APPROVED
HOWARD COUNTY HEALTH DEPARTMENT
FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS
4-27-82
COUNTY HEALTH OFFICER — DATE

APPROVED
HOWARD COUNTY OFFICE OF PLANNING & ZONING
DIRECTOR, PLANNING AND ZONING — DATE 5-14-82
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS FOR STORM DRAINAGE SYSTEMS AND ROADS
DIRECTOR, PUBLIC WORKS — DATE
CHIEF, BUREAU OF ENGINEERING — DATE 5-14-82

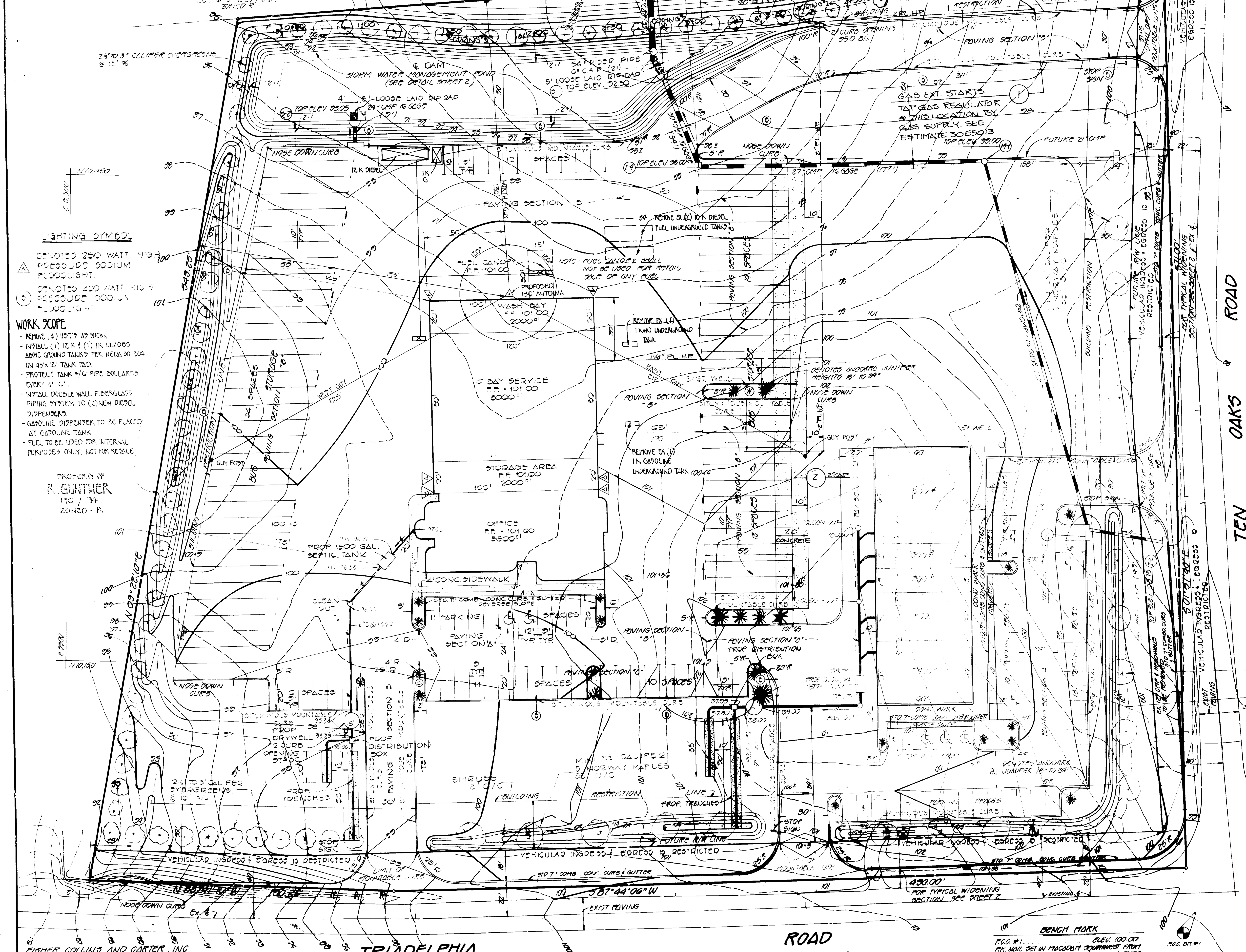
These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

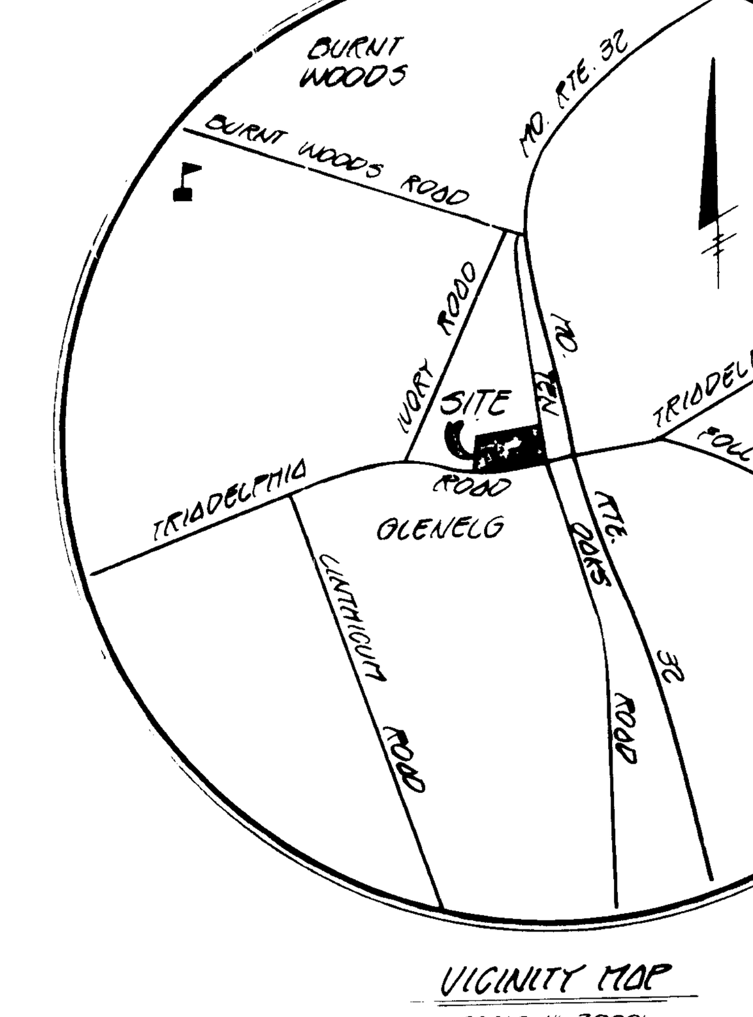
U.S. Soil Conservation Service — Date 5-2-82

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Howard Soil Conservation District — Date 5-11-82

REVISION		
NO	DATE	DESCRIPTION
1	10-25-95	ADD ANTENNA TOWER & GUY POST
2	6-30-98	REV. UG FUEL TANKS





2-5-82

GENERAL NOTES

1) Total area of tract - 7.991 AC.±
2) Present zoning - B-2 Business General
3) Property is recorded as Liber 1068, Folio 141
4) Parking Data
   a) Use-Retail Sales
   b) Total number of employees - 12
   c) Total area of building -9600 □'
   d) Number of parking spaces required @ 1 space/200□' of floor area = 9600□' /200□' = 48 spaces
   e) Number of parking spaces provided = 55 spaces
   f) Total number of handicapped spaces required = 3
   g) Total number of handicapped spaces provided = 3
   h) Total area of parking lot for retail use - 0.49 Ac.±
   i) Area of landscaped islands required - 5% x 0.49 Ac.± = 0.02 Ac.±
   j) Area of landscaped islands provided - 0.02 Ac.±

   a) Use-Office
   b) Total number of employees - 17
   c) Total area of building 5500 □'
   d) Number of parking spaces required @ 7 spaces/10 persons = 17/1.43 = 11.9 spaces
   e) Number of parking spaces provided = 34 spaces

   a) Use - Garage
   b) Total number of employees - 4
   c) Total area of building - 8000□'
   d) Number of parking spaces required @ 1 space/500□' of floor area = 8000□'/500□' = 16 spaces
   e) Number of parking spaces provided = 16 spaces
   f) Total number of handicapped spaces required for office and garage - 2
   g) Total number of handicapped spaces provided - 2
   h) All parking spaces to be delineated by solid white 6" painted lines
   i) The type of vehicles to be serviced and repaired in the garage will be buses only.
   j) Total area of parking lot for office and garage excluding bus storage area = 0.31 Ac.±
   k) Area of landscaped islands required = 5% x 0.31 Ac.± = 0.02 Ac.±
   l) Area of landscaped islands provided - 0.02 Ac.±
5) All paving and storm drain construction shall be in accordance with the Howard County Road Construction Code and Standard Specifications.
6) Existing utilities shown hereon have been located from field and office information, the contractor shall determine the exact location of existing utilities to his own satisfaction before making any connection thereto or excavating in the area thereof.
7) The contractor shall notify Miss Utility at 559-0100 a minimum of three days prior to beginning any construction shown hereon.
8) The property is located on Tax Map 22 Parcel 105
9) Coverage
   a) Total area of property - 7.991 Ac.±
   b) Total building coverage - 0.576 Ac.± or 7.21 % of site.
10) The Contractor shall notify the Howard County Construction Inspection/Survey Division 24 hours prior to commencement of work at 992-2418.
11) Handicapped facilities to be constructed in accordance with the "Design of Barrier Free Facilities" and the "Maryland Building Code for the Handicapped and Aged."
12) Open space required = 20% x 7.991 Ac.± = 1.60 Ac.±
    Total open space provided = 3.5 Ac.+

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 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."

Signature of Engineer — Date

DEVELOPER'S CERTIFICATE

"I hereby 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."

Signature of Developer — Date 4-20-82

SITE DEVELOPMENT & GRADING PLAN

J.R. ENTERPRISES

TAX MAP 22 - PARCEL 105
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' - AUGUST 10, 1981
SHEET 1 OF 5

OWNER & DEVELOPER
J.R. ENTERPRISES
15910 UNION CHAPEL ROAD
WOODBINE, MARYLAND 21797

RONALD B. CARTER REG. L.S. 10704 — DATE

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE, ELLICOTT CITY, MARYLAND 21043
TELEPHONE: 301-461-2855

3-26-97 REVISED BY ADDED GAS LINE
2-14-92 REVISED LANDSCAPE

S.D.P.- 82-64

HOWARD COUNTY OFFICE OF PLANNING AND ZONING

5 19 82

PLANNING DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

APPROVED FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

DIRECTOR — DATE

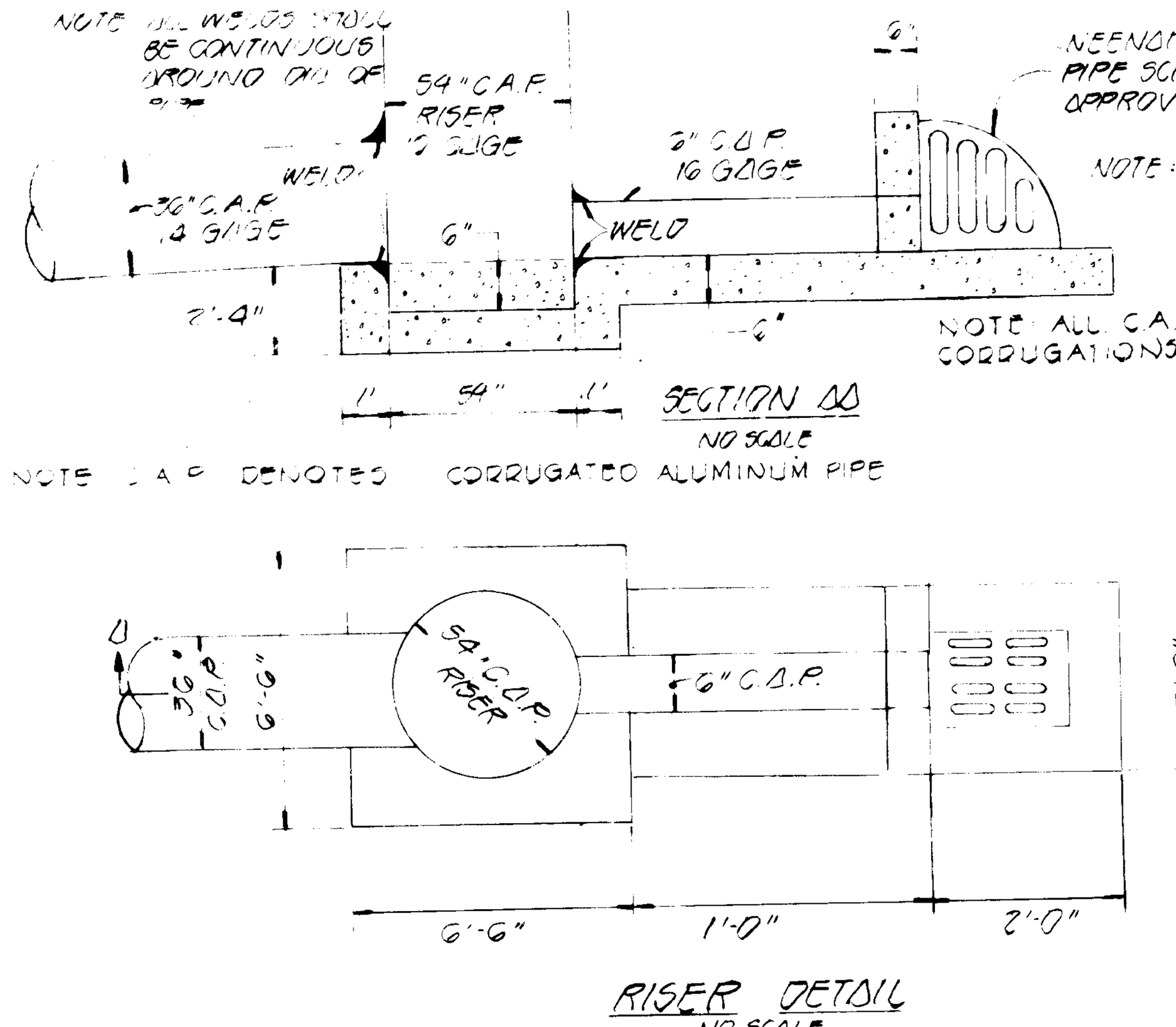
5-18-82

CHIEF, BUREAU OF ENGINEERING — DATE

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

4-27-82

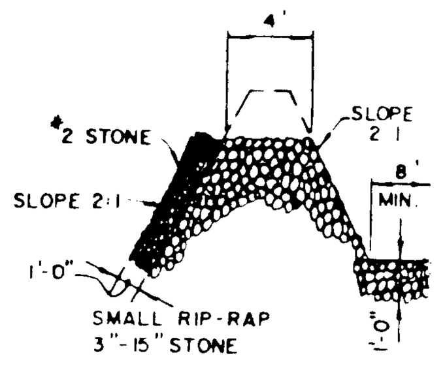
COUNTY HEALTH OFFICER — DATE



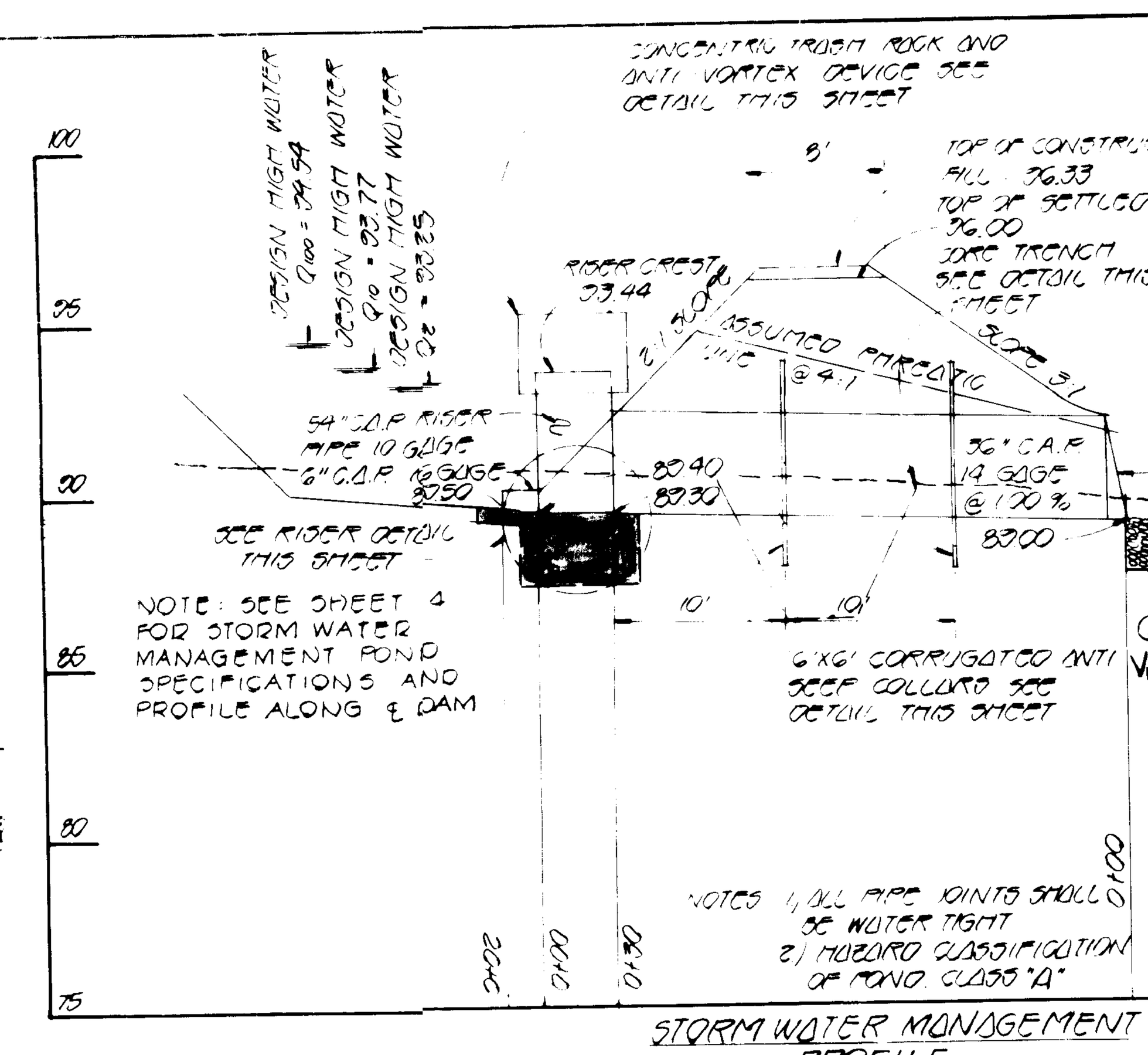
NOTE: 1/4" WELDS TO BE CONTINUOUS AROUND ALL OF
54" C.A.P. RISER 16 GAGE
NEENOH FOUNDRY CAST IRON PIPE SCREEN R-7512C OR APPROVED EQUAL
NOTE: PIPE SCREEN TO BE FASTENED TO CONCRETE WITH 6-3/4" ANCHOR BOLTS.
NOTE: ALL C.A.P. SHALL BE HELICAL WITH CORRUGATIONS 1/2" X 2 2/3"
NOTE: C.A.P. DENOTES CORRUGATED ALUMINUM PIPE
54" C.A.P. RISER
24" C.A.P.

SECTION AA
NO SCALE

RISER DETAIL
NO SCALE

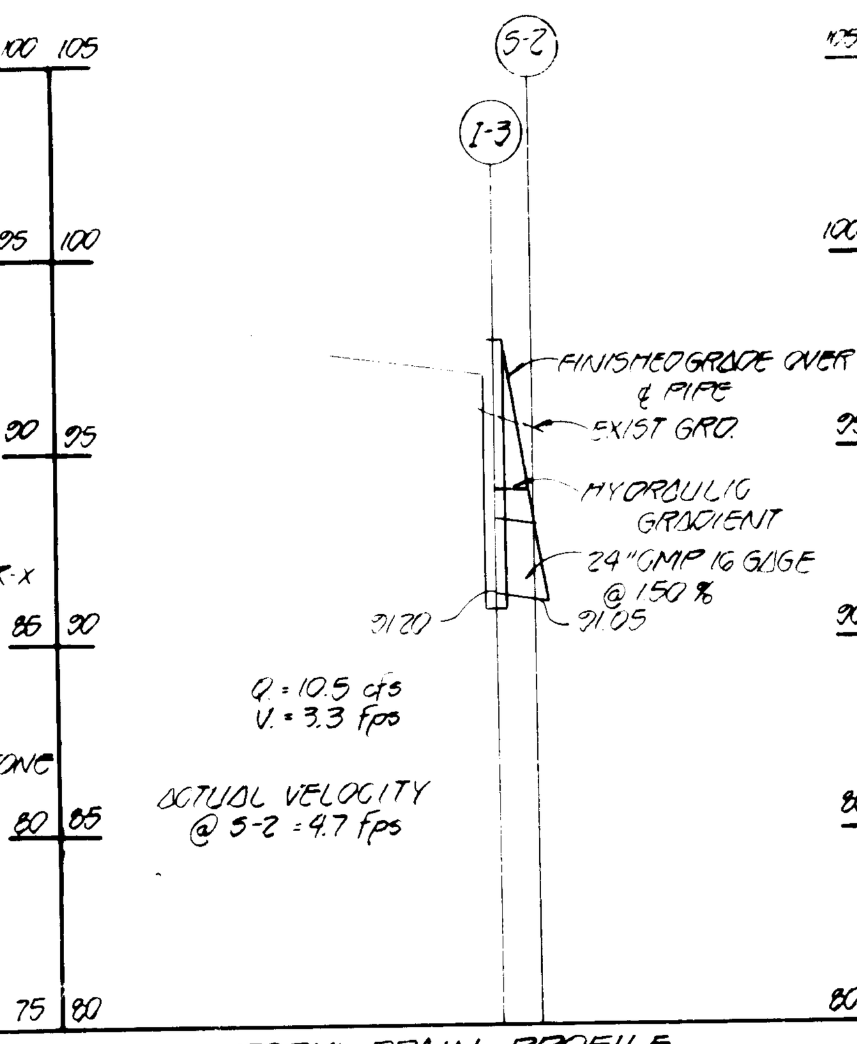


SECTION



CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE SEE DETAIL THIS SHEET
NOTE: SEE SHEET 4 FOR STORM WATER MANAGEMENT POND SPECIFICATIONS AND PROFILE ALONG ℄ DAM
SEE RISER DETAIL THIS SHEET
6'X6' CORRUGATED ANTI SEEP COLLARS SEE DETAIL THIS SHEET
STANDARD METAL END SECTION
EXIST. GROUND
POLY FILTER-X
6' WIDE RIP-RAP APRON, 12" DIA STONE
NOTES: 1) ALL PIPE JOINTS SHALL BE WATER TIGHT
2) MOUND CLASSIFICATION OF POND CLASS "A"

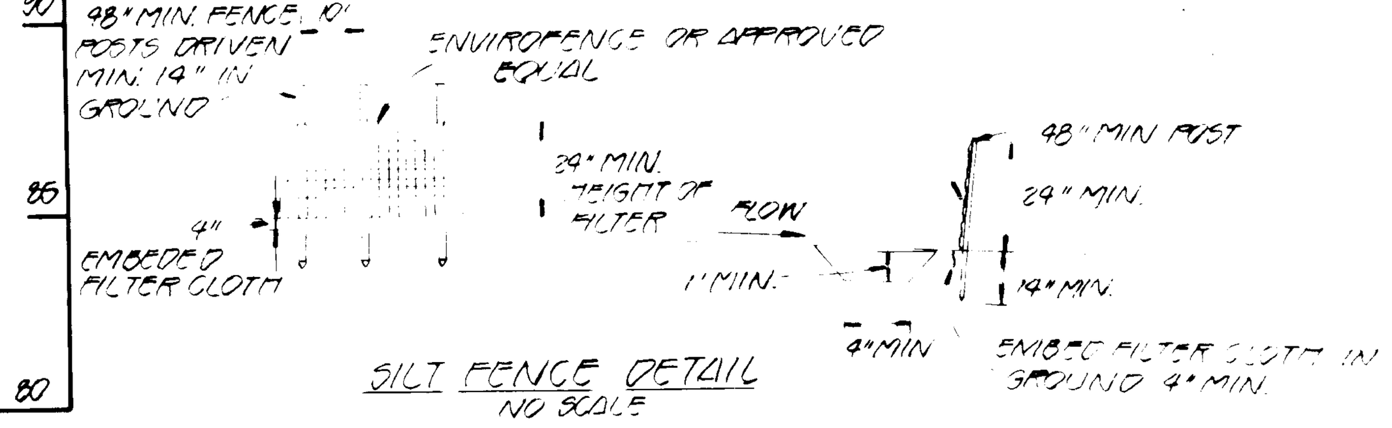
STORM WATER MANAGEMENT PROFILE
SCALE: 1"=10' HOR. 1"=5' VERT.



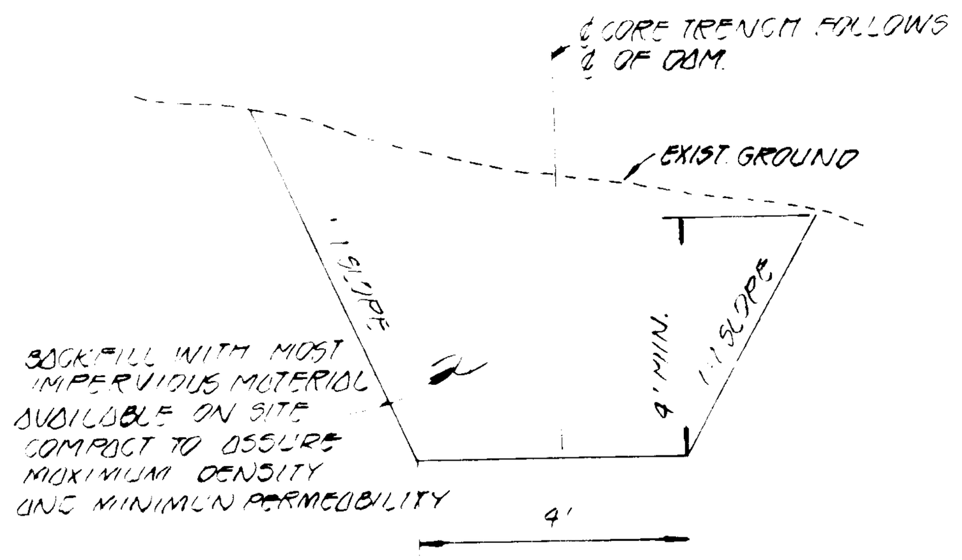
STORM DRAIN PROFILE
SCALE: 1"=30' HOR. 1"=5' VERT.

STRUCTURE SCHEDULE

NO.	TYPE	INVERT IN	INVERT OUT	TOP ELEV.	REMARKS
I-1	A-10	94.16	93.41	98.60	DRAWING S.D.-4.02
I-2	A-5	--	95.12	98.75	DRAWING S.D.-4.01
I-3	A-10	--	91.20	97.80	DRAWING S.D.-4.02
I-4	DOUBLE "S" RETICULAR GRATES	90.53	90.43	98.00	DRAWING S.D.-4.23 DRAWING S.D.-4.93
M-1	TYPE A-1 MANHOLE			99.00	DRAWING S.D.-3.01
S-1	STANDARD METAL END SECTION	--	90.00	92.50	DRAWING S.D.-5.61
S-2	STANDARD METAL END SECTION	--	91.05	93.05	DRAWING S.D.-5.61



SILT FENCE DETAIL
NO SCALE



CORE TRENCH DETAIL
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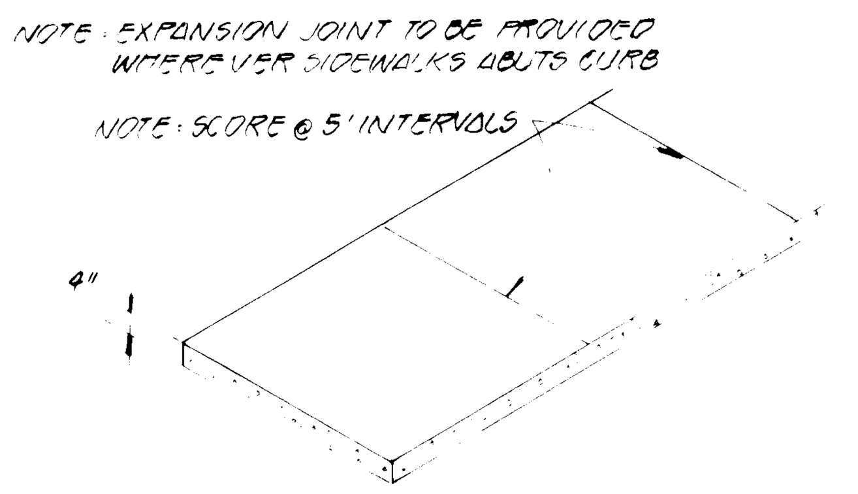
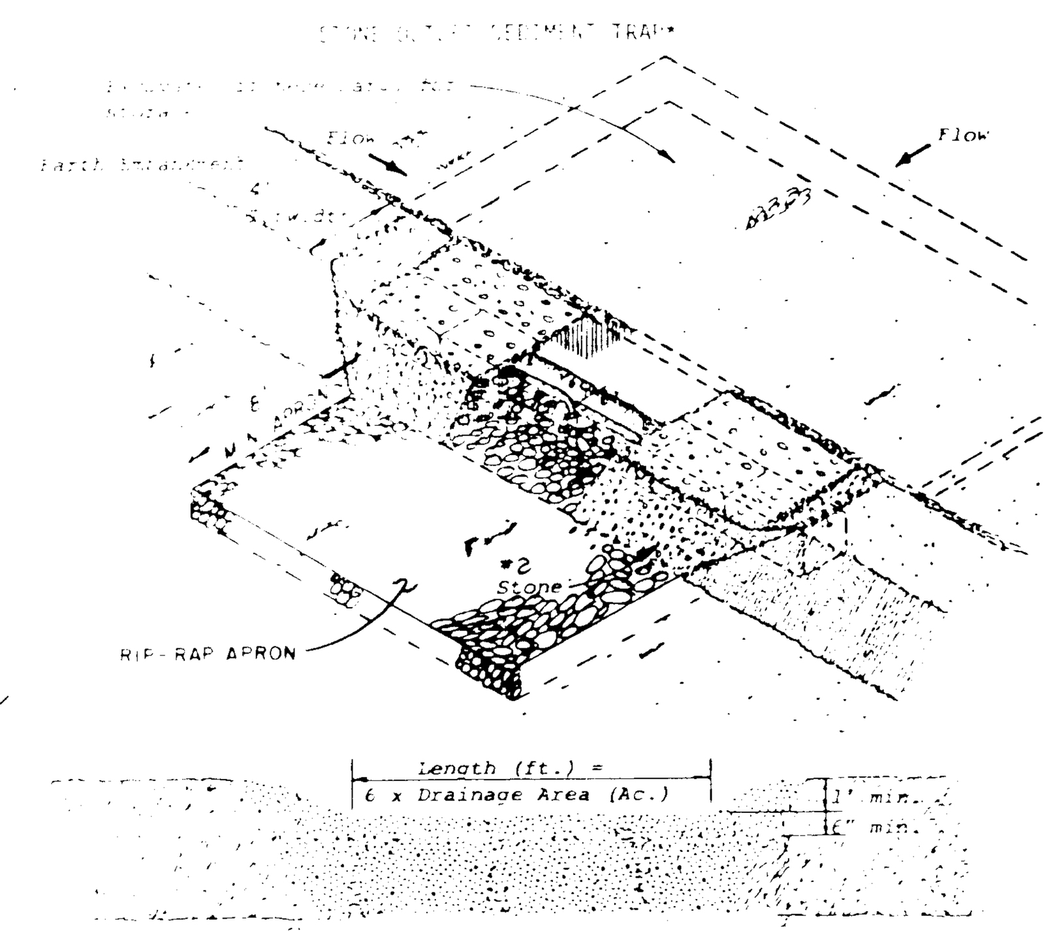
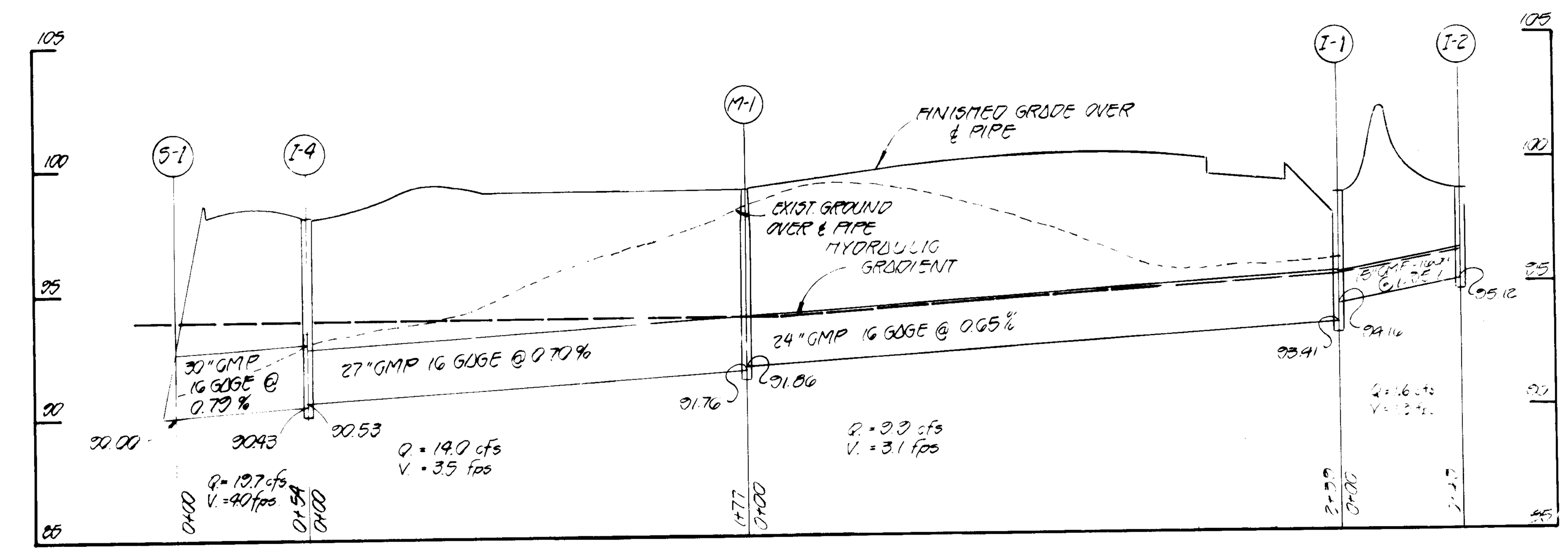


TYPICAL SIDEWALK DETAIL
NO SCALE

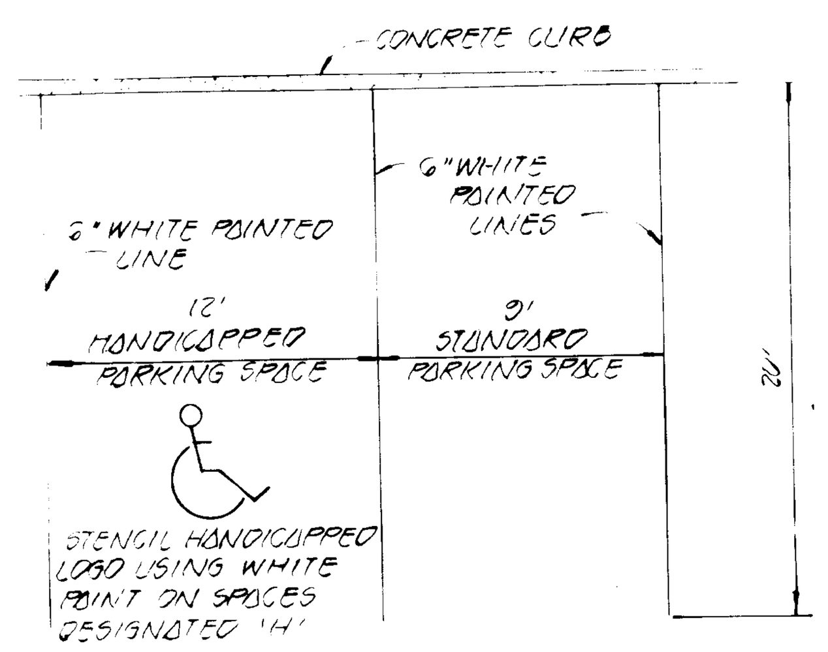


STONE OUTLET SEDIMENT TRAP

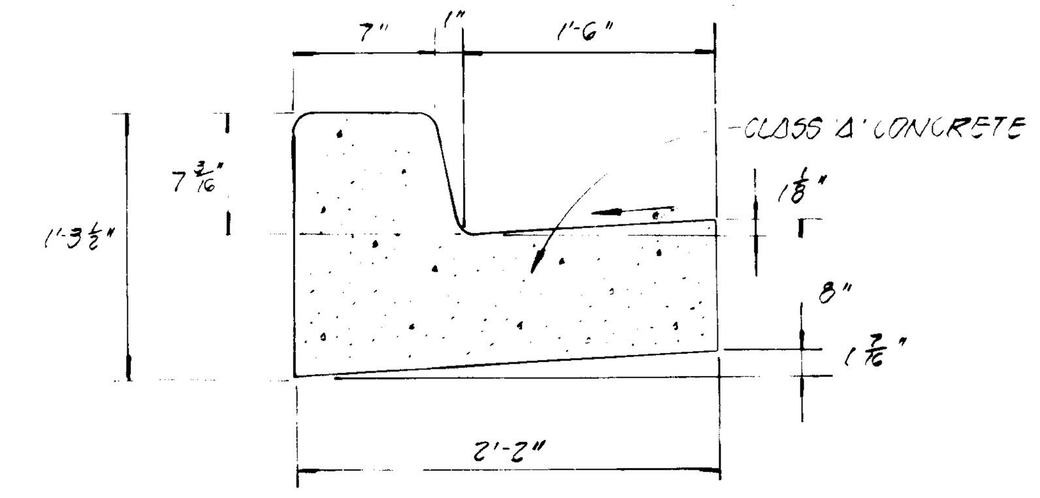
HANDICAPPED SIGN DETAIL
NO SCALE



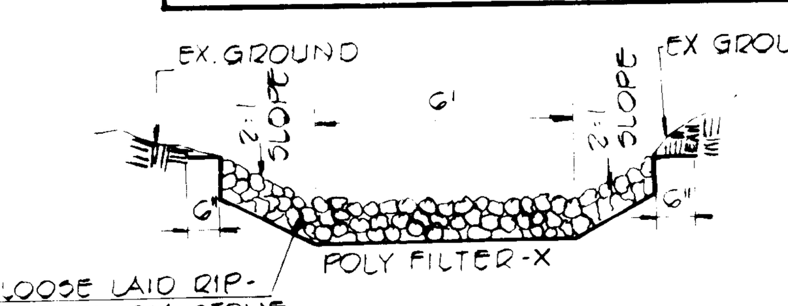
STORM DRAIN PROFILE
SCALE: 1"=30' HOR. 1"=5' VERT.



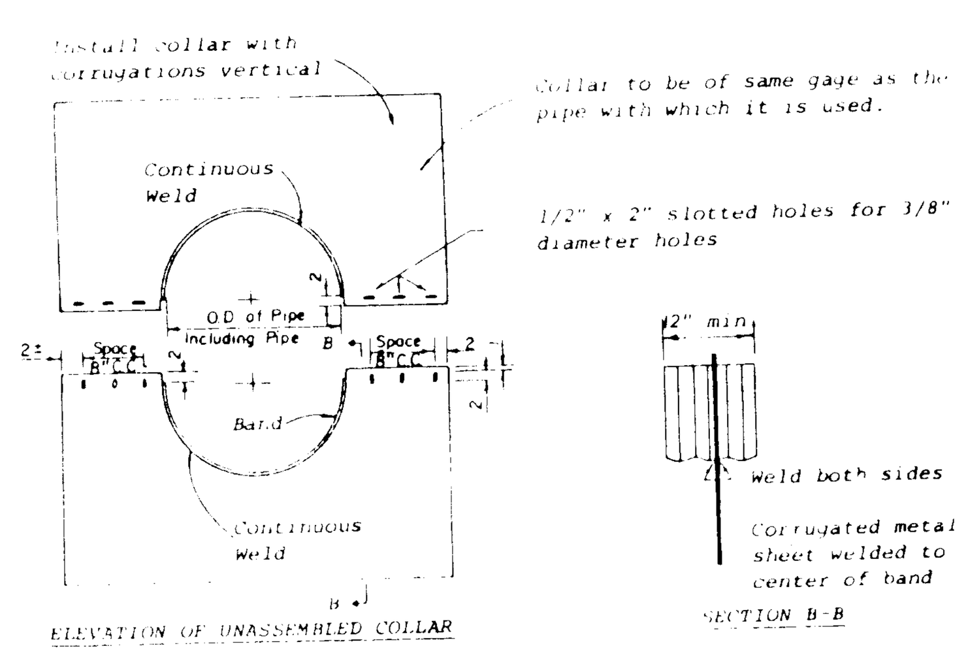
TYPICAL PARKING DETAIL
NO SCALE



STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE



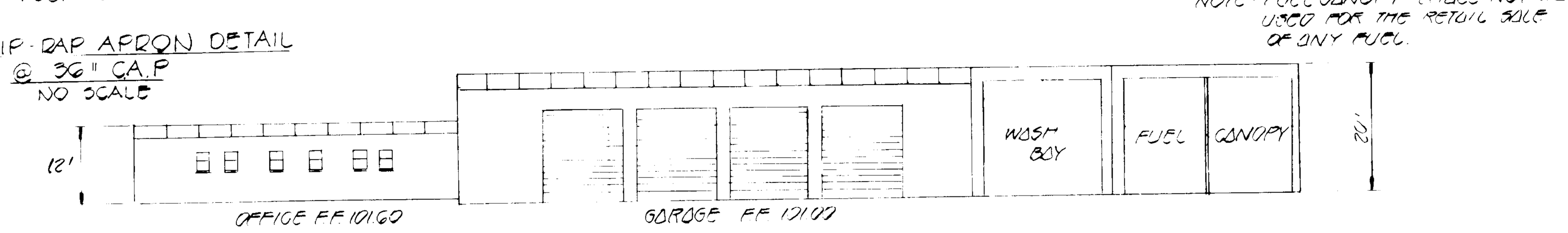
RIP-RAP APRON DETAIL @ 36" C.A.P.
NO SCALE

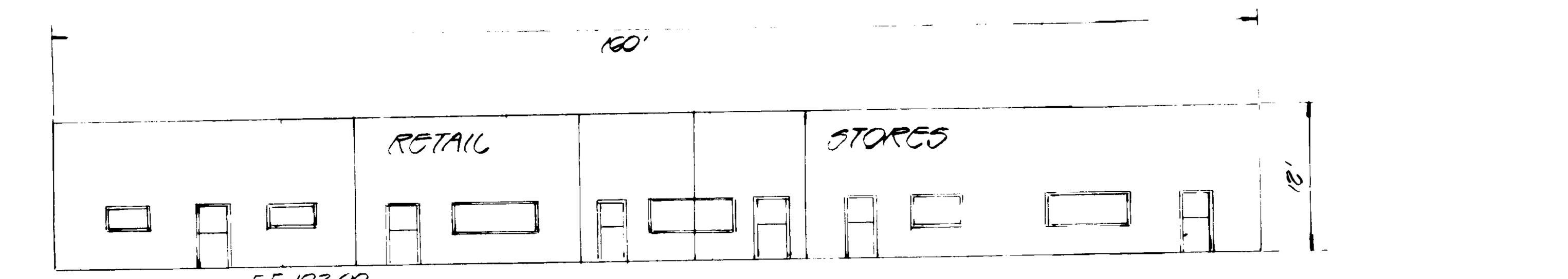


Install collar with corrugations vertical
Collar to be of same gage as the pipe with which it is used.
1/2" x 2" slotted holes for 3/8" diameter holes
Continuous weld
weld both sides
Corrugated metal sheet welded to center of band
ELEVATION OF UNASSEMBLED COLLAR
SECTION B-B

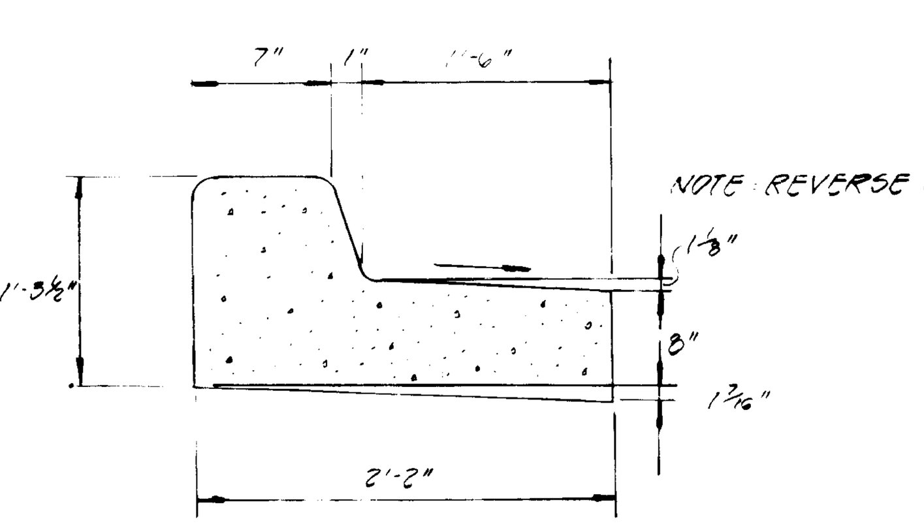
CORRUGATED METAL ANTI-SEEP COLLAR DETAIL
NOT TO SCALE

2-5-82

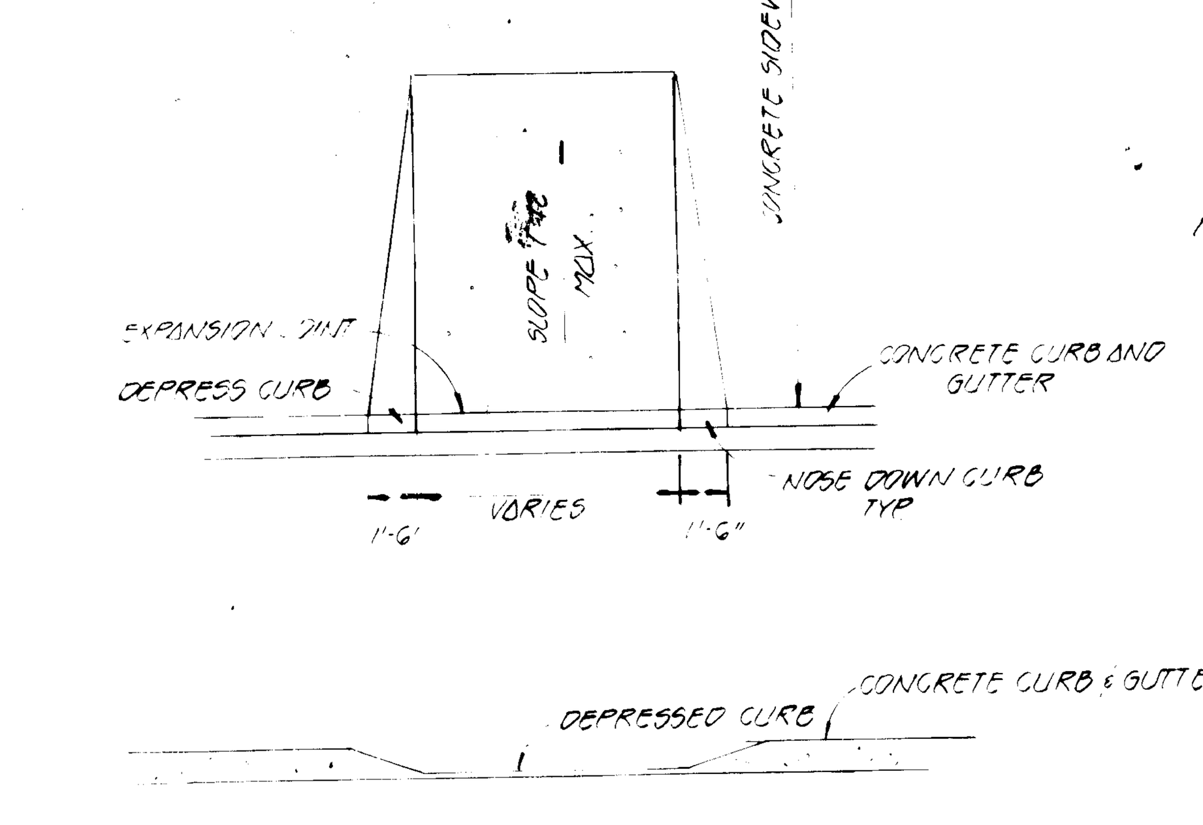




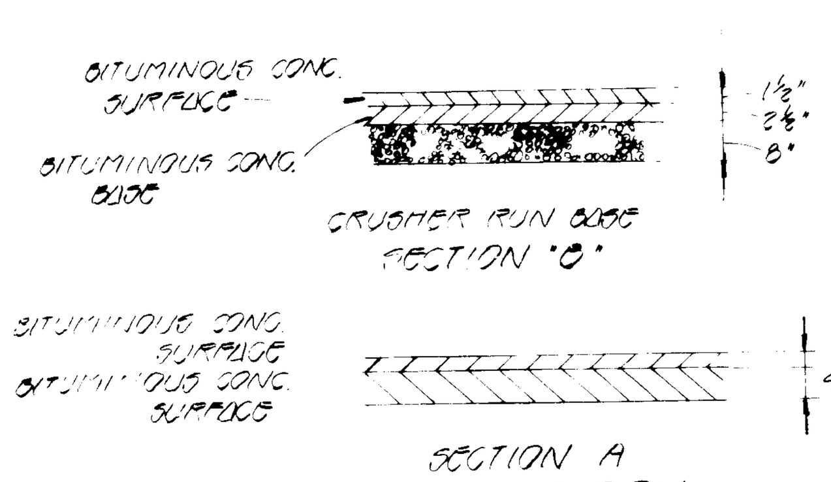
BUILDING SCHEMATIC PROFILE
NO SCALE



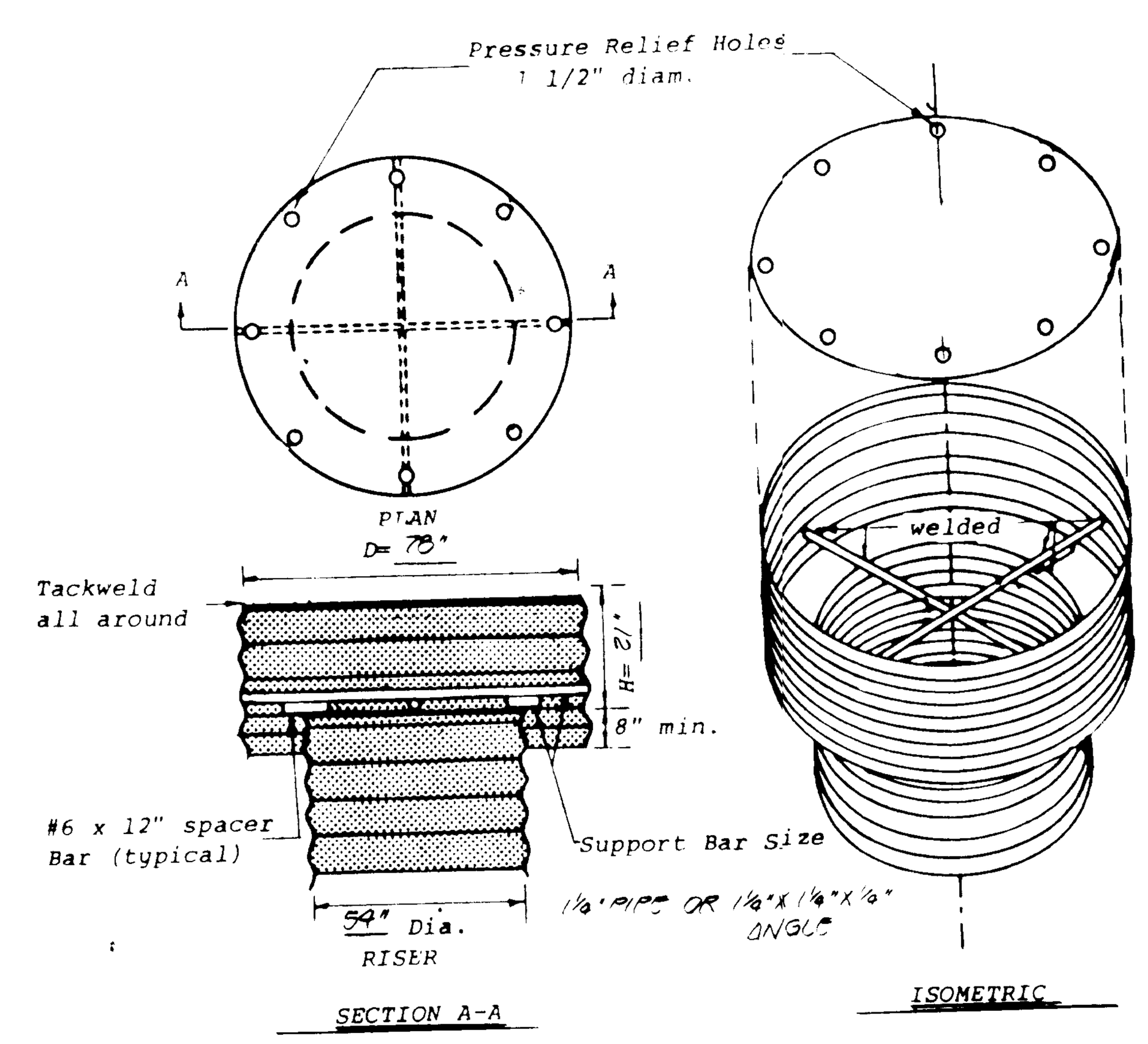
STANDARD 7" COMBINATION CURB & GUTTER
NO SCALE



CURB CUT DETAIL FOR HANDICAPPED RAMP
NO SCALE



SECTION A
PAVING SECTION
NO SCALE

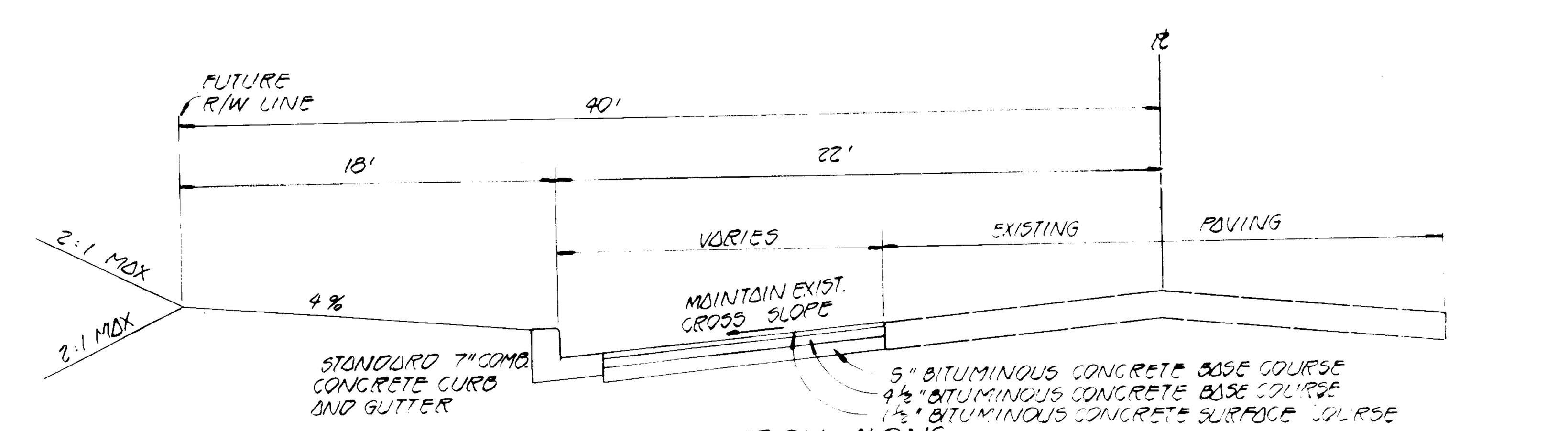


Top is 10 gage corrugated metal or 1/8" steel plate. Pressure relief holes may be ommitted, if ends of corrugations are left fully open when corrugated top is welded to cylinder.

Cylinder is 12 gage corrugated metal pipe or fabricated from 1/8" steel plate.

Notes:
1) The cylinder must be firmly fastened to the top of the riser.
2) Support bars are welded to the top of the riser or attached by straps bolted to top of riser.

CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE DETAIL
NOT TO SCALE



TYPICAL WIDENING SECTION ALONG TRIADELPHIA ROAD AND TEN OAKS ROAD
NO SCALE

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.

U.S. Soil Conservation Service — Date 5-12-82

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Howard Soil Conservation District — Date 5-11-82

RONALD B. CARTER REG. L.S. 10704 — DATE

FISHER, COLLINS AND CARTER INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
301-461-2855

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION DISTRICT — DATE 5-12-82

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

HOWARD SOIL CONSERVATION DISTRICT — DATE

DETAIL SHEET
J.R. ENTERPRISES
TAX MAP 22 — PARCEL 105
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1"=30' — NOVEMBER 1981
SHEET 2 OF 5

SDP-82-64

HOWARD COUNTY HEALTH DEPARTMENT
PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER — DATE

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR PLANNING AND ZONING — DATE

CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

DIRECTOR, PUBLIC WORKS — DATE

CHIEF BUREAU OF ENGINEERING — 5/18/82 DATE

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

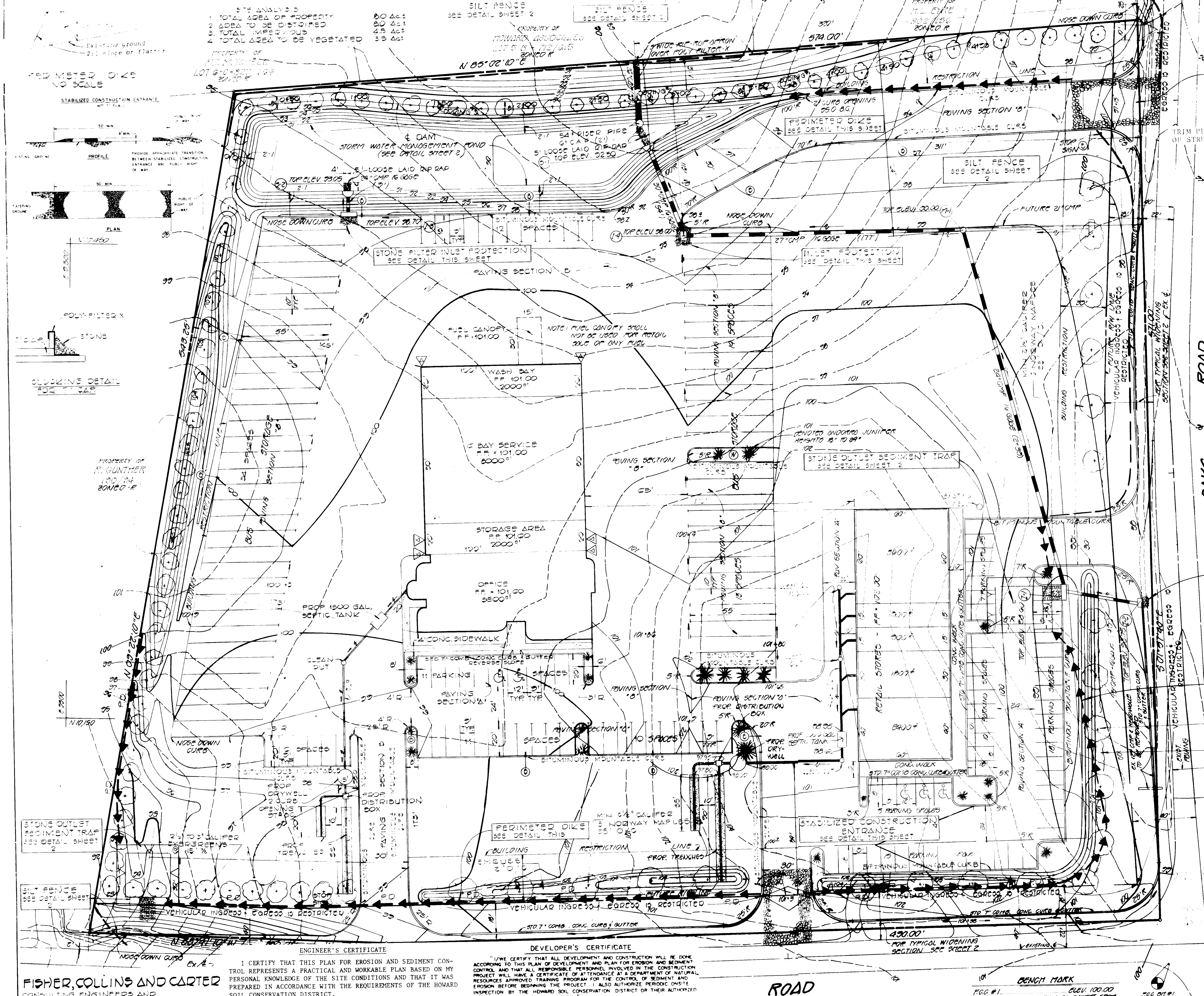
U.S. SOIL CONSERVATION DISTRICT — DATE

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

HOWARD SOIL CONSERVATION DISTRICT — DATE

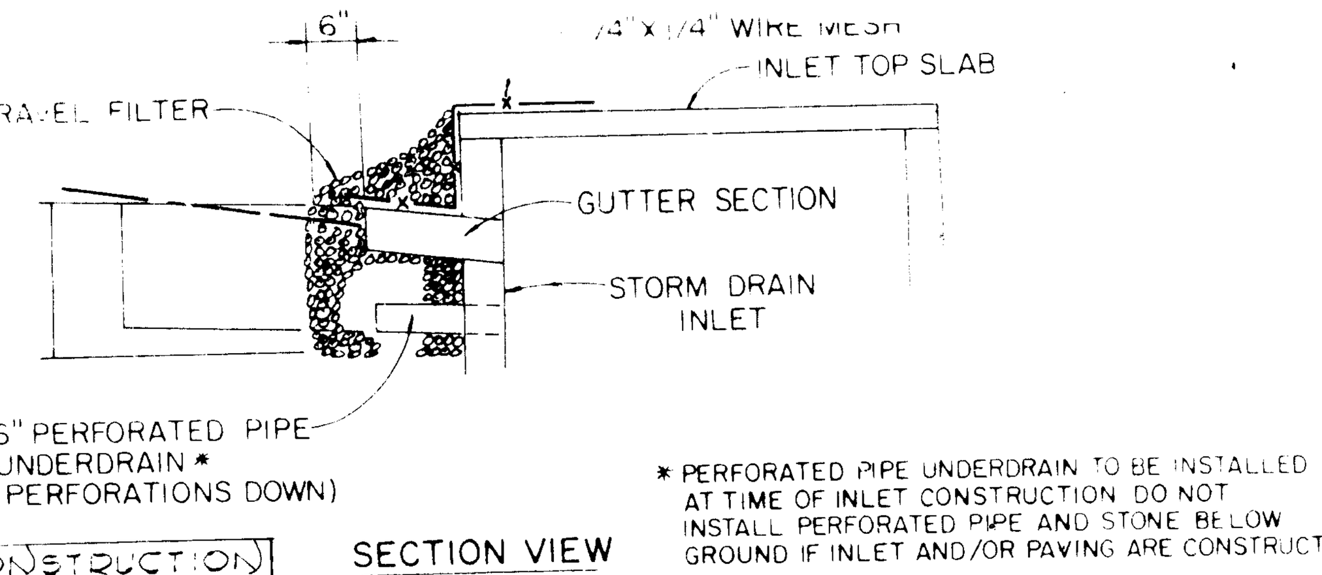
SITE ANALYSIS

1. TOTAL AREA OF PROPERTY 8.0 Ac.±
2. AREA TO BE DISTURBED 8.0 Ac.±
3. TOTAL IMPERVIOUS 4.5 Ac.±
4. TOTAL AREA TO BE VEGETATED 3.5 Ac.±



PERIMETER DIKE
NO SCALE

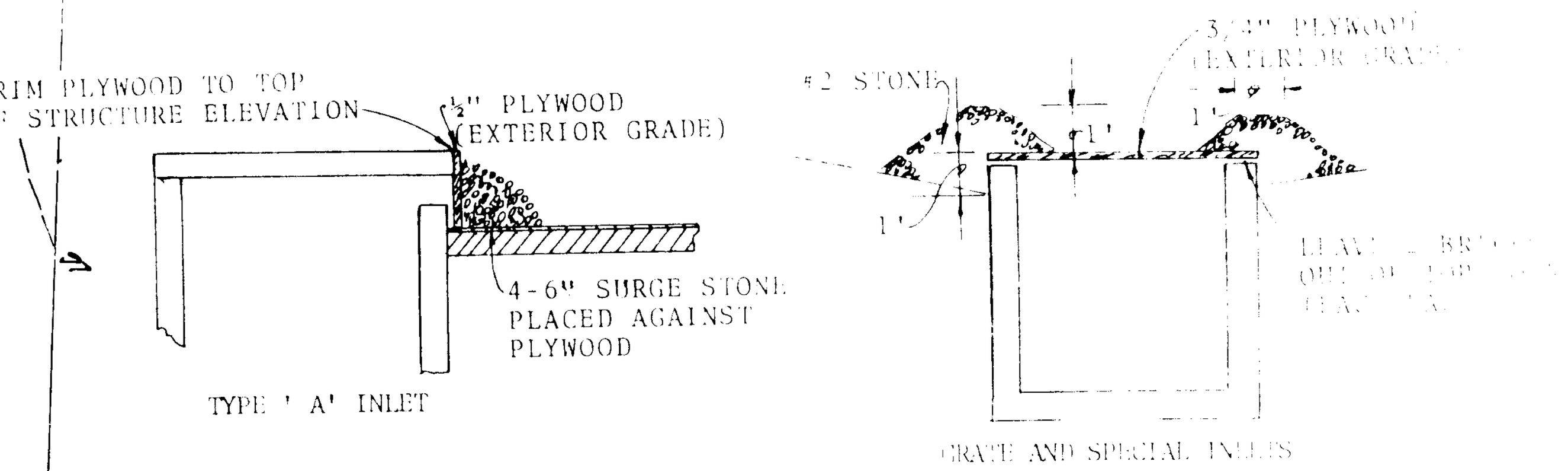
BLOCKING DETAIL FOR 6" CAP



* PERFORATED PIPE UNDERDRAIN TO BE INSTALLED AT TIME OF INLET CONSTRUCTION. DO NOT INSTALL PERFORATED PIPE AND STONE BELOW GROUND IF INLET AND/OR PAVING ARE CONSTRUCTED

STONE FILTER INLET PROTECTION DETAIL

NO SCALE



INLET PROTECTION DETAIL

NOT TO SCALE

STONE OUTLET AND INLET SEDIMENT TRAP DATA

TRAP NO.	DRAINAGE AREA	STORAGE REQUIRED	SIZE OF TRAP LxWxD	STORAGE PROVIDED	TOP WEIR ELEV.	LENGTH OF STONE FILTER	BOTTOM TRAP ELEV.
1	1.6 AC.+	107.2 Cu.Yds.	39'x39x2.5'	109.4 Cu.Yds.	95.00	9.0'	[illegible]
2	1.3 AC.+	87.1 Cu.Yds.	36'x35'x2.5'	88.4 Cu.Yds.	97.50	7.0'	[illegible]

CONSTRUCTION SEQUENCE

1) OBTAIN GRADING AND BUILDING PERMIT.
2) CONSTRUCT STONE CONSTRUCTION ENTRANCES AT TRIADELPHIA ROAD AND TEN OAKS ROAD.
3) CONSTRUCT STORM WATER MANAGEMENT POND AND STABILIZE USING TEMPORARY SEEDING.
4) THE 6" CAP SHALL BE BLOCKED IN ACCORDANCE WITH THE DETAIL ON THIS SHEET. THE 6" CAP SHALL BE BLOCKED UNTIL SUCH TIME WHEN THE SEDIMENT BASIN TRANSITIONS TO FUNCTION AS A STORM WATER MANAGEMENT POND.
5) GRADE SWALE ALONG THE WESTERN PROPERTY LINE AND STABILIZE WITH PERMANENT SEEDING.
6) INSTALL PERIMETER DIKE AND STONE OUTLET SEDIMENT TRAP ALONG SOUTHWEST CORNER OF PROPERTY.
7) INSTALL PERIMETER DIKE, SILT FENCE AND STONE OUTLET SEDIMENT TRAP ALONG TEN OAKS ROAD.
8) GRADE SITE TO SUBGRADE.
9) CONSTRUCT BUILDINGS AND STORM DRAIN SYSTEM.
10) INSTALL INLET PROTECTION DEVICES AT INLETS I-2, I-3 & I-4.
11) INSTALL CONCRETE CURB, LAY CRUSHER RUN AND BASE COURSE.
12) DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE TRAPS AND STORM WATER MANAGEMENT POND WHEN THE CLEANOUT ELEVATION HAS BEEN REACHED.
13) AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
14) THE SEDIMENT BASIN SHALL BE DEWATERED BY PUMPING.
15) THE SEDIMENT FROM THE TRAPS AND STORM WATER MANAGEMENT POND SHALL BE PLACED BETWEEN THE NEW ENTRANCE ROAD AND RETAIL STORES. STABILIZATION WILL BE WITH PERMANENT SEEDING.
16) THE STORM WATER MANAGEMENT POND SHALL BE GRADED IN ACCORDANCE WITH SHEET ONE AND STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS IN THE SEDIMENT CONTROL NOTES AND INSTALL RIP RAP APRON.
17) REMOVE PERIMETER DIKES, BACKFILL TRAPS AND STABILIZE WITH PERMANENT SEEDING.
18) REMOVE STONE CONSTRUCTION ENTRANCES.
19) CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE.
20) ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.

SEDIMENT CONTROL NOTES

1. Specifications for the Sediment Control Details shown hereon are included in the U.S.D.A. Soil Conservation Service "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."
2. The developer shall notify the Howard County Office of Inspection and Permits at least 24 hours prior to beginning any construction shown hereon (992-2433).
3. Sediment control structures to be constructed prior to any on-site grading or disturbance to any existing surface material, and are to be stabilized as soon as constructed.
4. All sediment control structures to remain in place until permission for their removal has been obtained from the Howard County Office of Inspection and Permits. (992-2433).
5. All graded areas not to be sodded shall be stabilized by seeding and mulching in accordance with the following:
   1. Site Preparation
      A. Harrow or disc in areas proposed to be seeded the following materials
         1) Pulverized limestone at 2 tons/acre.
         2) Commercial fertilizer 10-10-10 at 3/4 tons/acre.
         3) Super phosphate at 600 lbs./acre.
   2. Seeding
      A. Sow the following seed mixture at the rate of 200 lbs./acre with a mechanical spreader.
         1) Temporary: Italian or Perrenial Rye Grass
         2) Permanent: 40% Marion Blue Grass, 40% South Dakota Blue Grass and 20% Penn Lawn Creeping Fescue.
      B. The seeded area shall then be raked with a York Rake (a minimum of 2 passes) covered and compacted with Cultipacker or other approved method.
   3. Mulching
      A. Seeded areas shall be uniformly mulched immediately after seeding with unweathered small grain straw at the rate of 1 1/2 - 2 tons/acre.
      B. Tie mulch down with liquid asphalt at 0.1 gal./s.y. or emulsified asphalt at 0.04 gal./s.y. or mulch netting.

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.

EARL D. COLLINS P.E. REG. NO. 9753 — DATE

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ONSITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

DATE

FISHER, COLLINS AND CARTER
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY MARYLAND 21043

2-5-82

RONALD B. CARTER REG. L.S. 10704 — DATE

TAX MAP 22 - PARCEL 105
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1"=30' - AUGUST 10, 1981
SHEET 3 OF 5

OWNER & DEVELOPER
J.R. ENTERPRISES
15910 UNION CHAPEL ROAD
WOODBINE, MARYLAND 21797

S.D.P.-82-64

HOWARD COUNTY HEALTH DEPARTMENT
PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS

COUNTY HEALTH OFFICER — DATE 4-27-82

APPROVED HOWARD COUNTY OFFICE OF PLANNING & ZONING

DIRECTOR, PLANNING AND ZONING — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE

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

DIRECTOR, PUBLIC WORKS — DATE

CHIEF, BUREAU OF ENGINEERING — DATE 5/18/82

These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Howard Soil Conservation District — Date 5-11-82

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.

U.S. Soil Conservation Service — Date

I. SITE PREPARATION
Areas under the embankment and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. To facilitate clean out and resturation, it is recommended that the permanent pool area be cleared of all brush and trees.

II. EARTH FILL
Material
The fill material shall be taken from approved designated borrow area or areas. It shall be free from 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 at least 5 percent above the design elevation (including freeboard) unless otherwise shown on the plans.
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
95% of Standard Proctor by A.S.T.M. 698
Core Trench
Where specified, a core 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 governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the core 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 the contractor drive equipment 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 CONDUITS
A. CORRUGATED METAL PIPE
1. Materials - Aluminum Pipe - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-196 or M-211, with watertight coupling bands.
2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the control structure shall be mortared all around. Watertight coupling bands shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to be completely watertight.
3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
4. Laying pipe - The pipe shall be placed with inside circumferential laps pointing downstream and with the longitudinal laps at the sides.
5. Backfilling shall conform to structural backfill as shown above.
6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

V. CONCRETE
Concrete shall meet minimum requirements set forth in Maryland State Highway Administration Specifications for Materials, Highways, Bridges, and Incidental Structures, Article 20.07 (Portland Cement Concrete Mixtures), Mix No. 3.

VI. STABILIZATION
All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be stabilized by seeding and applying straw mulch in accordance with Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas immediately after finish grading.

All exposed areas of the embankment and pond shall be stabilized by:

a. Spreading 4" topsoil
b. Working in 1 ton of ground limestone and 1,000 pounds of 10-10-10 fertilizer per acre.
c. Seed with 40 lbs./acre of "Kentucky 31" tall fescue, and 15 lbs./acre of Crownvetch inoculated.
d. Mulch with 1-1/2 tons straw per acre.
e. Tie down mulch with emulsified asphalt @ 34k gallons acre.

LIGHTING SYMBOL
△ DENOTES 250 WATT HIGH PRESSURE SODIUM FLOODLIGHT.
(C) DENOTES 400 WATT HIGH PRESSURE SODIUM FLOODLIGHT

TAX MAP 22 - PARCEL 105
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1"=50' - AUGUST 10, 1981
SHEET 4 OF 5

OWNER & DEVELOPER
J.R. ENTERPRISES
15910 UNION CHAPEL ROAD
WOODBINE, MARYLAND 21797

RONALD E. CARTER REG. L.S. 10704 — DATE

FISHER, COLLINS AND CARTER
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043

8-14-82 REVISED LANDSCAPE

SDP-82-64

NOTES

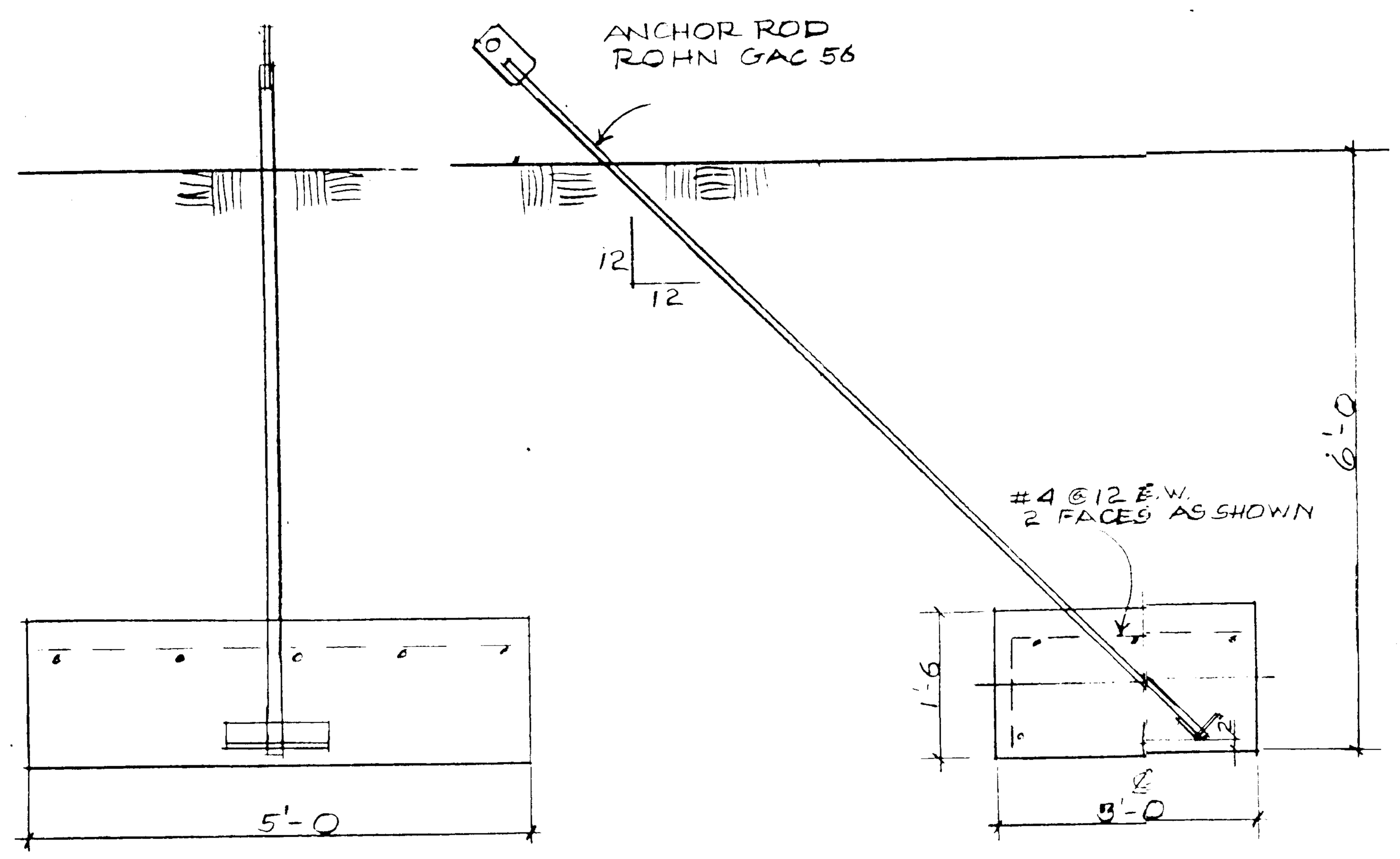
A. GENERAL:
1. TOWER AND FOUNDATIONS ARE DESIGNED IN ACCORDANCE WITH ANSI EIA/TIA STANDARD 222-E, "STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND ANTENNA SUPPORTING STRUCTURES", MARCH, 1991.
2. TOWER SHALL BE ROHN NO. 45G COMMUNICATION TOWER, 180' HIGH, BY UNR-ROHN, PEORIA, ILLINOIS GUY WIRES AND CONNECTION ACCESSORIES SHALL BE BY ROHN.
3. ERECTION SHALL BE IN ACCORDANCE STANDARD 222-E AND WITH ROHN PRINTED INSTRUCTIONS, BY AN ERECTOR EXPERIENCED IN TOWER CONSTRUCTION.
4. 1/4" GUY WIRES SHALL BE PRE-TENSIONED TO A FORCE OF 660 LBS. 5/16" GUY WIRES SHALL BE PRE-TENSIONED TO A FORCE OF 1.120 LBS. TENSION IN POST GUYS SHALL BE AS REQUIRED TO MAINTAIN PLUMBNESS.
5. CALCULATIONS FOR WIND LOAD RESULTING FROM SUPPORTED ANTENNAS ARE BASED ON ASSUMED 5 ANTENNAS HAVING A TOTAL EQUIVILENT FLAT PLATE AREA TO PRODUCE WIND FORCE OF 400 LBS. WITH BASIC WIND SPEED OF 70 MPH, WITH IT'S RESULTANT AT A HEIGHT OF 130'. THIS CAPACITY MUST NOT BE EXCEEDED.

B. FOUNDATIONS:
1. FOUNDATION DESIGN IS BASED ON "NORMAL" SOIL PARAMETERS PER EIA-222-E. "NORMAL" SOIL IS DEFINED AS DRY, COHESIVE SOIL WITH AN ALLOWABLE NET VERTICAL BEARING CAPACITY OF 4,000 PSF AND AN ALLOWABLE NET HORIZONTAL PRESSURE OF 400 PSF PER LINEAL FOOT OF DEPTH TO A MAXIMUM OF 4,000 PSF.
2. A GEOTECHNICAL ENGINEER SHALL BE RETAINED TO MAKE TEST BORINGS AT EACH ANCHOR LOCATION AND THE TOWER BASE, A TOTAL OF FOUR. BORINGS SHALL BE EXTENDED TO A DEPTH OF 15'. IF VERTICAL AND HORIZONTAL BEARING CAPACITIES ARE LESS THAN ASSUMED, THE ENGINEER SHALL RECOMMEND ALLOWABLE VERTICAL AND HORIZONTAL PRESSURES FOR RE-DESIGN.

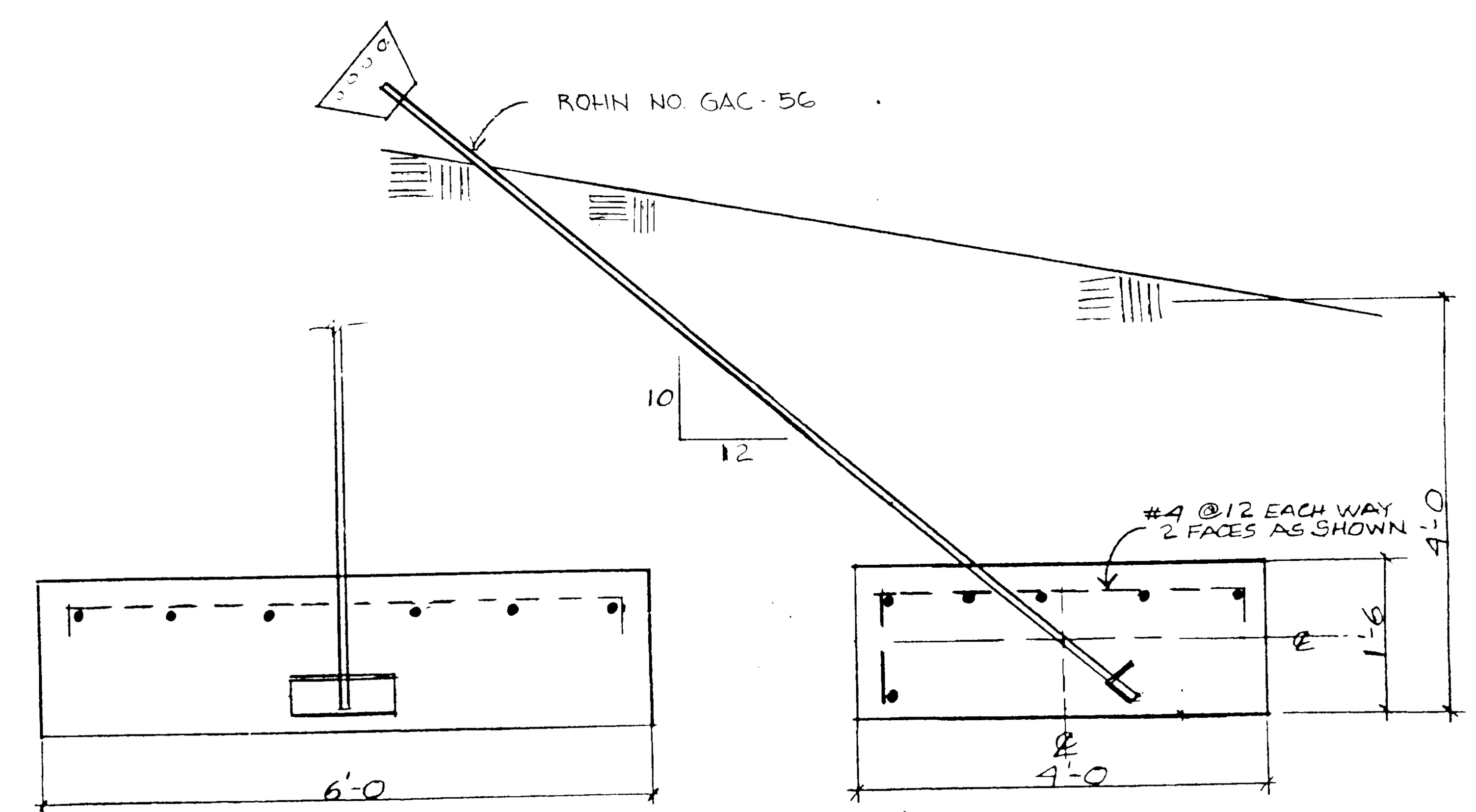
C. CONCRETE:
1. CONCRETE SHALL DEVELOP COMPRESSIVE STRENGTH OF 3,000 PSI IN 28 DAYS.
2. CONCRETE WORK SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE BY THE AMERICAN CONCRETE INSTITUTE, A.C.I. 318, LATEST EDITION.
3. REINFORCING STEEL SHALL BE ASTM A-615, GRADE 60. IT SHALL BE TIED AND SUPPORTED ACCURATELY IN PLACE WHILE CONCRETE IS POURED.
4. EXCAVATIONS SHALL BE CUT ACCURATELY AND CONCRETE POURED AGAINST UNDISTURBED EARTH WITHOUT FORMS. ANY EXCESS EXCAVATION SHALL BE FILLED WITH CONCRETE.
5. TOP OF FOUNDATIONS OUTSIDE LIMITS OF BEARING PLATES SHALL SLOPED TO DRAIN WITH A FLOAT FINISH.
6. BACKFILL OVER ANCHOR BLOCKS SHALL BE PLACED IN 8" LAYERS AND COMPACTED WITH MECHANICAL TAMPERS TO 95% DRY DENSITY AT OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D 698.

D. STRUCTURAL STEEL
1. STRUCTURAL STEEL SHALL BE ASTM A 36. PIPE FOR POSTS SHALL BE ASTM A 53, GRADE B. ALL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS.
2. WELDING SHALL BE DONE BY CERTIFIED WELDERS IN ACCORDANCE WITH THE LATEST AWS SPECIFICATIONS.
3. ALL STEEL, INCLUDING POSTS, ANCHOR BOLTS AND BEARING PLATES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
4. ANCHOR BOLTS SHALL HAVE PAL NUTS OR ANCO NUTS.

HORIZONTAL AND VERTICAL DIMENSIONS MUST BE VARIFIED ON SITE PRIOR TO FABRICATION OF MATERIALS

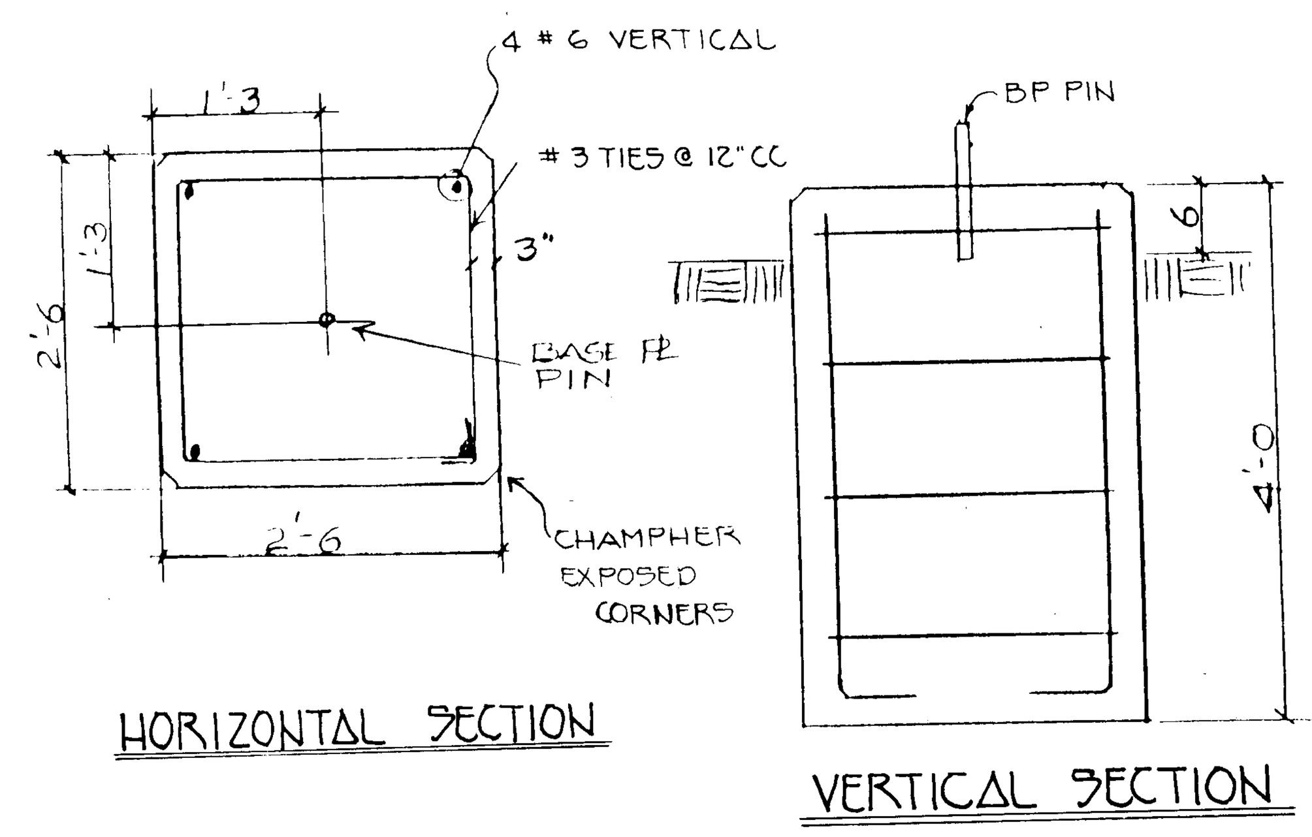


GUY POST ANCHORS - 2 RQ
2 RQ

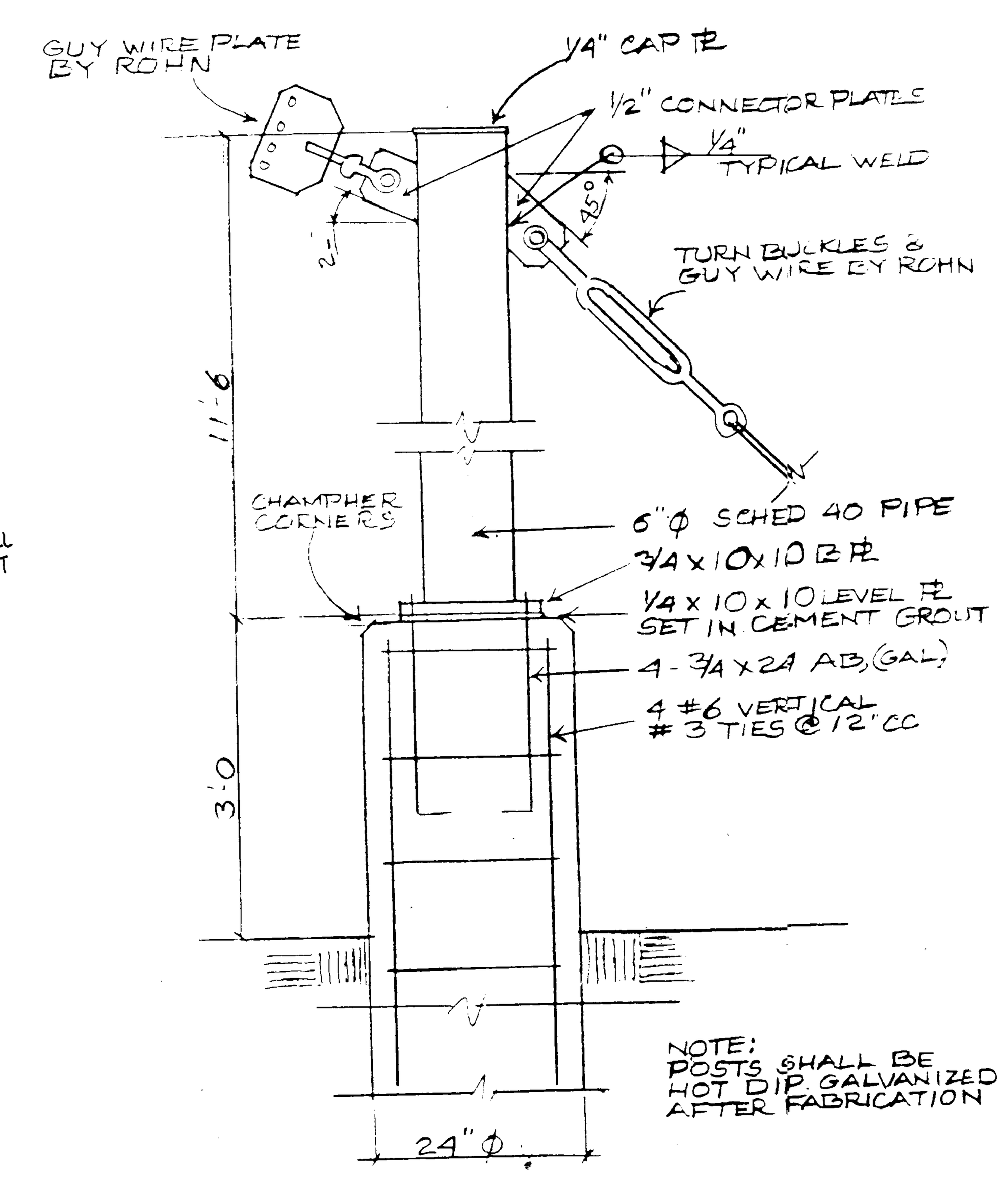


NORTH GUY ANCHOR
3/4" = 1'-0

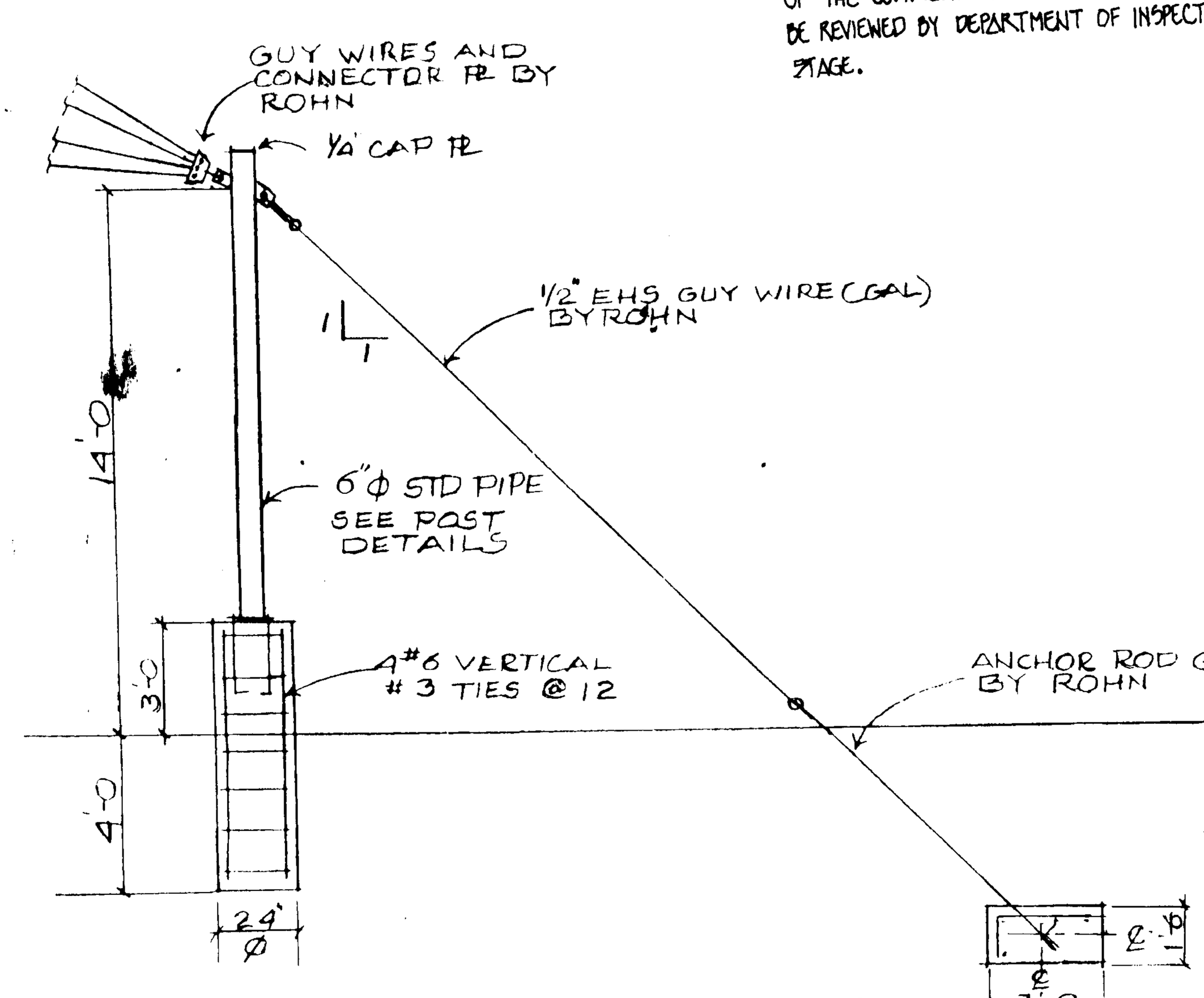
NOTE:
DEVELOPMENT ENGINEERING DIVISION ONLY REVIEWED FOR THE LOCATION OF THE COMMUNICATION TOWER. STRUCTURAL DESIGN FOR THIS TOWER WILL BE REVIEWED BY DEPARTMENT OF INSPECTION AND LICENSE AT BUILDING PERMIT STAGE.



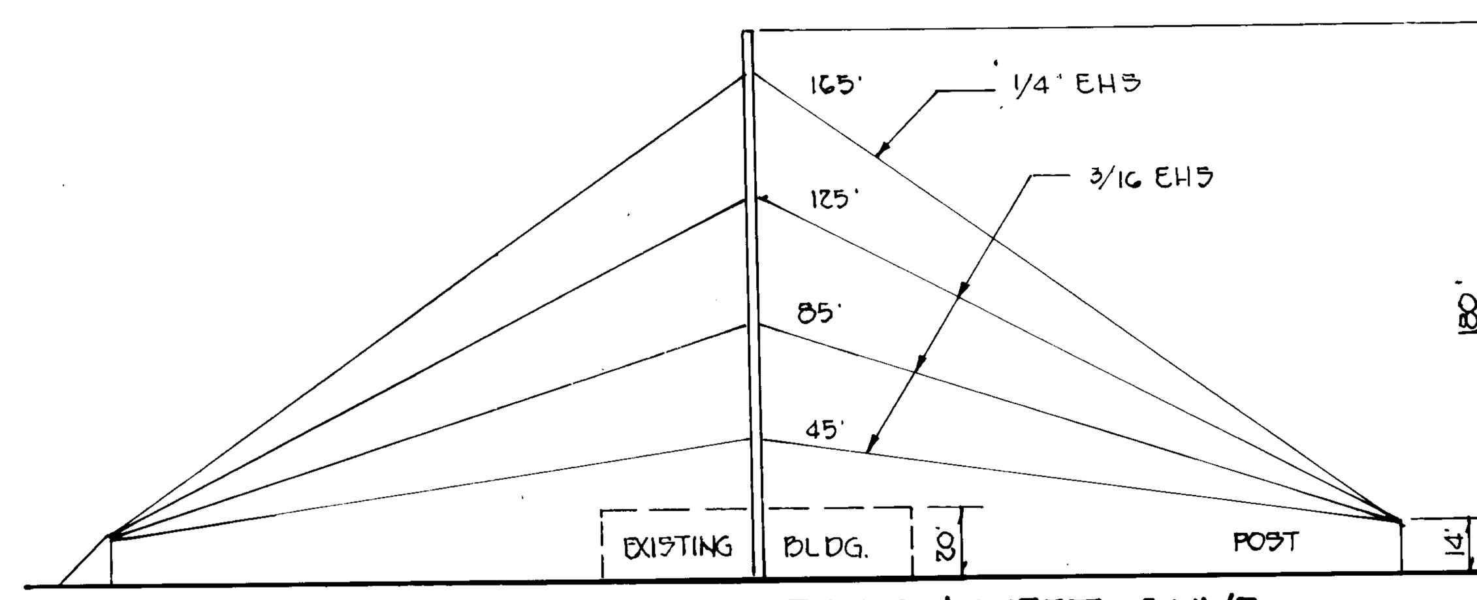
TOWER BASE DETAILS
3/4 = 1'-0



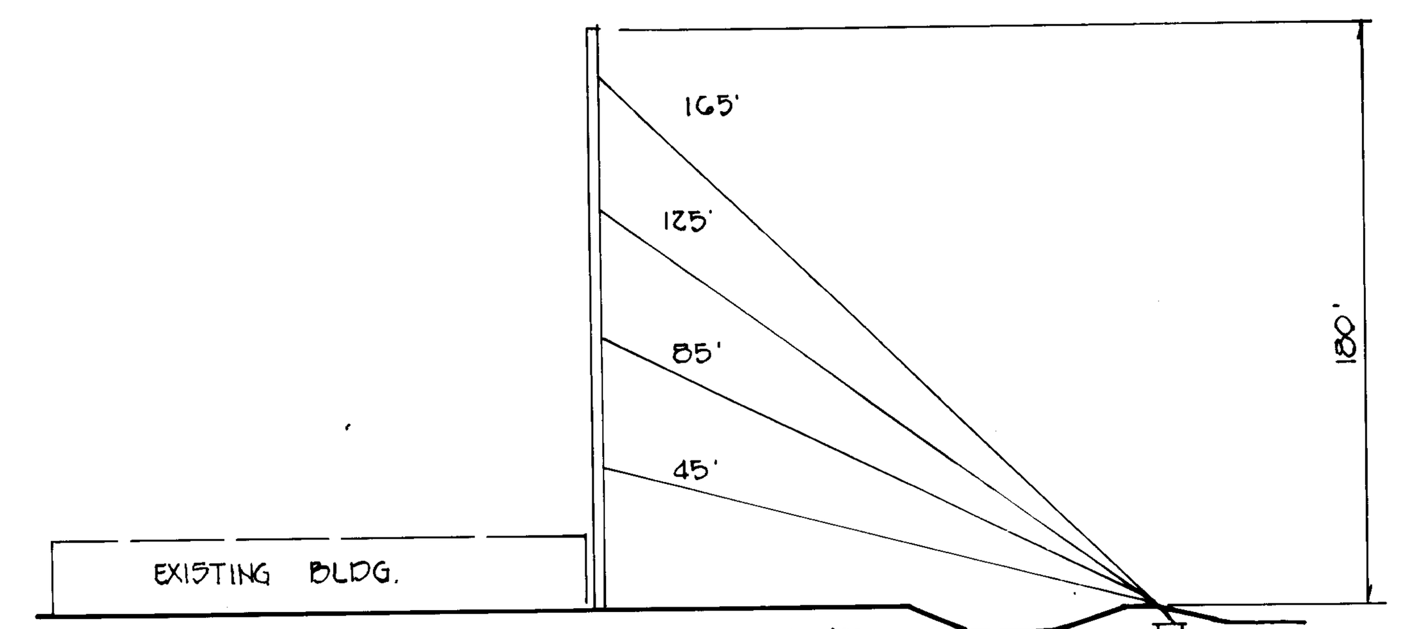
DETAIL - EAST & WEST GUY POST
3/4" = 1'-0



ELEVATION - EAST & WEST GUY POSTS
1/4" = 1'-0



ELEVATION - EAST & WEST GUYS
1" = 60'



ELEVATION - NORTH GUYS
1" = 60'

NOTE:
THE PURPOSE OF THIS PLAN IS TO ADD THE PROPOSED ANTENNA TOWER ON SHEET 1 ALONG WITH THE CONSTRUCTION DETAILS ON THIS SHEET.

DONALD SIMMONS ASSOCIATES
CONSULTING ENGINEERS
4637 S. LEISURE COURT
ELLICOTT CITY, MARYLAND 21043

STATE OF MARYLAND DONALD E. SIMMONS NO. 0804 REGISTERED PROFESSIONAL ENGINEER

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."

Signature of Engineer (Print name below signature) — Date 10/4/95

DEVELOPER'S CERTIFICATE

"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 the Environment 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 of Developer — Date 10/4/95

Reviewed for HOWARD SCD and meets Technical Requirements.

U.S.D.A.-Natural Resources Conservation Service — Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Howard SCD — 10/13/95 — Date

OWNER DEVELOPER

J.R. ENTERPRISES
15910 UNION CHAPEL ROAD
WOODBINE, MARYLAND 21797

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Development and Research — Date 10/30/95

Chief, Development Engineering Division — Date 10/24/95

Director — Date 10/30/95

SUBDIVISION J.R. ENTERPRISES			SECTION/AREA	PARCEL · 105	
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE 22	ELEC. DIST. 3RD	CENSUS TR.
WATER CODE			SEWER CODE		

NOTES AND DETAILS

REVISED SITE DEVELOPMENT PLAN

J.R. ENTERPRISES

TAX MAP 22 — PARCEL 105
3RD ELECTION DIST. — HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN — DATE: SEPTEMBER 27, 1995

SHEET 5 OF 5

SDP-82-64

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855