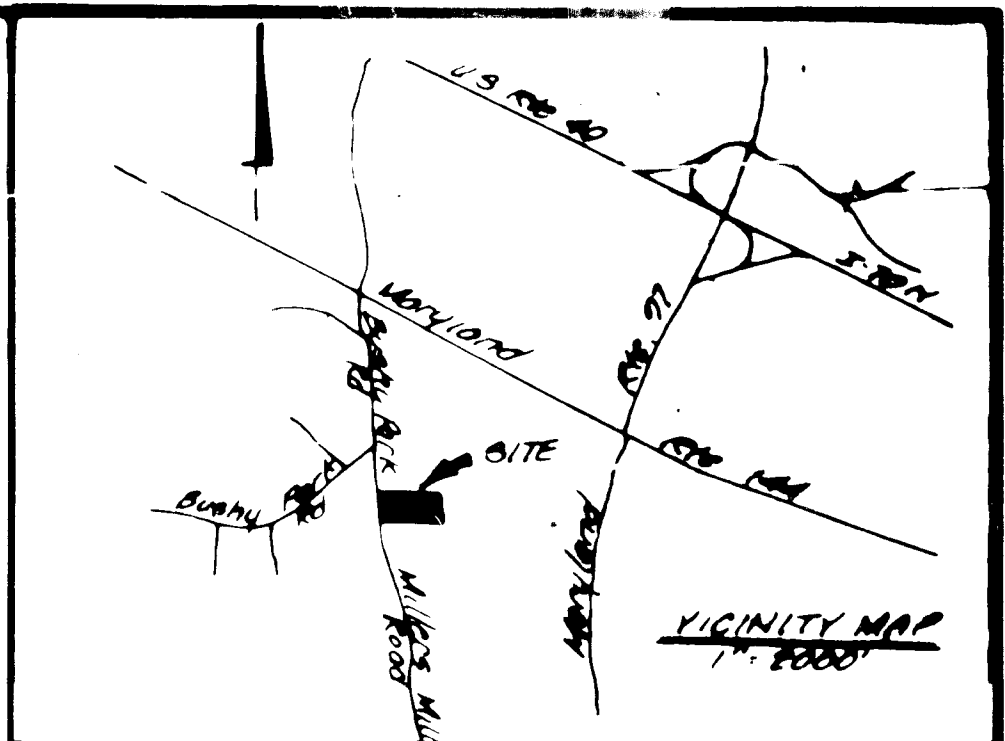
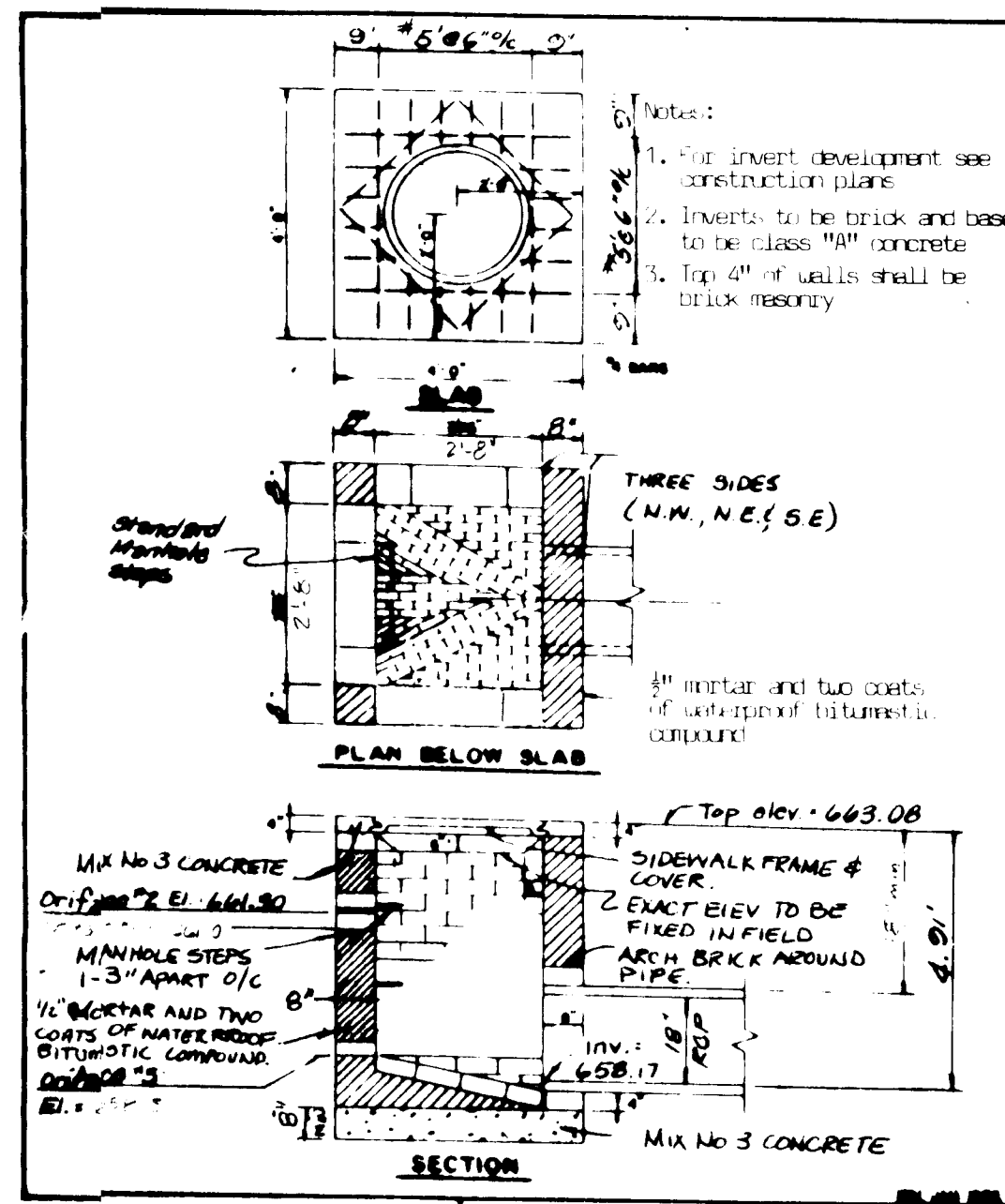
5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.
6. Consolidating - Concrete 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 embedded items.
7. 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 tamped and completely filled with dry-patching mortar.
8. 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. Moisture 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.
9. Placing Temperature - Concrete may not be placed at temperatures below 32° with the temperature falling, or 36° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications or as shown on the accompanying drawings.

VII. EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.



DEVELOPER'S CERTIFICATE
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, 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 WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
James D. Plentz 9-21-84
GTE/SPRINT COMMUNICATIONS (DATE)

ENGINEER'S 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 SOIL CONSERVATION DISTRICT. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE ADVISED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
Ed Ryan 9-21-84
E. C. ROBERTS, Md. Reg. PE #12114 (DATE)

APPROVED FOR PUBLIC STORM DRAINAGE SYSTEMS & ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE 9-21-84
Director

APPROVED FOR PRIVATE WATER & PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
DATE 10-1-84
County Health Officer

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-28-84
Planning Officer

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE 10-28-84
Chief, Division of Planning, Zoning and Zoning Administration

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
James M. Zehn 9-25-84
U.S. SOIL CONSERVATION SERVICE (DATE)

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
James M. Zehn 9-25-84
HOWARD SOIL CONSERVATION DISTRICT (DATE)

APPROVED
DIVISION OF LAND DEVELOPMENT
ZONING ADMINISTRATION
HOWARD COUNTY, MARYLAND
DATE 5-22-84
M. J. [Signature]

Owner:	NO.	REVISIONS	DATE
Southern Pacific Communications 1501 Millers Mill Road Cooksville, Maryland 21723 301-489-7050			5-22-84

DEVELOPMENT CONSULTANTS GROUP, INC.
12408 ROUTE 108
CLARKSVILLE, MD 21029
301-596-9080 301-988-9830

TOC EXPANSION
Cooksville, Maryland
47th Section, 5-22-84
Howard County, Maryland

GTE/SPRINT COMMUNICATIONS
2/3/84
DATE AUG 1984
DRAWN
CHECKED MLG
SCALE
D.E. PROJ. NO. 838
SDP-84-156

DIVERSIFIED ENGINEERING, INC.
814 Silver Spring Avenue
SILVER SPRING, MARYLAND 20910
(301) 585-8888
D.E. PROJ. NO. 838
CKV-440-001

C-2

Sheet 3 of 3
PROJECT NO. CKV-440-001
DGS # 106-01