

**GENERAL NOTES**

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HRS. IN ADVANCE OF ANY CONSTRUCTION.
3. STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
4. ANY DAMAGE TO PUBLIC RIGHT OF WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
5. CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TELEPHONE 792-7272.
6. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION, CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES CURRENT REVISED EDITION.

**STREET LIGHTS**

☉ DENOTES A PENDANT MOUNTED 150 WATT HIGH PRESSURE SODIUM VAPOR LAMP ON A 25 FOOT STEEL POLE.

B. THE WETLAND (STREAM) BUFFER INDICATED ON THIS PLAN DOES NOT EFFECT THE INITIAL CONSTRUCTION OF A RESIDENTIAL UNIT ON ANY LOT, IT DOES PROHIBIT SUBSEQUENT CLEARING, GRADING OR CONSTRUCTION IN THE BUFFER AREA. MAINTENANCE OF RESIDENCES, LANDSCAPING AND UTILITIES IS PERMITTED.

APPROVED  
DEPARTMENT OF PUBLIC WORKS

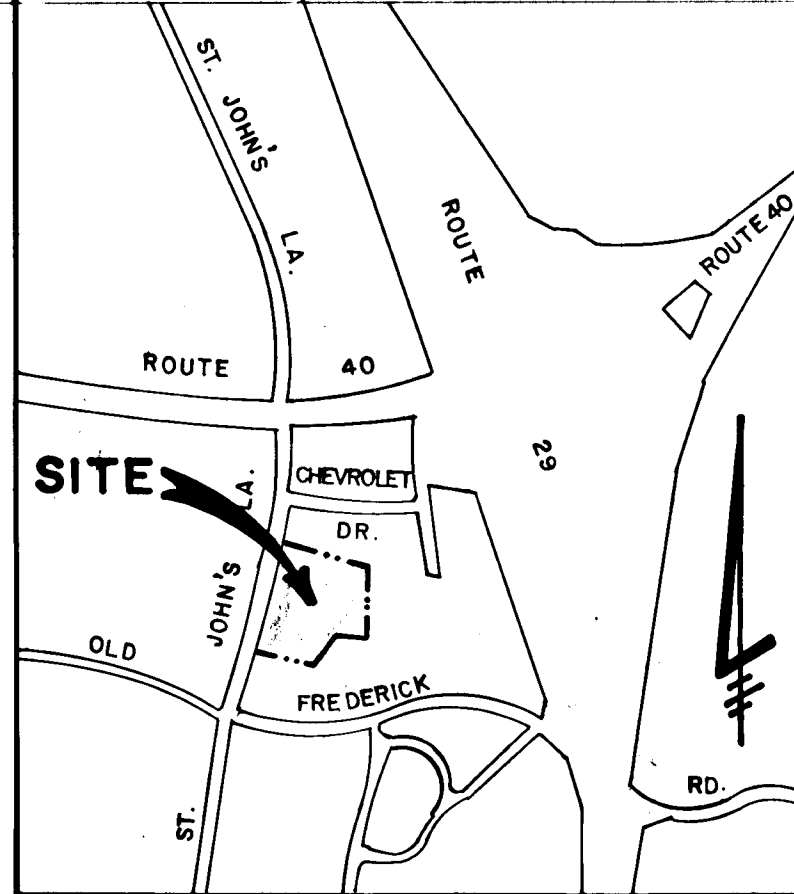
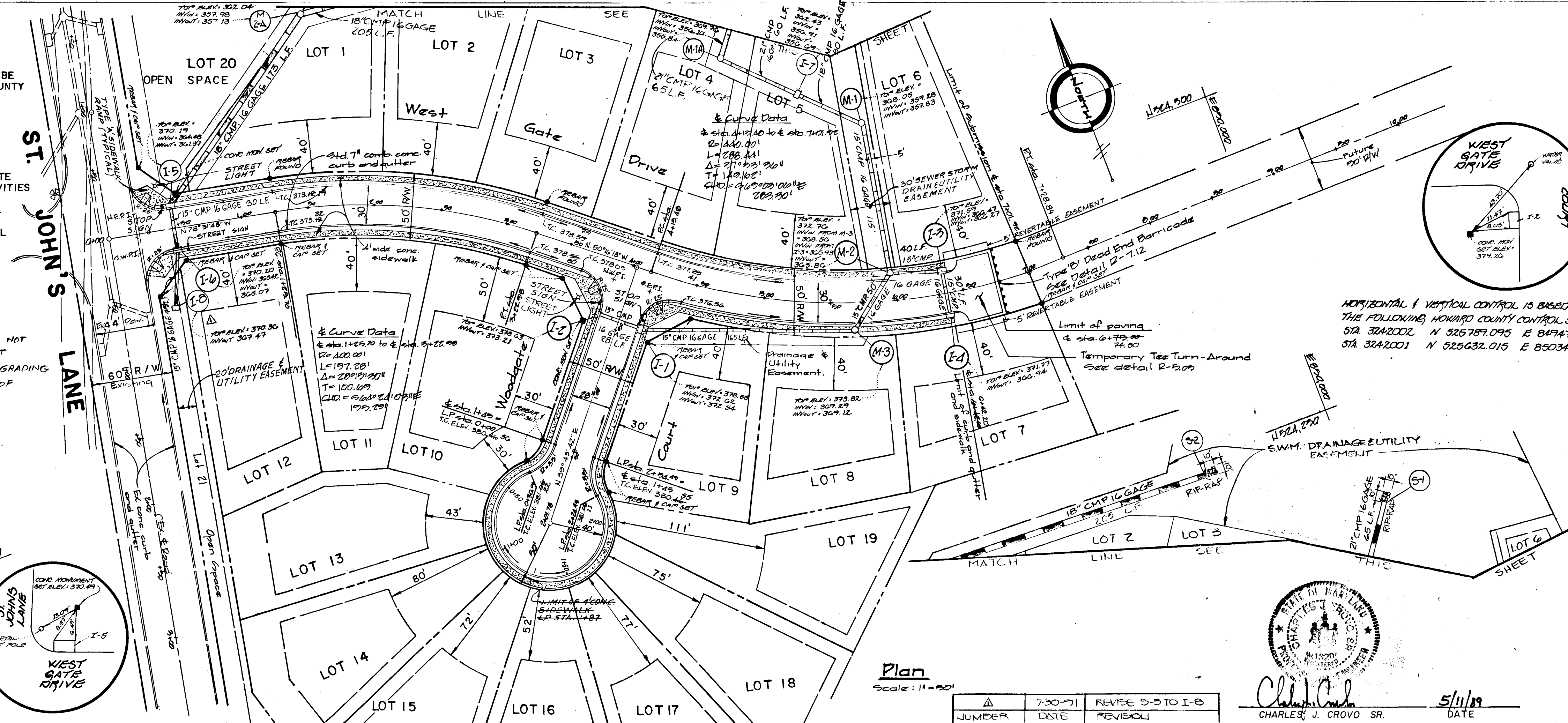
*Arnold J. Jaxon* 4/3/90  
*Spawville W. Welland* 3/21/90  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED  
DEPARTMENT OF PUBLIC WORKS

*William E. Roney* 4-4-90  
 CHIEF, BUREAU OF ENGINEERING

APPROVED  
DEPARTMENT OF PLANNING AND ZONING

*Mark J. DeLough* 4/17/90  
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



**VICINITY MAP**  
SCALE: 1" = 1200'

**BENCH MARK**  
B. M. 400 ELEV. 382.76  
R.R. SPIKE IN BASE OF 60" OAK TREE.  
SEE SHEET 3 FOR LOCATION.

**WESTGATE WOODS**  
 2<sup>ND</sup> ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND 21043

**PLAN AND PROFILE**  
 WEST GATE DRIVE

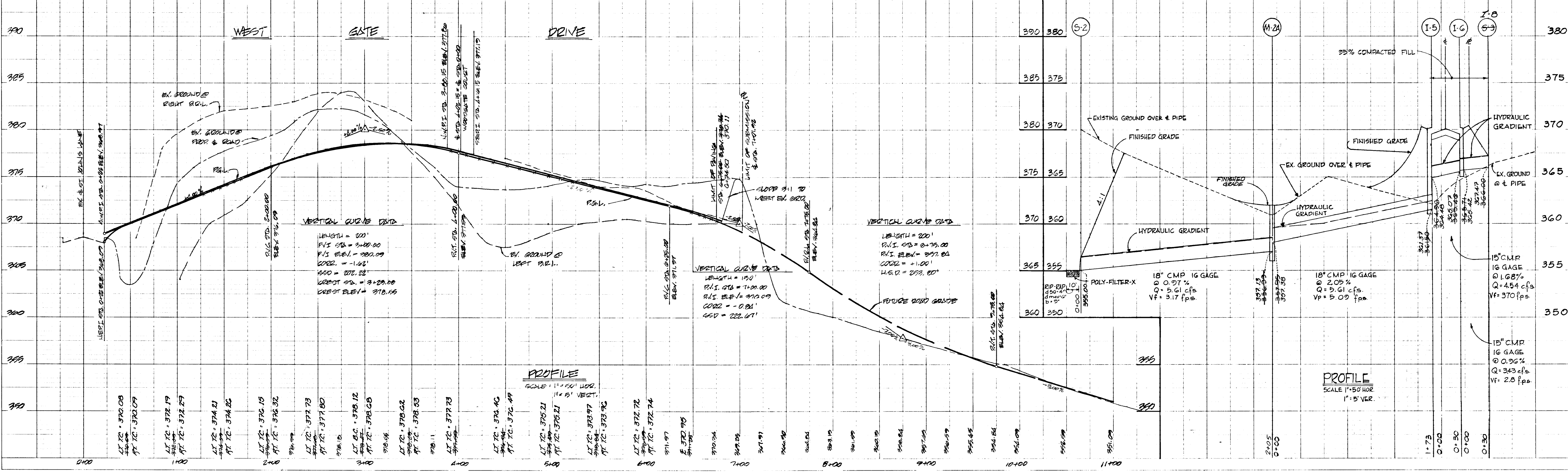
OWNER AND DEVELOPER  
 JACK PECTOR  
 C/O LAND DESIGN AND DEVELOPMENT, INC.  
 8307 MAIN STREET  
 ELLICOTT CITY, MARYLAND 21143

SCALE AS SHOWN DATE: 1/3/1990 DWG. NO. 1 OF 4  
 DES. Y. F. DRN. A. S. CHK. A. M. V.

FISHER, COLLINS AND CARTER, INC.  
 CIVIL ENGINEERS AND LAND SURVEYORS  
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21143

NUMBER	DATE	REVISION
1	7-30-91	REVISE 5-3 TO 1-8
2		REVISE 1-8 TO 1-8

CHARLES J. CROVO SR.  
 5/11/89  
 DATE



PLAN  
 SURVEYED, PLOTTED, CHECKED, NOTE BOOK NO. BY DATE

PROFILE  
 SURVEYED, PLOTTED, CHECKED, NOTE BOOK NO. BY DATE

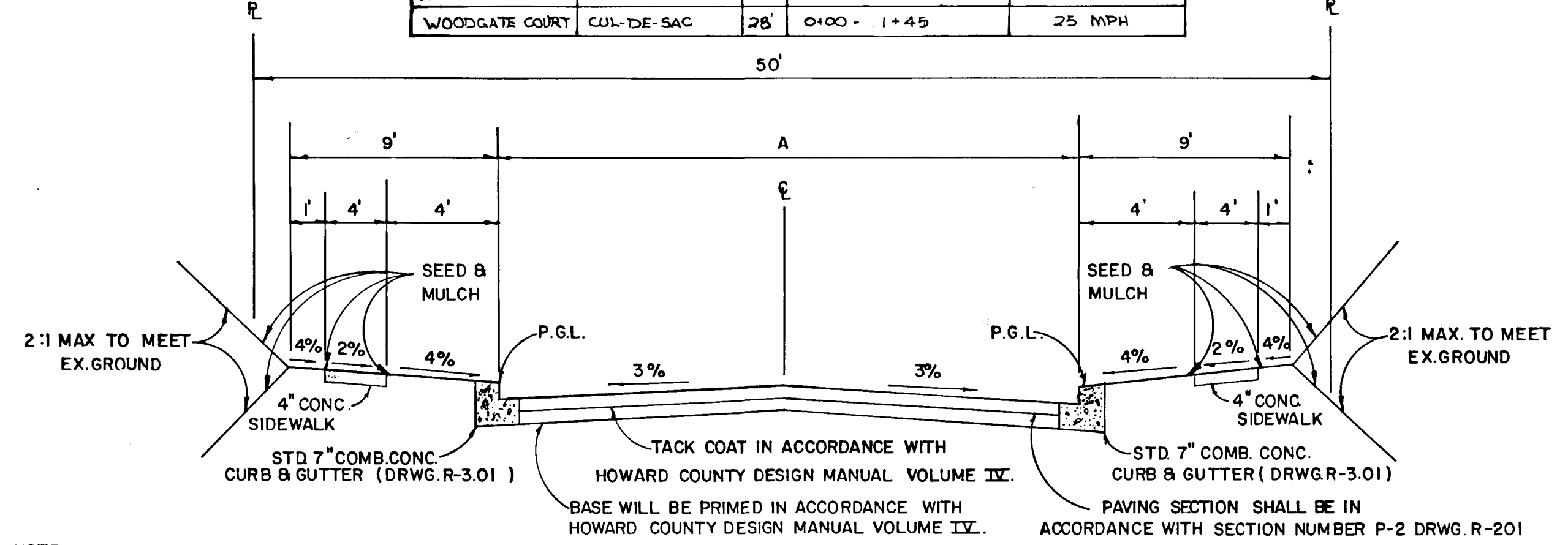
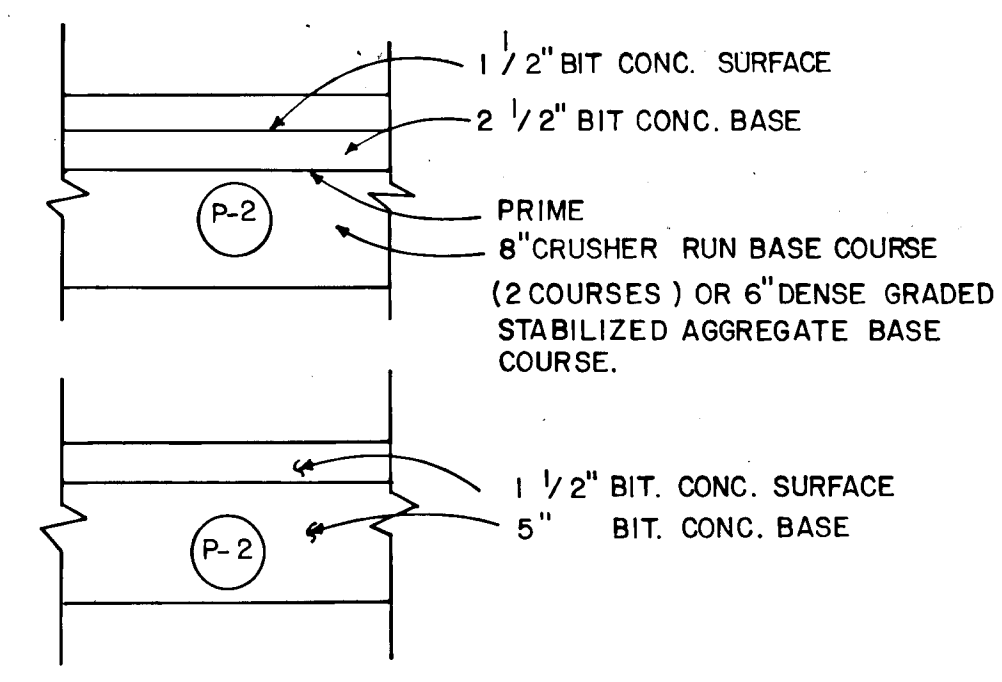
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DATE  
BY  
CUSTODY  
PLOTTED  
ALIGNMENT CHECKED  
NOTE BOOK  
NO.

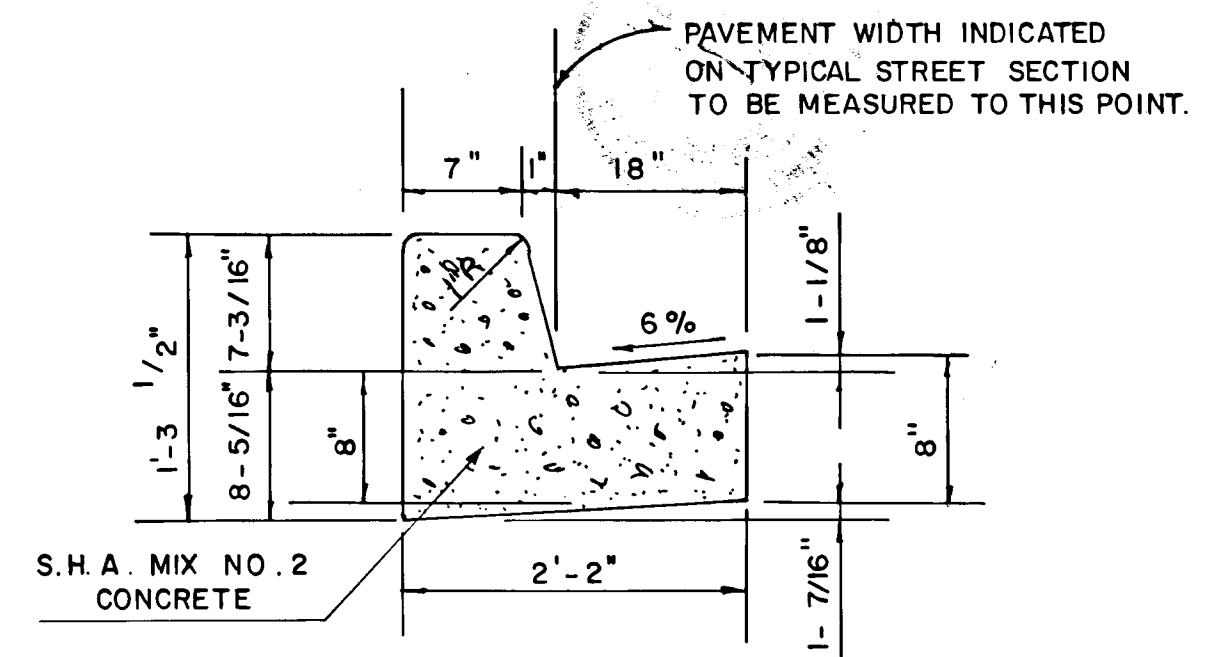
DATE  
BY  
SURVEYED  
GRADES CHECKED  
NOTE BOOK  
NO.

ROAD NAME	CLASSIFICATION	A	STA. LIMITS	DESIGN SPEED
WEST GATE DRIVE	LOCAL ROAD	30'	0+00 - 6+40	30 MPH
WOODGATE COURT	CUL-DE-SAC	28'	0+00 - 1+49	25 MPH



NOTE:  
ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL-VOLUME III STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.

TYPICAL ROADWAY SECTION  
NO SCALE



STANDARD 7" COMB. CONC. CURB & GUTTER  
NO SCALE

APPROVED  
DEPARTMENT OF PUBLIC WORKS  
*Arnold E. Jovan* 4/3/90  
DATE  
*Francis W. Welland* 3/27/90  
DATE  
CHIEF, BUREAU OF HIGHWAYS

APPROVED  
DEPARTMENT OF PUBLIC WORKS  
*William B. Ray* 4-4-90  
DATE  
CHIEF, BUREAU OF ENGINEERING

APPROVED  
DEPT. OF PLANNING AND ZONING  
*Frank J. Legler* 7/12/90  
DATE  
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT



*Charles J. Crovo Sr.*  
CHARLES J. CROVO SR.  
DATE 5/11/89

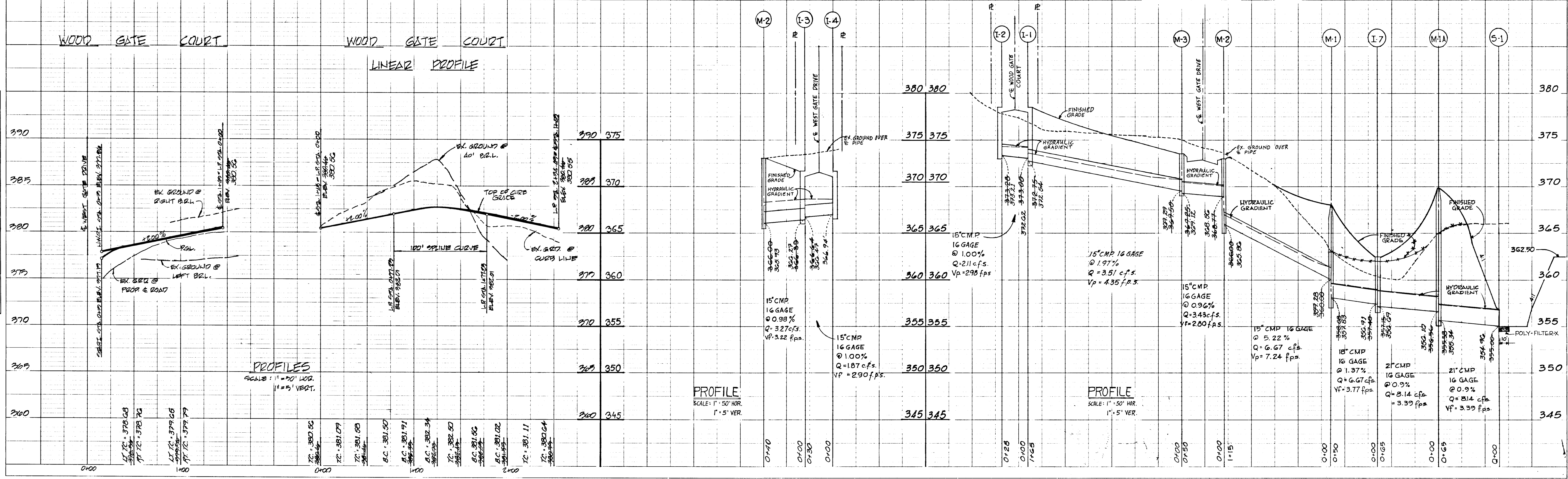
WESTGATE WOODS  
LOTS 1-21  
2<sup>ND</sup> ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND 21043

NOTES & DETAILS

OWNER AND DEVELOPER  
JACK PECTOR  
C/O LAND DESIGN AND DEVELOPMENT, INC.  
8307 MAIN STREET  
ELLCOTT CITY, MARYLAND 21043

SCALE AS SHOWN DATE 1/3/1990 DWG. NO 2 OF 4  
DES. Z. Y. F. DRN. A. S. CHK. A. M. V.

FISHER, COLLINS AND CARTER, INC.  
CIVIL ENGINEERS AND LAND SURVEYORS  
8388 COURT AVE. ELLCOTT CITY, MARYLAND 21043



1550



PERMANENT SEEDING NOTES:  
 APPLY TO GRADED OR CLEARED AREA 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, DISCING OR  
 OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.  
 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 400 LBS. PER 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 PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15,  
 SEED WITH 60 LBS. PER ACRE (1.4 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE  
 FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 60 LBS. PER ACRE (1.4 LBS/1000  
 PER ACRE AND 2 LBS. PER ACRE (.05 LBS/1000 SQ. FT.) OF WEEPING LOVEGRASS. DURING  
 THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY OPTION (1) 2 TONS  
 PER ACRE OF WELLS ANCHORED STRAW MULCH ANCHORED AS SOON AS POSSIBLE IN THE  
 SPRING, OPTION (2) USE SOIL, OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL  
 FESCUE AND MULCH WITH 2 TONS/ACRE WELLS ANCHORED STRAW.  
 MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED  
 SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY  
 AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 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 SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS  
 AND RESEEDINGS.

TEMPORARY SEEDING NOTES:  
 APPLY TO GRADED OR CLEARED AREAS LITTLER TO BE RESTORED WHERE A  
 SHORT-TERM VEGETATIVE COVER IS NEEDED.

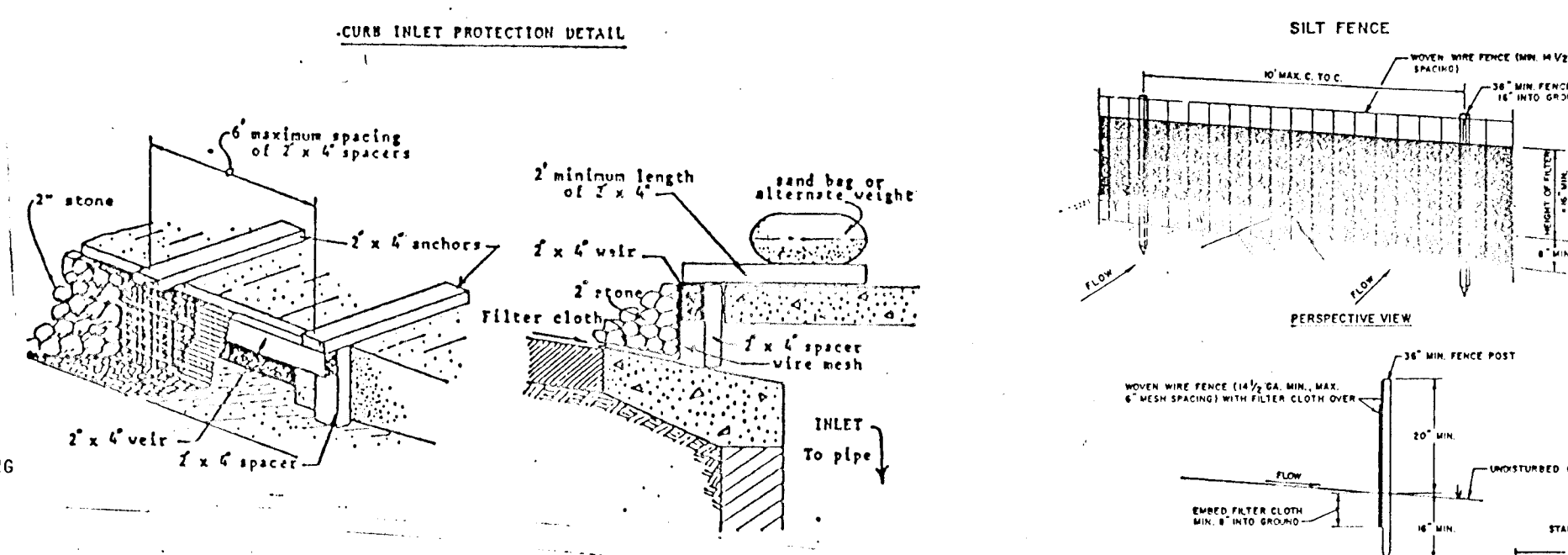
SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR  
 OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.  
 SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000  
 SQ. FT.)  
 SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER  
 15, SEED WITH 2 1/2 BUSSELS PER ACRE OF ANNUAL RYEGRASS (2.5 LBS/1000 SQ. FT.)  
 FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS PER ACRE OF WEEPING  
 LOVEGRASS (.07 LBS/1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28,  
 PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELLS ANCHORED STRAW MULCH AS  
 SOON AS POSSIBLE IN THE SPRING, OR USE SOIL.  
 MULCHING: APPLY 1 1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNROTTED  
 SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY  
 AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000  
 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS, ON SLOPES 8 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.

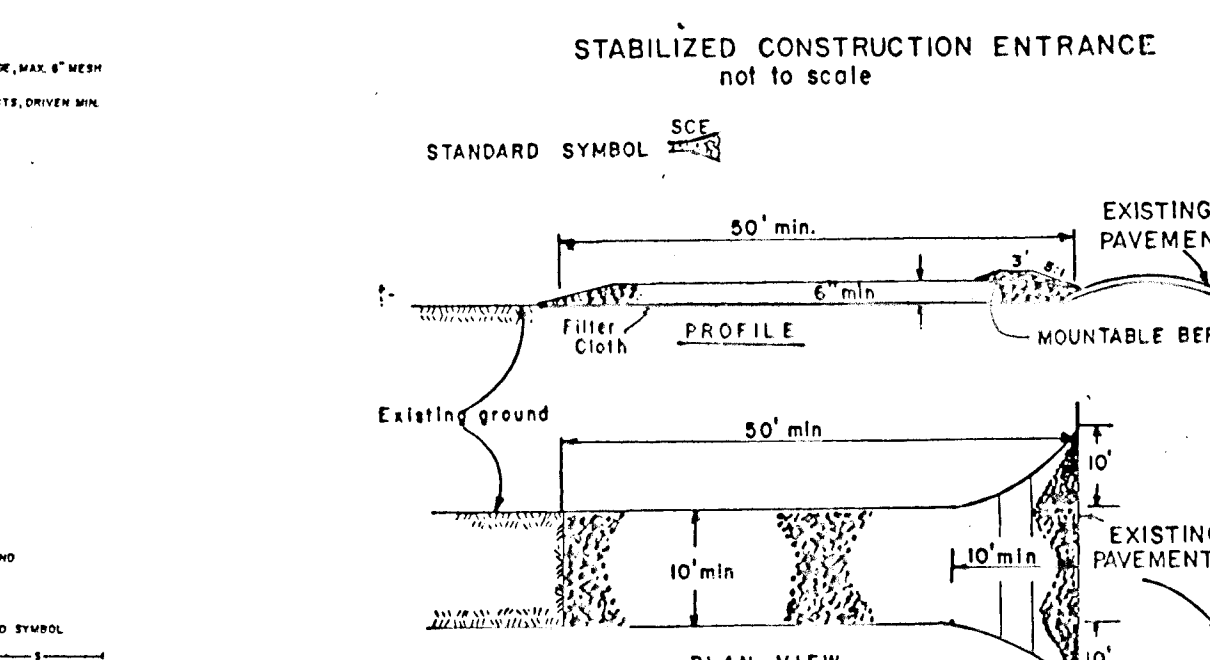
SEDIMENT CONTROL NOTES:

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE  
 OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION  
 (992-2437).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING  
 TO THE PROVISIONS OF THIS PLAN AND IN CONFORMANCE WITH THE  
 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND  
 SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR  
 TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS  
 FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DICES, PERIMETER SLOPES  
 AND ALL SLOPES GREATER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED  
 OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS  
 POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12,  
 OF THE HOWARD COUNTY DESIGN MANUAL, STANDARD AND SPECIFICATIONS FOR  
 ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD  
 SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND  
 SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT  
 SEEDING (SEC. 51) SOIL (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND  
 MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY  
 BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER  
 GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE  
 MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL  
 HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:  

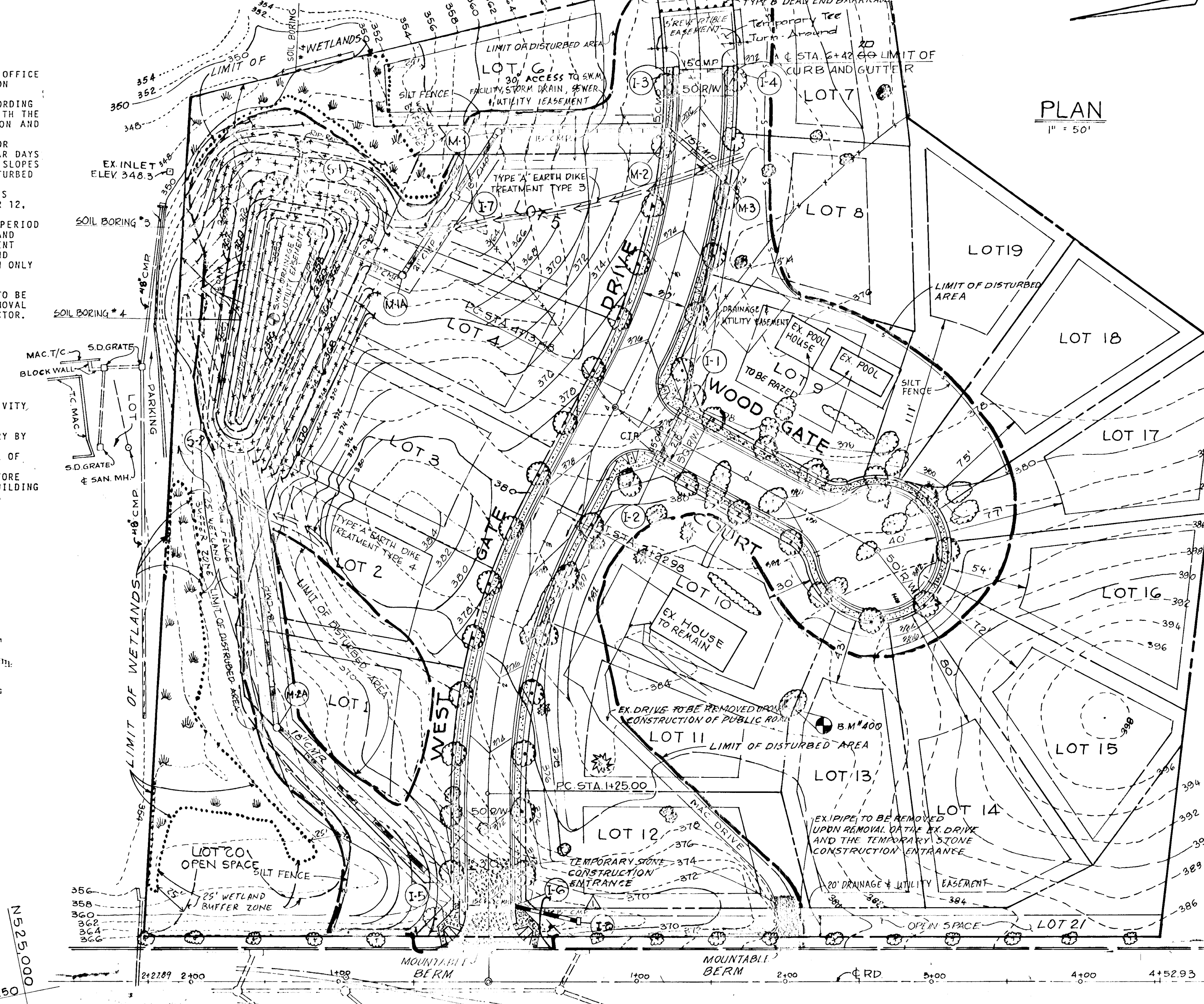
TOTAL AREA OF SITE	9.17	ACRES
AREA DISTURBED	4.65	ACRES
AREA TO BE ROOFED OR PAVED	0.98	ACRES
AREA TO BE VEGETATIVELY STABILIZED	3.54	ACRES
TOTAL CUT	6000	CU. YDS.
TOTAL FILL	5000	CU. YDS.
- ANY OFFSITE WASTE/BORROW AREA LOCATION  
 OFFSITE SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY,  
 FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF  
 DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY  
 THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF  
 THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF  
 INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE  
 PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING  
 OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS  
 INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.



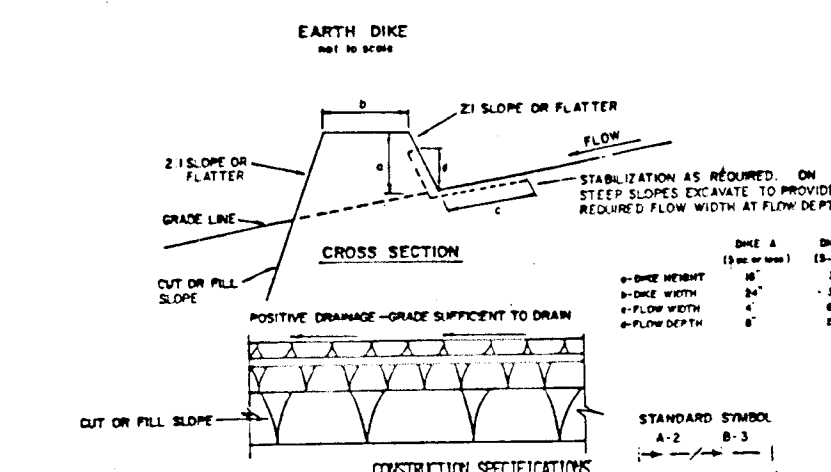
- Curb Inlet Protection.**
- Attach a continuous piece of wire mesh (30" min. width by  
 length plus 4") to the 2" x 4" weir (measuring throat  
 length plus 2") as shown on the standard drawing.
  - Place a piece of approved filter cloth (40-85 sieve) of the  
 same dimensions as the wire mesh over the wire mesh and  
 securely attach to the 2" x 4" weir.
  - Securely nail the 2" x 4" weir to 9" long vertical spacers to  
 be located between the weir and inlet face (max. 6" apart).
  - Place the assembly against the inlet throat and nail (minimum  
 2" length of 2" x 4" to the top of the weir at spacer  
 locations. These 2" x 4" anchors shall extend across the  
 inlet top and be held in place by sandbags or alternate weight.
  - The assembly shall be placed so that the end spacers are a  
 minimum 1' beyond both ends of the throat opening.
  - Form the wire mesh and filter cloth to the concrete gutter and  
 against the face of curb on both sides of the inlet. Place  
 clean 2" stone over the wire mesh and filter fabric in such  
 a manner as to prevent water from entering the inlet under  
 a second filter cloth.
  - This type of protection must be inspected frequently and the  
 filter cloth and stone replaced when clogged with sediment.
  - Assure that storm flow does not bypass inlet by installing  
 temporary earth or asphalt dikes directing flow into inlet.



- CONSTRUCTION SPECIFICATIONS**
- Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
  - Length - As required, but not less than 50 feet (except on a single resi-  
 dence lot where a 30 foot minimum length would apply).
  - Thickness - Not less than six (6) inches.
  - Width - Ten (10) foot minimum, but not less than the full width at  
 points where ingress or egress occurs.
  - Filter Cloth - Will be placed over the entire area prior to placing of stone.  
 Filter will not be required on a single family residence lot.
  - Surface Water - All surface water flowing or diverted toward construction  
 entrances shall be piped across the entrance. If piping is impractical,  
 a mountable beam with 5/8" slope will be permitted.
  - Maintenance - The entrance shall be maintained in a condition which will  
 prevent tracking or flowing of sediment onto public rights-of-way. This may  
 require periodic top dressing with additional stone as conditions demand  
 and repair and/or cleaning of any measures used to trap sediment. All  
 sediment applied, dropped, washed or tracked onto public rights-of-way must  
 be removed immediately.
  - Washing - Vehicles shall be cleaned to remove sediment prior to entrance onto  
 public rights-of-way. When washing is required, it shall be done on an area  
 established with stone and which drains into an approved sediment trap pipe  
 device.
  - Periodic inspection and needed maintenance shall be provided after each rain.



E 649,750  
 N 524,000



**CONSTRUCTION SEQUENCE**

- OBTAIN GRADING PERMIT.
- CONSTRUCT STORM DRAIN SYSTEM FROM S-3 TO S-2.
- CONSTRUCT STORM CONSTRUCTION ENTRANCES AND STABILIZED TEMPORARY SEEDING.
- CONSTRUCT PERIMETER SEDIMENT CONTROL STRUCTURES, DICES AND EARTH DIKE AS SHOWN ON THIS SHEET.
- CLEAR WEST GATE DRIVE AND WOOD GATE COURT.
- CONSTRUCT STORM DRAIN SYSTEM FROM S-1 TO S-1.
- INSTALL CURB INLET PROTECTION AT S-1 AND S-1.
- PLACE WEST GATE DRIVE AND WOOD GATE COURT TO SURGRADE.
- CONSTRUCT CONCRETE CURB AND GUTTER AND LAY BASE COURSE.
- GRADE SLOPES GREATER THAN 3:1, (8) 14 DAYS FOR ALL OTHER DISTURBED AREAS. INLETS SHALL BE OPENED UPON STABILIZATION OF GRADED AREAS.
- INSTALL PERIMETER SEDIMENT CONTROL STRUCTURES AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEM.
- DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STORM WATER MANAGEMENT POND AT THE CLEANOUT ELEVATION OF 359.42.
- REMOVE CONSTRUCTION ENTRANCES.
- INSTALL RIP-RAP AT S-1 AND S-2 AS SHOWN ON THIS PLAN.
- CLEAR BASE COURSE. APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE. STABILIZE ALL SHOULDERS USING PERMANENT SEEDING.
- REMOVE EARTH DIKE, SILT FENCE AND STRAW BALE DICES ONCE DISTURBED AREAS HAVE BEEN STABILIZED.
- ALL SLOPES GREATER THAN 3:1, (8) 14 DAYS FOR ALL OTHER DISTURBED AREAS ON THE PROJECT SITE.
- NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT.

**BORING #3**

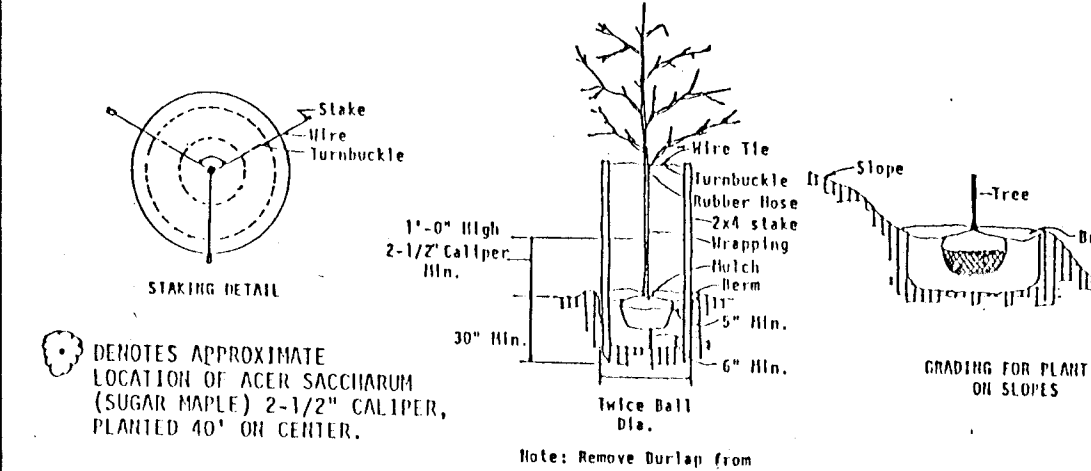
ELEV.	DESCRIPTION OF MATERIALS (CONDUIT)	DEPTH (FEET)	SCALE
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1

**BORING #4**

ELEV.	DESCRIPTION OF MATERIALS (CONDUIT)	DEPTH (FEET)	SCALE
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1
359.42	Dark Brown alluvium	0.00	1:1

**STRUCTURE SCHEDULE**

STRUCT.	TYPE	INV. IN.	INV. OUT.	TOP ELEVATION	STATION	REMARKS
I-1	A-5 INLET	373.00	373.74	373.74	WOODGATE COURT	S.D. 4.40
I-2	A-5 INLET	372.00	372.74	372.74	WOODGATE COURT	S.D. 4.40
I-3	A-5 INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
I-4	A-5 INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
I-5	A-5 INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
I-6	A-5 INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
I-7	A-5 INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
M-1	MANHOLE	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
M-2	MANHOLE	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
M-3	MANHOLE	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
S-1	SECTION	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
S-2	SECTION	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
I-O	TYPE 'D' INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
M-1A	STD. MANHOLE	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
M-2A	STD. MANHOLE	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40
I-7	YARD INLET	366.64	367.38	367.38	W151 GATE DRIVE	S.D. 4.40



NOTE: CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH "LANDSCAPE SPECIFICATIONS FOR DISTRICT-WASHINGTON METROPOLITAN AREAS". SUBSTITUTIONS TO THE ABOVE SPECIFICATIONS MAY BE PERMITTED, PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.

FISHER, COLLINS AND CARTER, INC.  
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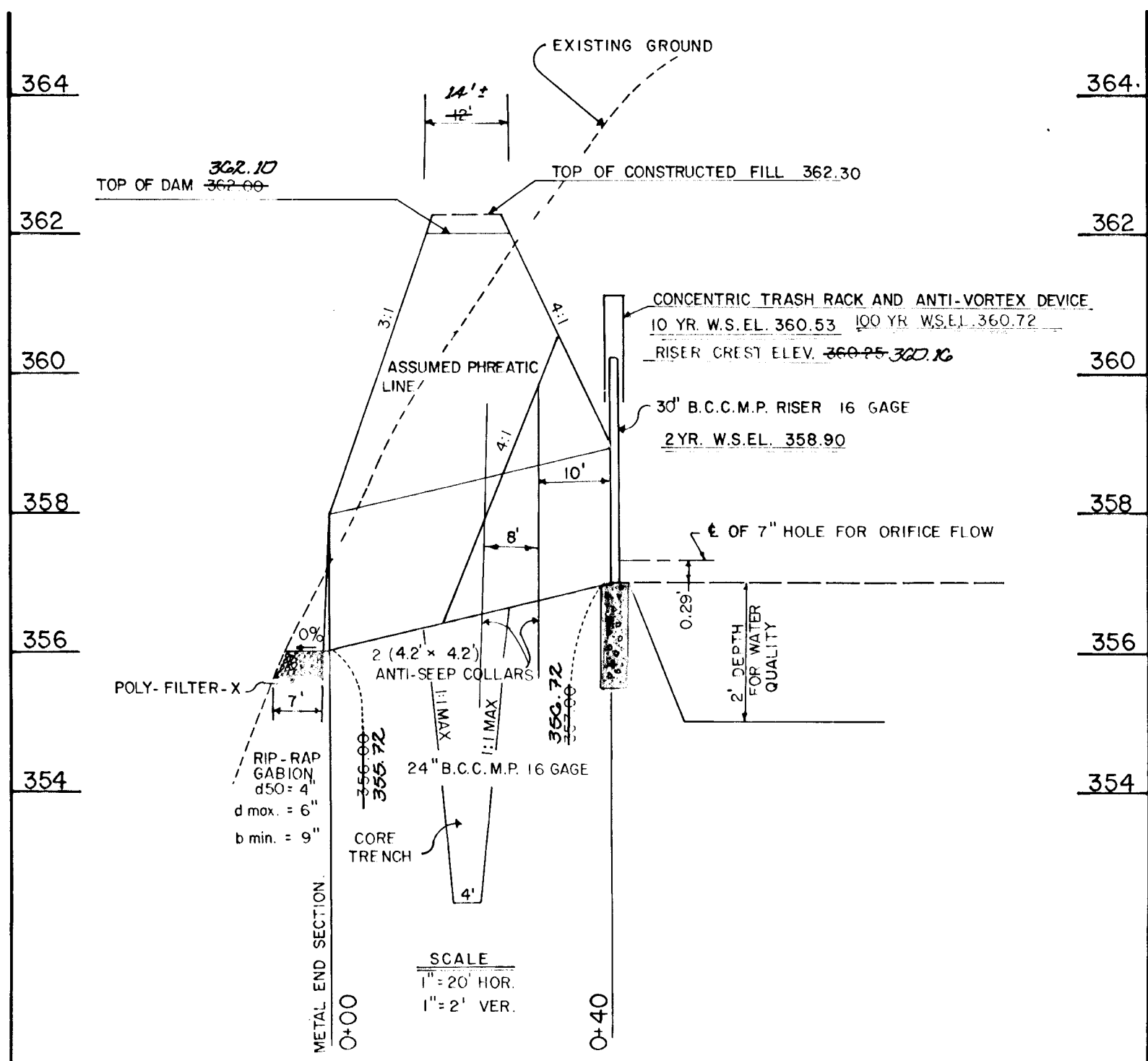
CHARLES J. CROVO SR.  
 DATE

STREET TREE GRADING  
 AND  
 SEDIMENT CONTROL PLAN  
 WESTGATE WOODS

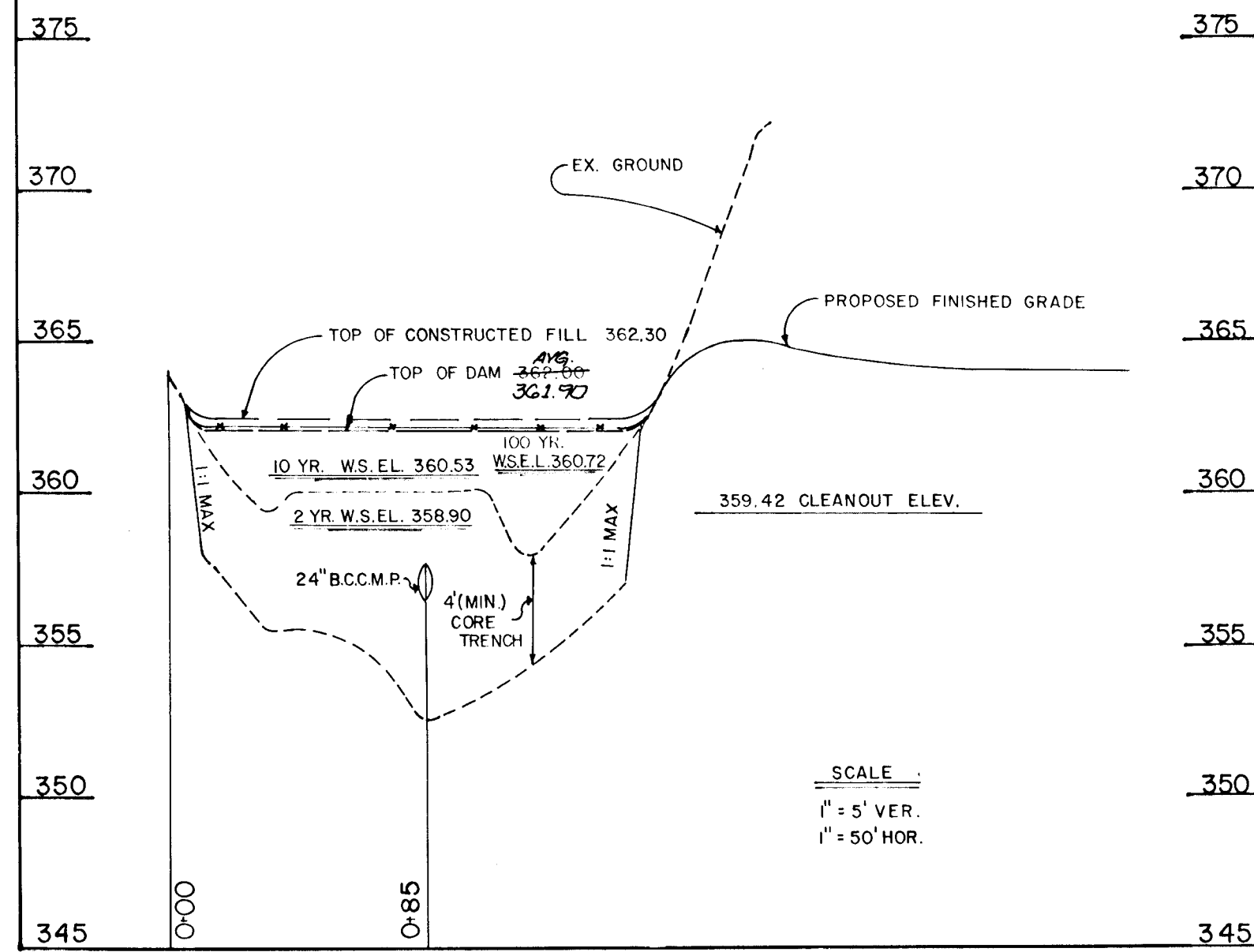
LOTS 1-21  
 2<sup>ND</sup> ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND 21043  
 SCALE: AS SHOWN JAN. 3, 1990

DATE

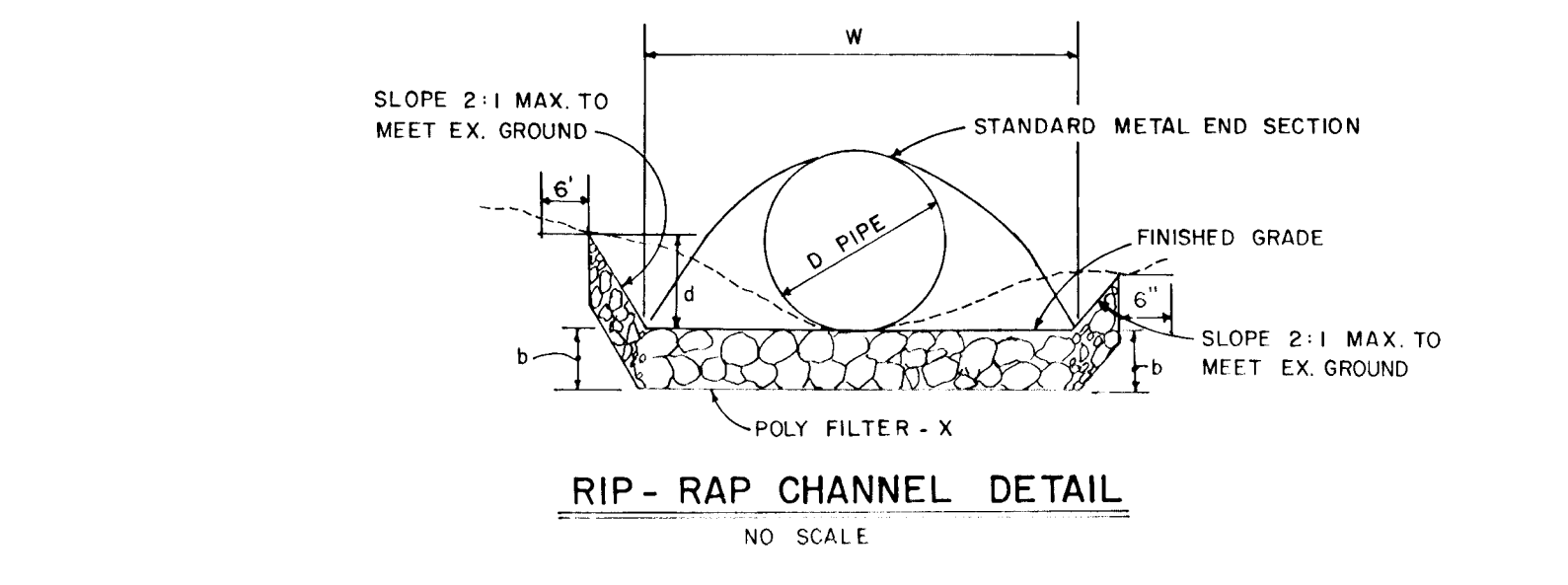




STORM WATER MANAGEMENT PROFILE THROUGH STRUCTURE

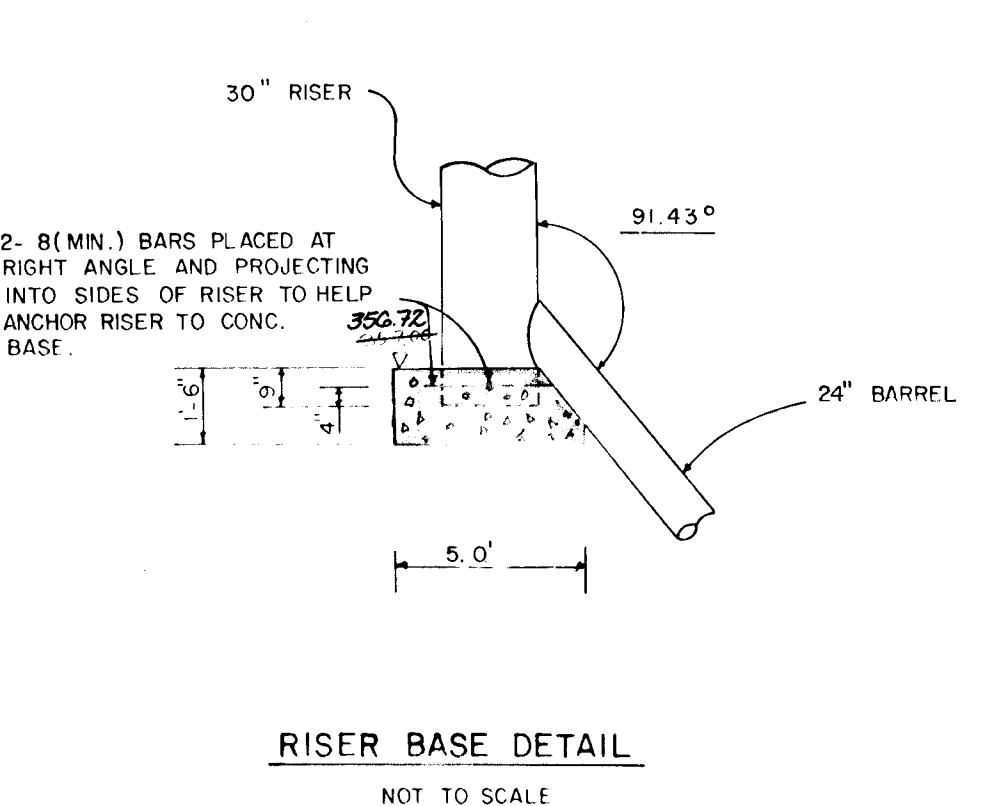


PROFILE ALONG C OF DAM



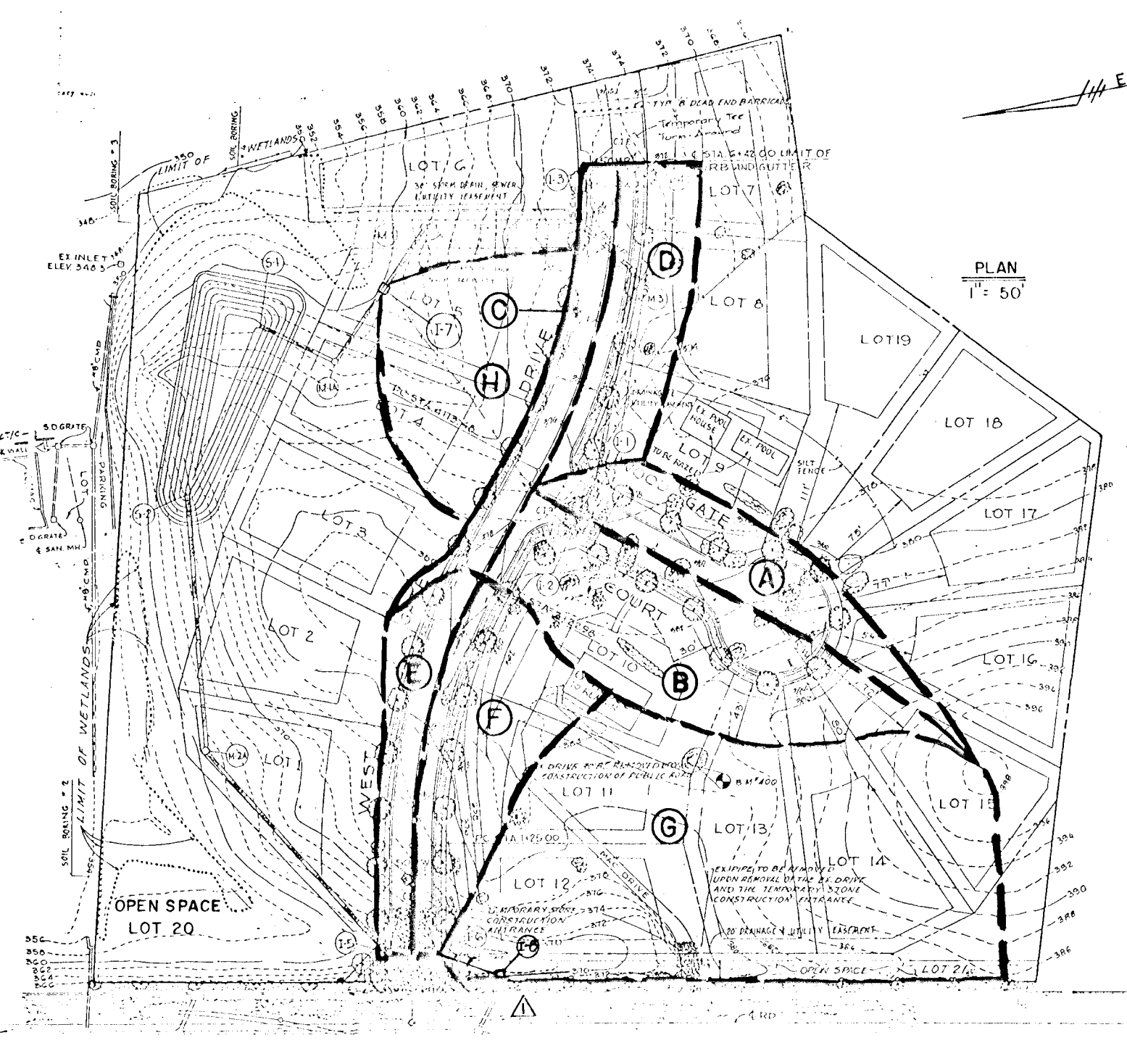
RIP RAP CHANNEL DESIGN DATA

STRUCTURE	A	P ft.	R	R <sup>2</sup> /3	S %	S 1/2	n	Q c.f.s.	V f.p.s.	d ft.	W ft.	RIP RAP SIZE d 50	b
S-1	5.50	12.24	0.45	0.59	0.5%	0.07	0.04	8.48	1.54	0.5	10	4"	9"
S-2	4.46	11.01	0.41	0.55	0.5%	0.07	0.04	6.33	1.42	0.45	9	4"	9"



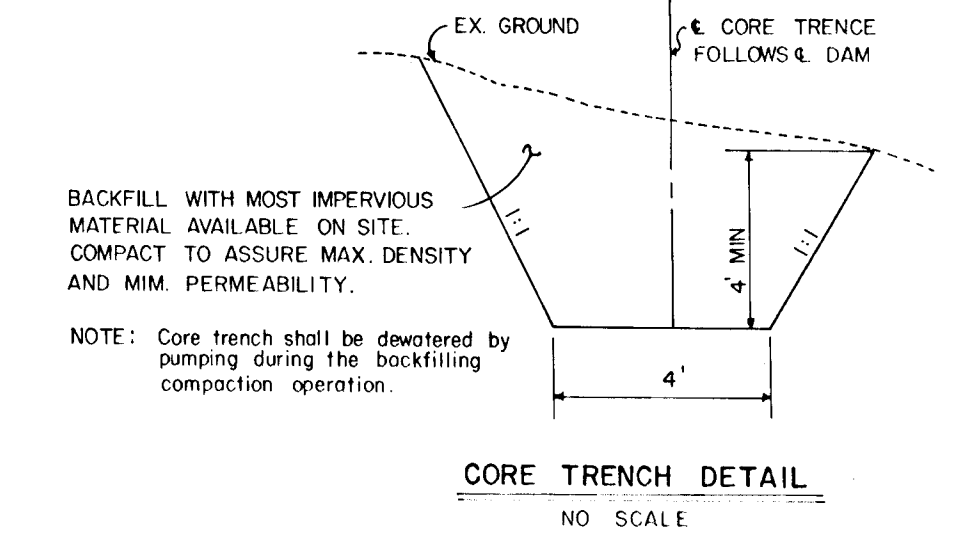
RISER BASE DETAIL

NOTES:  
1. The concrete base shall be poured in such a manner to insure that the concrete fills the bottom of the riser to the invert of the outlet pipe to prevent the riser from breaking away from the base.



DRAINAGE AREA MAP

SCALE: 1" = 100'

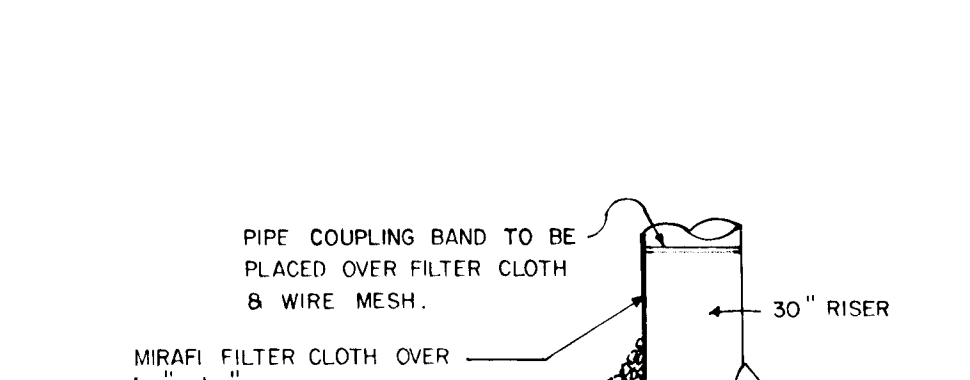


CORE TRENCH DETAIL

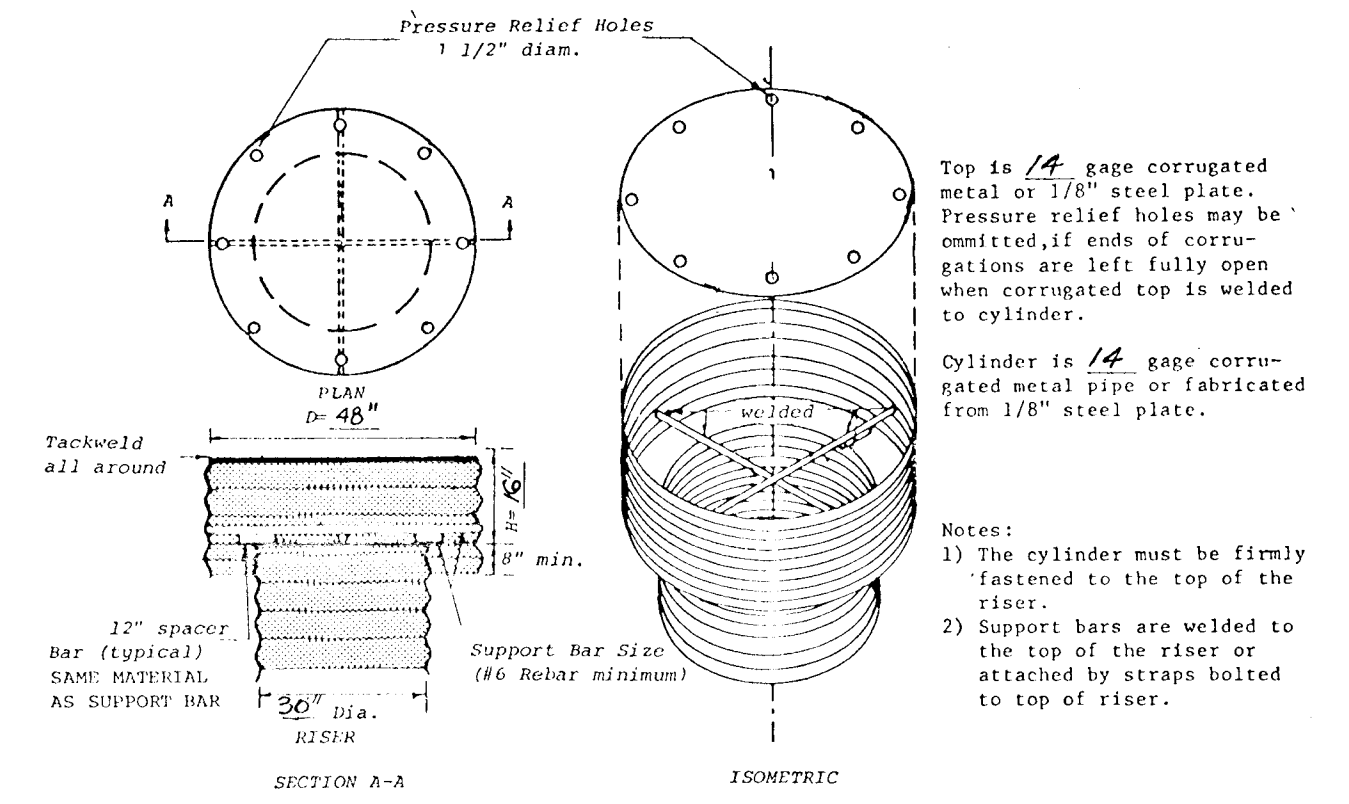
DRAINAGE AREA	GOING TO	AREA A.C.	Cw	ZONED
A	I-1	0.394	0.60	R-20
B	I-2	0.620	0.55	R-20
C	I-3	0.459	0.60	R-20
D	I-4	0.465	0.60	R-20
E	I-5	0.359	0.60	R-20
F	I-6	0.415	0.55	R-20
G	I-8	1.564	0.43	R-20
H	I-7	0.20	0.35	R-20

NOTE: Core trench shall be dewatered by pumping during the backfilling and compaction operation.

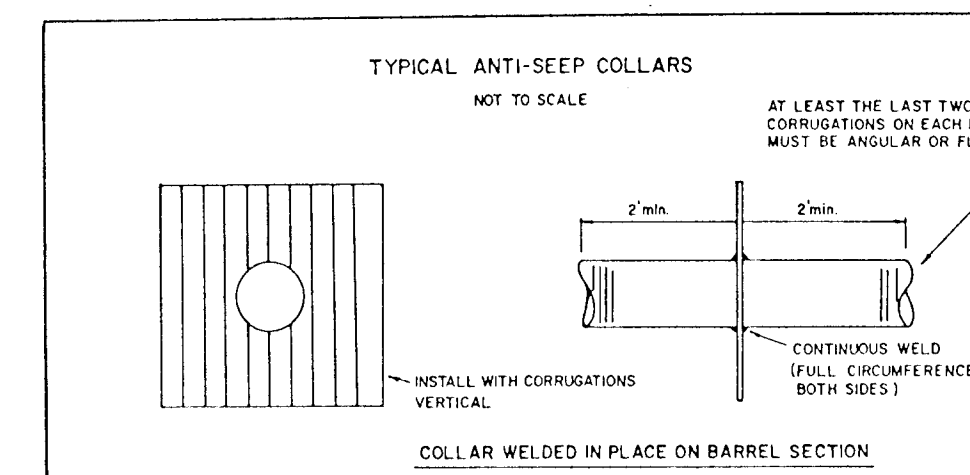
BACKFILL WITH MOST IMPERVIOUS MATERIAL AVAILABLE ON SITE. COMPACT TO ASSURE MAX. DENSITY AND MIN. PERMEABILITY.



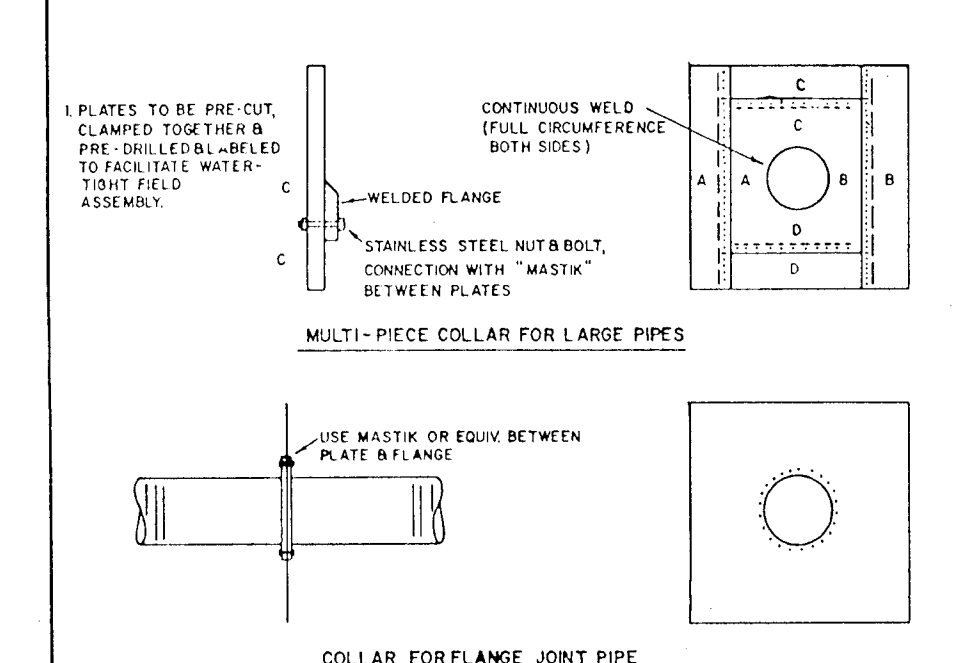
BLOCKING DETAIL



CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE (not to scale)



TYPICAL ANTI-SEEP COLLARS



COLLAR FOR FLANGE JOINT PIPE

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 restoration, 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, over-size 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 along the length of the embankment shall be increased at least 10 percent above the design elevation (including free-board) unless otherwise shown on the plans. All fill material shall be CL or ML, as approved by Soils Engineer.

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.

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 4 feet. The depth shall be at least 4 feet or as shown on the plans. The side slopes of the trench shall be 1:1 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. Contact to 92% of AASHTO T-99 density. Materials shall be CL or ML as approved by Soils Engineer.

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 4 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 4 feet to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a structure or pipe unless there is a compacted fill of 2 feet or greater over the structure or pipe.

IV. PIPE CONDUITS  
A. CORRUGATED METAL PIPE  
1. Materials - Metal Pipe - This pipe and its appurtenances shall conform to the requirements of AASHTO Specification M-186 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 slightly condition. All exposed surfaces of the embankment, spillway and borrow areas shall be stabilized by permanent seeding and applying straw mulch in accordance with "Standards and Specifications for Soil Erosion and Sediment Control in Urbanizing Areas" immediately after finish grading.

Fertilizer: 10-10-10 @ 11.5 lbs./1000 sq. ft.  
Seed: Crownvetch inoculated @ 0.5 lbs./1000 sq. ft.  
Mulch: 1/2" Tall Fescue @ 1.5 lbs./1000 sq. ft.  
Asphalt Tie-down: Straw @ 80 lbs./1000 sq. ft.  
Flat areas @ 8 gal./1000 sq. ft.  
@ 5 gal./1000 sq. ft.

STORM WATER MANAGEMENT POND CERTIFICATION AND APPROVAL

ENGINEER'S CERTIFICATE  
"I, CHARLES J. GROVO SR., ENGINEER, HEREBY CERTIFY THAT THE ABOVE PLAN IS A PRACTICAL AND WORKABLE PLAN BASED ON A REASONABLE INVESTIGATION 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' DRAWING OF THE POND WITHIN 30 DAYS OF COMPLETION."

DATE: 5/1/90

DEVELOPER'S CERTIFICATE  
"I/WE 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' DRAWING OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE THE HOWARD SOIL CONSERVATION DISTRICT TO CONDUCT ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DATE: 3-19-90

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND STRUCTURE AND SEDIMENT CONTROL.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
CHIEF, DIVISION OF COMMUNITY DEVELOPMENT AND LAND DEVELOPMENT  
DATE: 4/3/90

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DATE: 3/19/90

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
DATE: 4-4-90

WESTGATE WOODS  
LOTS 1-21  
2 ND ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND 21043  
SCALE: AS SHOWN JAN. 3, 1990  
SHEET 4 OF 4

NOTE: HAZARD CLASSIFICATION OF POND CLASS 'A'

OWNER AND DEVELOPER  
JACK PECTOR  
C/O LAND DESIGN AND DEVELOPMENT, INC.  
8307 MAIN STREET  
ELLICOTT CITY, MARYLAND 21043

STATE OF MARYLAND  
COUNTY OF HOWARD  
CHARLES J. GROVO SR.  
DATE: 5/1/90

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

NO.	DATE	REVISION
1	7-30-91	REVISED S-3 TO I-6/CORE TRENCH DETAIL

1550

F-89-22G