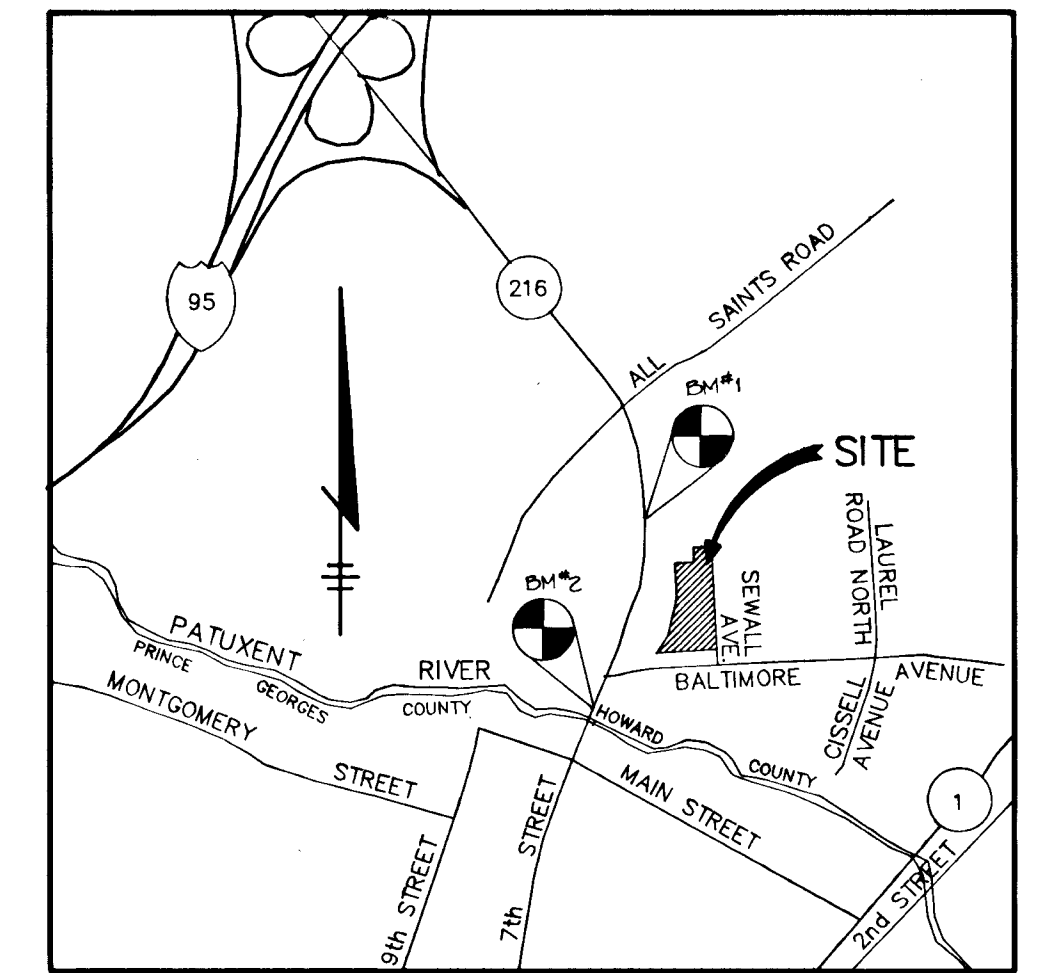


SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN AND PROFILE SEWALL AVENUE
3	PLAN AND PROFILE NORFOLK AVENUE
4	STORM DRAIN PROFILES AND DETAILS
5	SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP
6	STORMWATER MANAGEMENT PROFILES AND DETAILS
7	LANDSCAPE PLAN

ROADS AND STORM DRAINS PATUXENT HEIGHTS 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=200'

GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- APPROXIMATE LOCATION 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. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

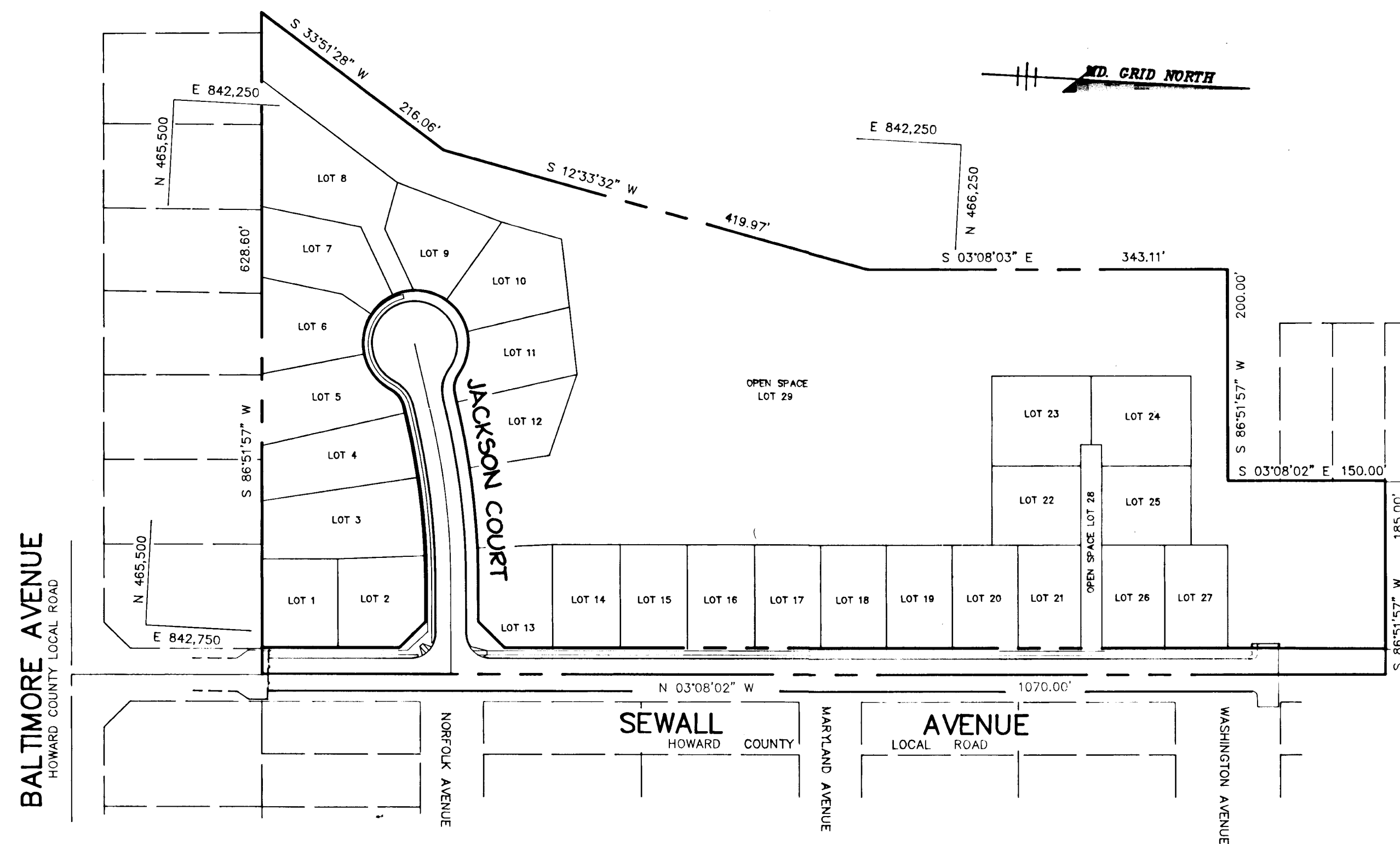
MISS UTILITY	1-800-257-777
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 or 3554
BALTIMORE GAS AND ELECTRIC CO.	538-8000
HOWARD COUNTY BUREAU OF UTILITIES	313-4800
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272
COLONIAL PIPELINE	795-1390
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 25' RADIUS UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

ALL 50' RIGHT-OF-WAYS 30 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEAL LEVEL DATUM, 1929.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED R-SC PER 8-2-85 COMPREHENSIVE ZONING PLAN.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED JUNE, 1990 BY RIEMER MUEGGE & ASSOC., INC.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- SEE OFFICE OF PLANNING AND ZONING FILE NO'S. S-89-88 & P-91-12
- LIGHT POLES AND FIXTURES FOR STREET LIGHTS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME III - ROAD AND BRIDGES, PAGE 4A-26.
- THE STORMWATER MANAGEMENT FACILITY PROPOSED FOR THIS SITE IS A CLASS "A" HAZARDOUS FACILITY. IN THE EVENT OF THE FAILURE OF THE EMBANKMENT, DAMAGE WILL BE LIMITED TO FLOODPLAINS AND COUNTY ROADS.
- REF: COUNCIL RESOLUTION #226 (ADOPTED 11/4/91), PERMITTED THE TRANSFER OF HOWARD COUNTY'S RIGHTS, TITLE AND INTERESTS IN SEWALL AVENUE TO WARD DEVELOPMENT CORPORATION FOR THE CONSTRUCTION OF SEWALL AVENUE AS A PUBLIC ROAD.
- DISTURBANCE WITHIN THE WETLANDS OR WITHIN THE ENVIRONMENTAL BUFFERS IS PROHIBITED, EXCEPT IN ACCORDANCE WITH THE PERMITS.
- HANDICAP RAMPS ARE TO MEET CURRENT A.D.A. STANDARDS.

BENCHMARKS

B.M. #1 ELEV 195.395
 HO CO MON #1741003, LOCATED ON RT 216 APPROX 1166' SOUTH OF THE INTERSECTION WITH ALL SAINTS RD 15' ± EAST OF EDGE OF PAVING ± 8' ± EAST OF GUARD RAIL. N467,020.503; E 842,118.705

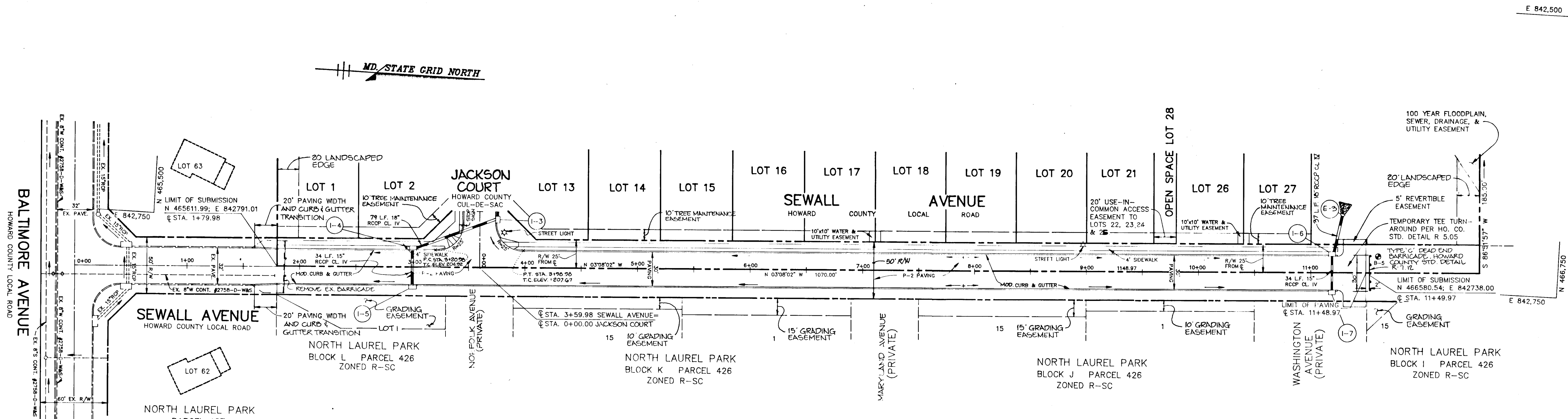
B.M. #2 ELEV 197.365
 HO CO MON #1741002, LOCATED ON RT 216 APPROX 0.4 MILES SOUTH OF THE INTERSECTION WITH ALL SAINTS RD 10' ± EAST OF EDGE OF PAVING. N466,043.185; E 841,993.790



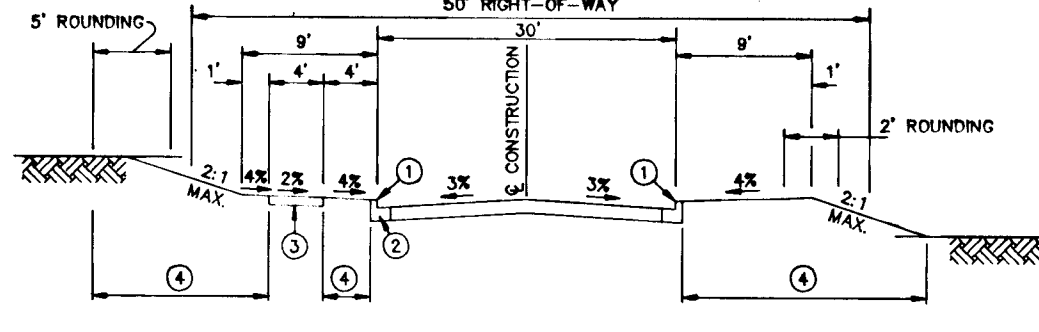
PLAN
SCALE: 1"=100'

AS BUILT CERTIFICATE	
ARTHUR E. MUEGGE P.E.#8707	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND LAND DEVELOPMENT	
<i>Arthur E. Muegge</i>	5/4/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>John A. ...</i>	8/27/92
CHIEF, LAND DEVELOPMENT DIVISION	DATE
<i>John M. ...</i>	7/1/92
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>John ...</i>	8-28-92
CHIEF, BUREAU OF ENGINEERING	DATE JH
DATE NO.	REVISION
OWNER / DEVELOPER	
WARD DEVELOPMENT COMPANY, INC. 1300 PICCARD DRIVE ROCKVILLE, MARYLAND 20850	
PROJECT	
PATUXENT HEIGHTS	
AREA	
TAX MAP NO. 50 PARCEL 426 BLOCK C, LOTS 7, & 8 BLOCK D, LOTS 1 TO 12 BLOCK E, LOTS 1 TO 12 BLOCK F, LOTS 1 TO 6 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
TITLE SHEET	
RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 301-997-8900 FAX: 301-997-9282	
7-21-92 DATE	S-89-88 P-91-12
	DESIGNED BY: CB
<i>Arthur E. Muegge</i>	DRAWN BY: CADD/CB
	PROJECT NO: 57806
	DATE: JULY 21, 1992
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 7

1696



PLAN
SCALE: 1"=50'



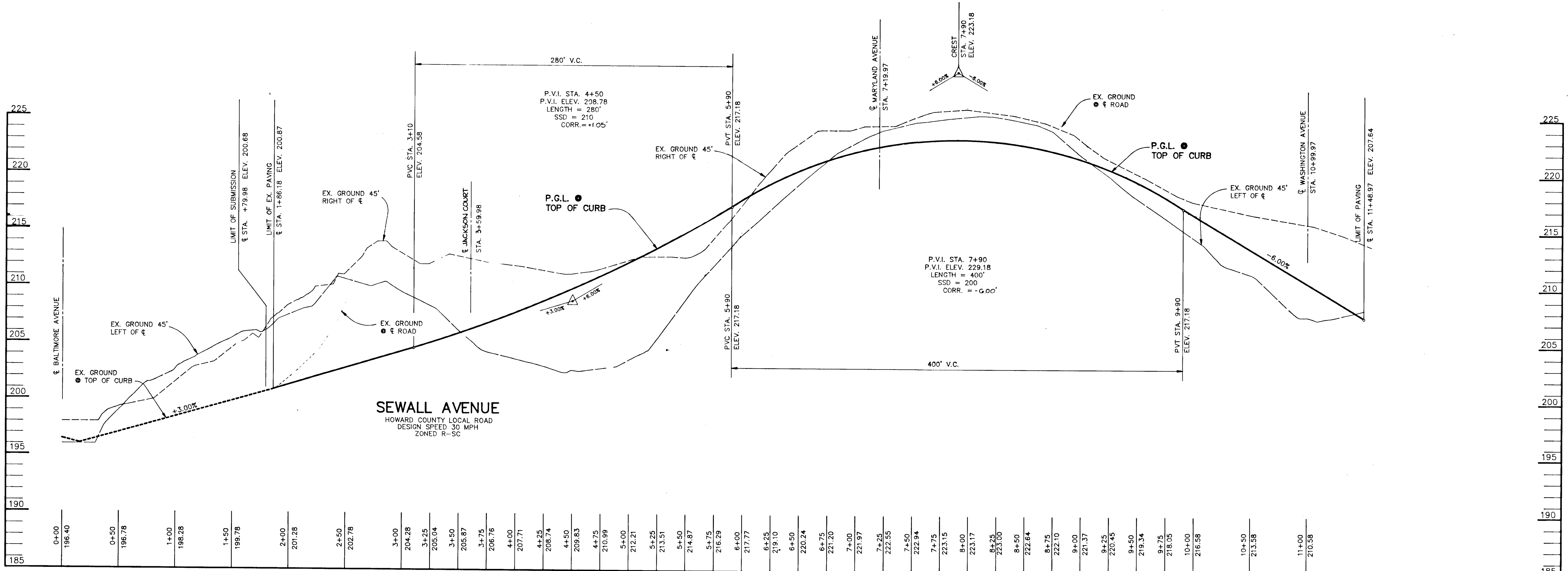
SEWALL AVENUE STA. 1+86.18 TO STA. 11+48.97

CLOSED SECTION

- ① PROFILE GRADE LINE (P.G.L.)
- ② MODIFIED COMB. CURBS AND GUTTER.
- ③ 4" CONCRETE SIDEWALK, SEE PLAN.
- ④ INDICATES 2" TOPSOIL, SEED AND MULCH.

TYPICAL ROAD SECTION

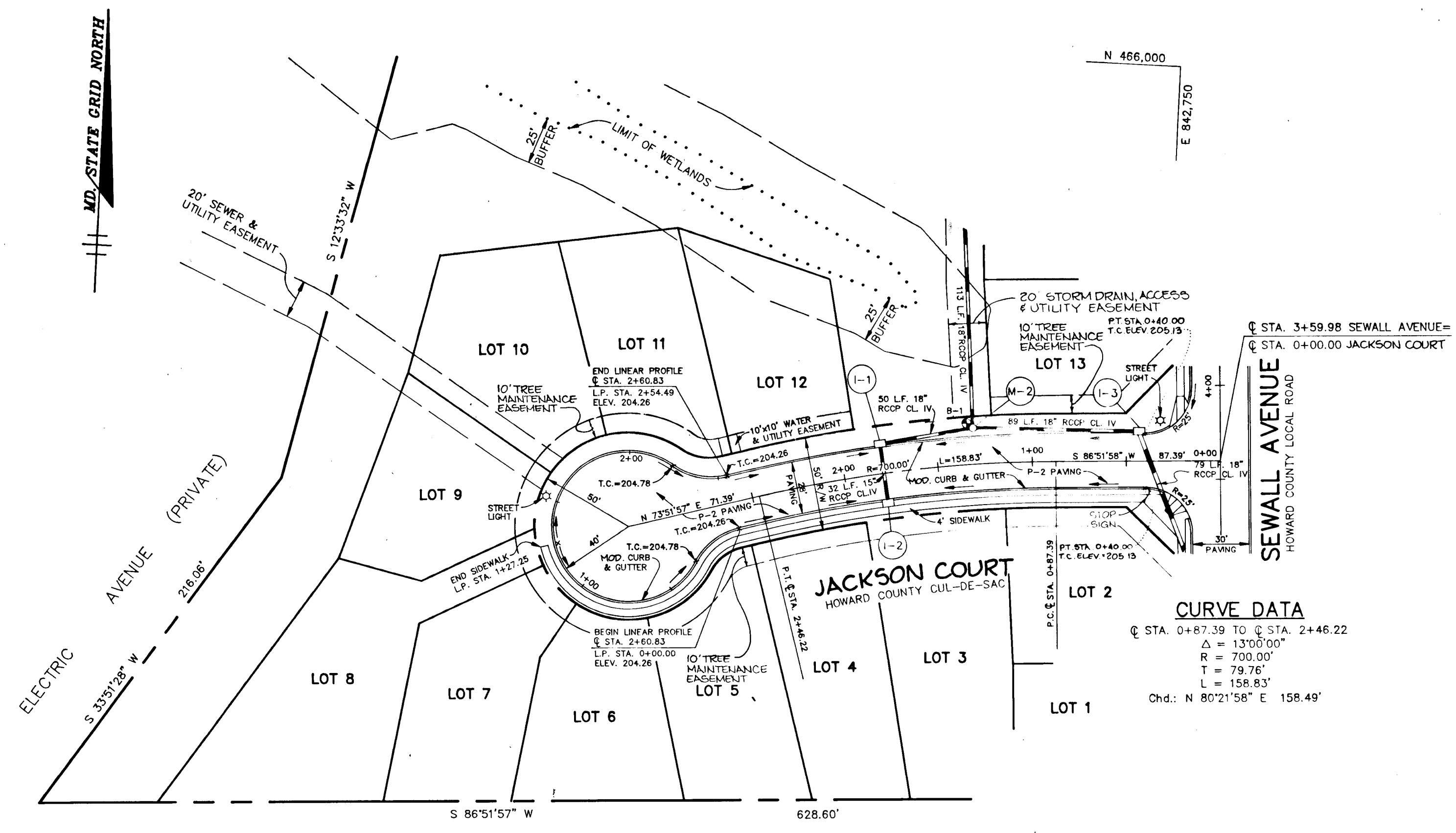
NO SCALE



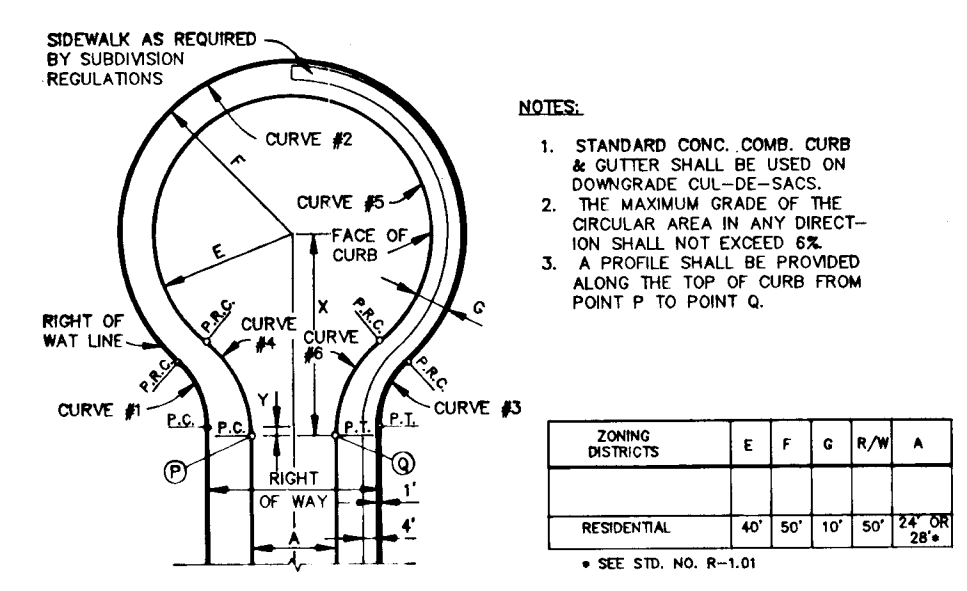
PROFILE
SCALE: HOR.: 1"=50'
VER.: 1"=5'

AS BUILT CERTIFICATE	
ARTHUR E. MUEGGE P.E.#8707	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND LAND DEVELOPMENT	
<i>Anna Hermal</i>	9/4/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>John M. Tompkins</i>	8/2/92
CHIEF, LAND DEVELOPMENT DIVISION	DATE
<i>William E. Reilly</i>	7/31/92
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>William E. Reilly</i>	8-28-92
CHIEF, BUREAU OF ENGINEERING	DATE
DATE	NO. REVISION
OWNER / DEVELOPER	
WARD DEVELOPMENT COMPANY, INC. 1300 PICCARD DRIVE ROCKVILLE, MARYLAND 20850	
PROJECT	
PATUXENT HEIGHTS	
AREA TAX MAP NO. 50 PARCEL 426 BLOCK C, LOTS 7, & 8 BLOCK D, LOTS 1 TO 12 BLOCK E, LOTS 1 TO 12 BLOCK F, LOTS 1 TO 6 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
PLAN AND PROFILE SEWALL AVENUE	
RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 301-997-8900 FAX : 301-997-9282	
7-21-92 DATE	S-89-88 P-91-12
	DESIGNED BY : CB
	DRAWN BY : CADD/CB
	PROJECT NO : 5780G
	DATE : JULY 24, 1992
	SCALE : AS SHOWN
	DRAWING NO. 2 OF 7

1646



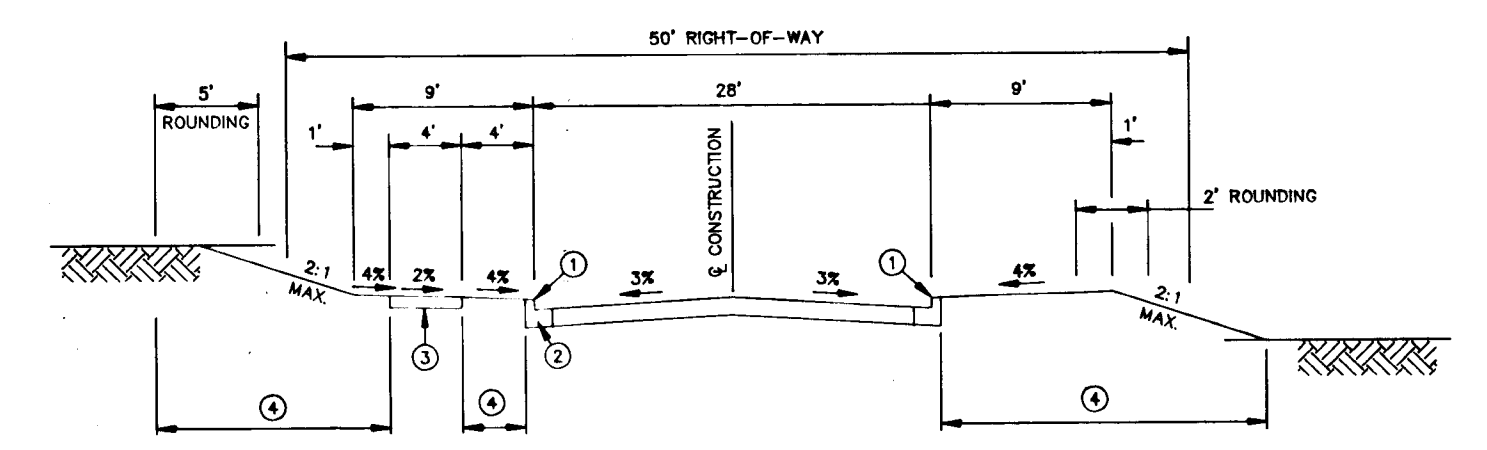
PLAN
SCALE: 1"=50'



CURVE DATA

COMMERCIAL-INDUSTRIAL (38' APPROACH)		COMMERCIAL-INDUSTRIAL (44' APPROACH)	
CURVE #	DATA	CURVE #	DATA
1	Δ = 135.00° R = 700.00' L = 79.76' T = 158.83' C.D. = N 80°21'58" E 158.49'	2	Δ = 135.00° R = 700.00' L = 79.76' T = 158.83' C.D. = N 80°21'58" E 158.49'
3	Δ = 135.00° R = 700.00' L = 79.76' T = 158.83' C.D. = N 80°21'58" E 158.49'	4	Δ = 135.00° R = 700.00' L = 79.76' T = 158.83' C.D. = N 80°21'58" E 158.49'
5	Δ = 135.00° R = 700.00' L = 79.76' T = 158.83' C.D. = N 80°21'58" E 158.49'	6	Δ = 135.00° R = 700.00' L = 79.76' T = 158.83' C.D. = N 80°21'58" E 158.49'

CUL-DE-SAC DETAIL
NO SCALE

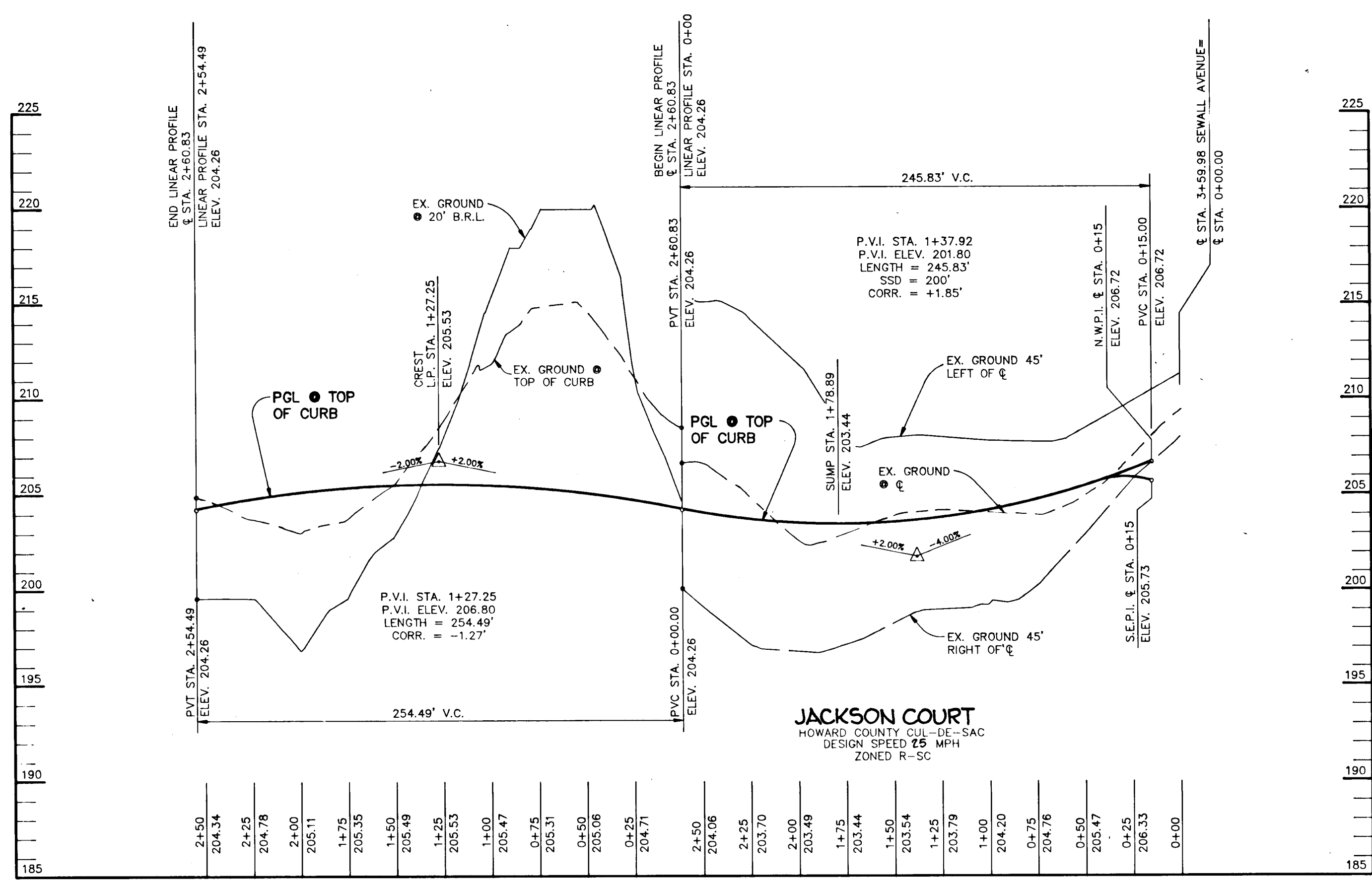


JACKSON COURT STA. 0+00.00 TO 2+60.83

CLOSED SECTION

- ① PROFILE GRADE LINE (P.G.L.)
- ② MODIFIED CONC. CURB AND GUTTER
- ③ 4" CONCRETE SIDEWALK 5/8" FLAT
- ④ INDICATES 2" TOPSOIL, SEED AND MULCH

TYPICAL ROAD SECTION
NO SCALE



PROFILE
SCALE: HOR: 1"=50'
VER: 1"=5'

AS BUILT CERTIFICATE

APPROVED: ARTHUR E. MUEGGE P.E. #8707 DATE 7/21/92

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: HOWARD COUNTY DEPARTMENT OF HIGHWAYS

APPROVED: HOWARD COUNTY DEPARTMENT OF ENGINEERING

OWNER / DEVELOPER: WARD DEVELOPMENT COMPANY, INC. 1300 PICCARD DRIVE ROCKVILLE, MARYLAND 20850

PROJECT: PATUXENT HEIGHTS

AREA: TAX MAP NO. 50 PARCEL 426 BLOCK C, LOTS 7, & 8 BLOCK D, LOTS 1 TO 12 BLOCK E, LOTS 1 TO 12 BLOCK F, LOTS 1 TO 6 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE: PLAN AND PROFILE JACKSON COURT

RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 8818 Centre Park Drive • Suite 200 • Columbia, Md 21045 301-997-8900 FAX: 301-997-9282

DATE: 7.21.92

DESIGNED BY: CB

DRAWN BY: CADD/CB

PROJECT NO: 5780G

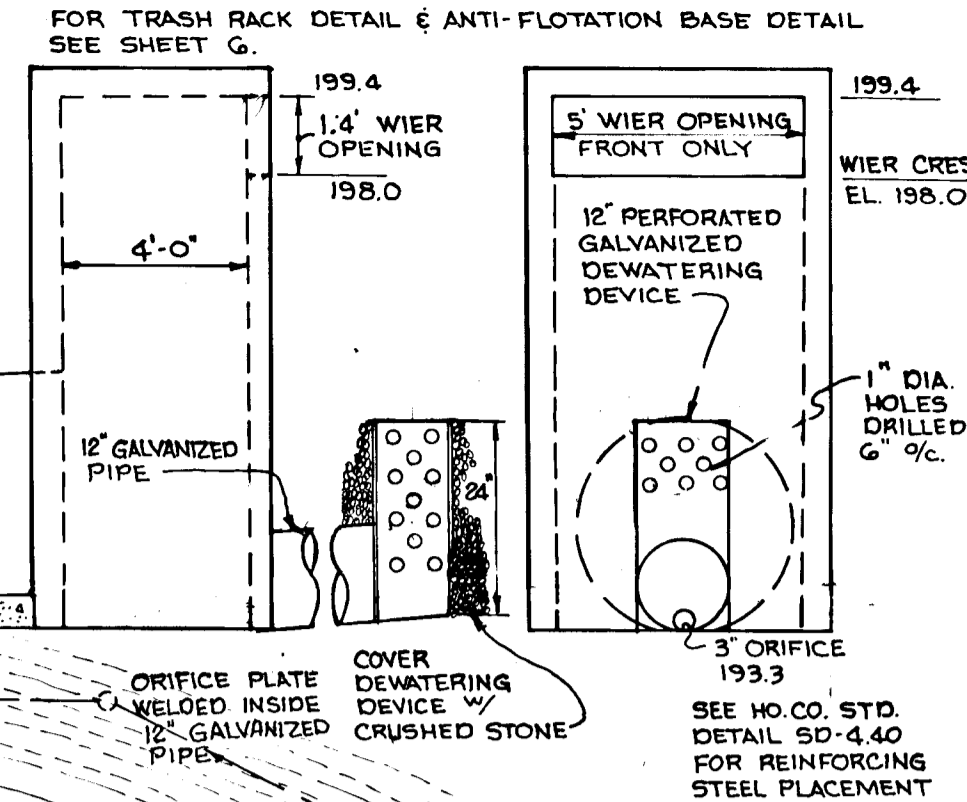
DATE: JULY 21, 1992

SCALE: AS SHOWN

DRAWING NO. 3 OF 7

1646

△ POND NOTE:
POND CONSTRUCTION TO BE IN ACCORDANCE W/ MARYLAND 378 SPECIFICATIONS.



SOILS CLASSIFICATION

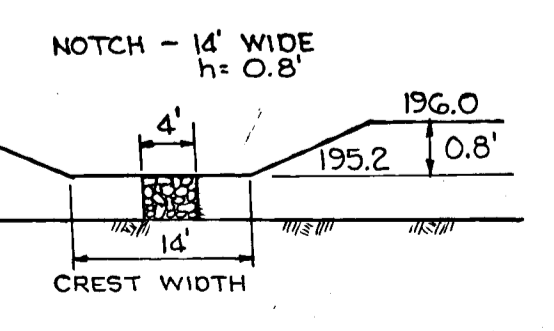
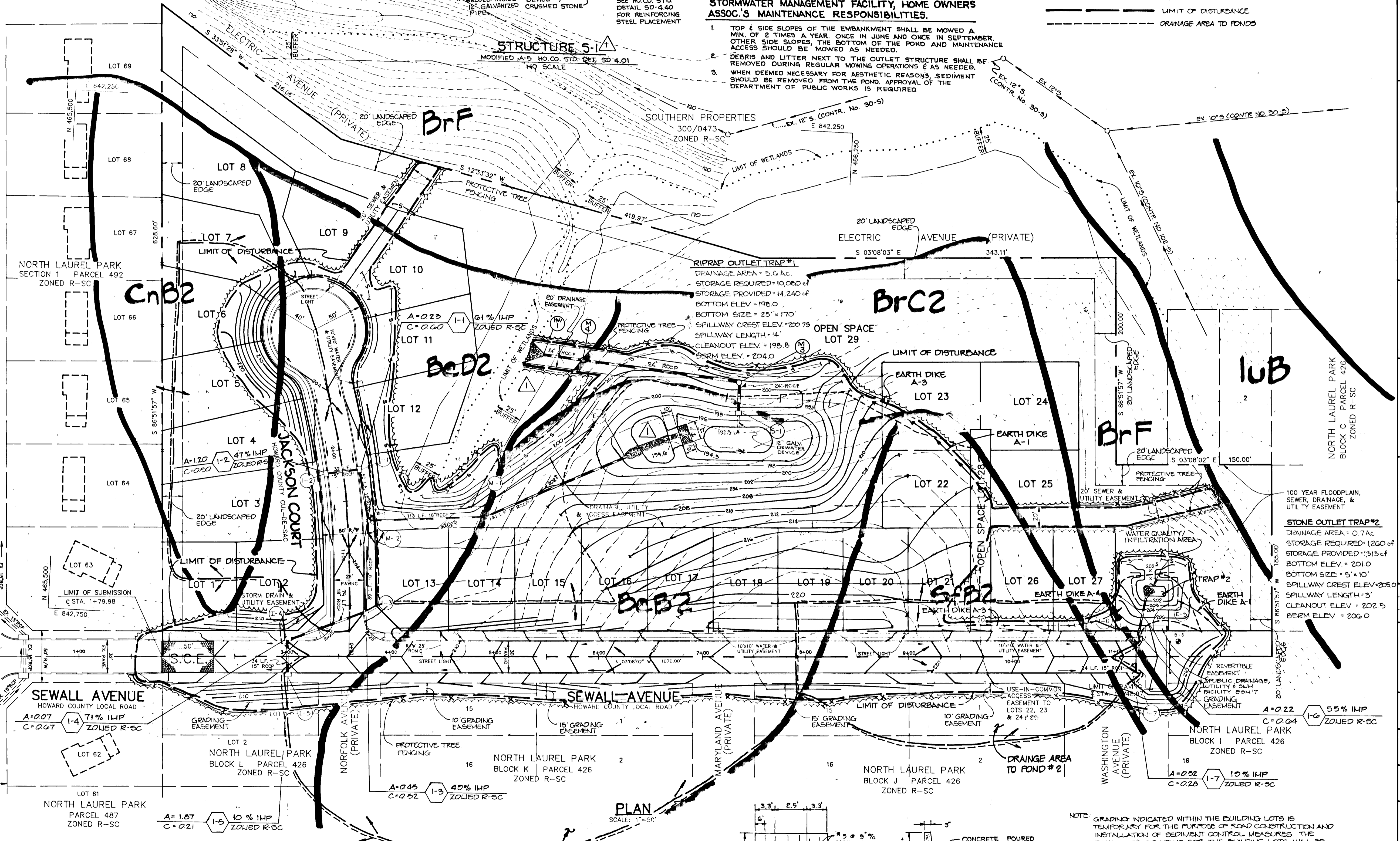
- CBe2 - BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
- CBeD2 - BELTSVILLE SILT LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED
- CBrC2 - BRANDYWINE LOAM, 8 TO 15 PERCENT SLOPES, MODERATELY ERODED
- CBrF - BRANDYWINE LOAM, 25 TO 60 PERCENT SLOPES
- CnB2 - CHILLUM-FAIRFAX LOAMS, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
- CluB - IUKA LOAM, LOCAL ALLUVIUM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED
- SsB2 - SASSAFRAS GRAVELLY SANDY LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED

NOTE: TAKEN FROM SHEET 31(NSET) OF THE HOWARD COUNTY, MARYLAND SOIL SURVEY, JULY, 1968.

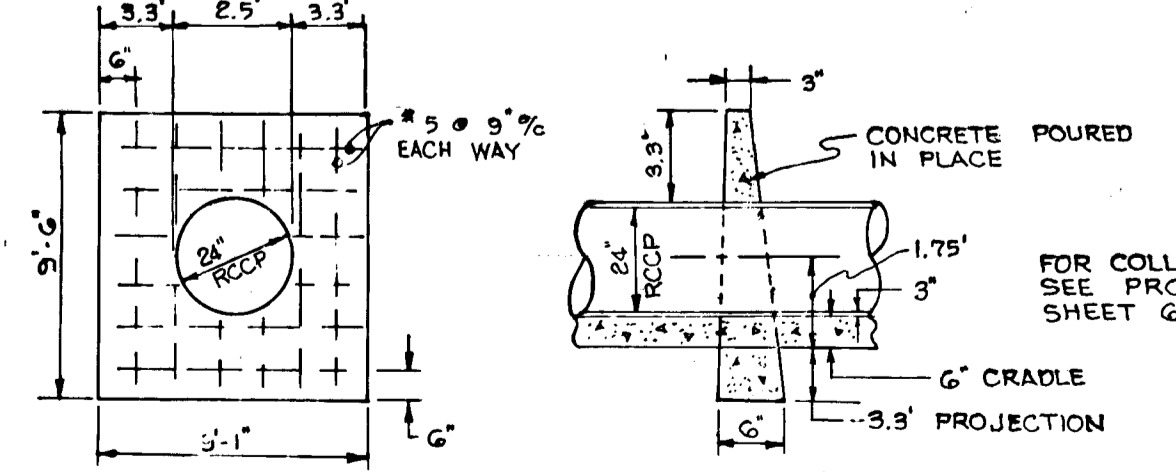
- △ OPERATION & MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT FACILITY, HOME OWNERS ASSOC.'S MAINTENANCE RESPONSIBILITIES.**
- TOP & SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MIN. OF 2 TIMES A YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES, THE BOTTOM OF THE POND AND MAINTENANCE ACCESS SHOULD BE MOWED AS NEEDED.
 - DEBRIS AND LITTER NEXT TO THE OUTLET STRUCTURE SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS & AS NEEDED.
 - WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, SEDIMENT SHOULD BE REMOVED FROM THE POND. APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS IS REQUIRED.

LEGEND

- LIMIT OF WETLANDS
- WETLANDS BUFFER
- SOILS DELINEATION
- X X X PROTECTIVE TREE FENCING
- EX. TREES TO REMAIN
- LIMIT OF DISTURBANCE
- DRAINAGE AREA TO PONDS



△ FOREBAY DETAIL
NO SCALE



△ CONCRETE ANTI-SEEP COLLAR
NOT TO SCALE
NOTE: LOCATE COLLAR A MINIMUM OF 2" FROM PIPE JOINT.

ARTHUR E. MUEGGE P.E.#8707 DATE

BY THE DEVELOPER:
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 DESIGNED BY THE ENVIRONMENT 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Richard S. Ward 7/1/92
DEVELOPER DATE

BY THE ENGINEER:
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.

Arthur E. Muegge 7/1/92
ENGINEER DATE

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.

John C. ... 7/1/92
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.

Robert W. Zichner 7/20/92
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND LAND DEVELOPMENT

Emma J. Blomath 7/1/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John M. ... 7/1/92
CHIEF, LAND DEVELOPMENT DIVISION DATE

William B. ... 8-28-92
CHIEF, BUREAU OF ENGINEERING DATE

7/95
DATE NO. REVISION

OWNER / DEVELOPER
WARD DEVELOPMENT COMPANY, INC.
1300 PICCARD DRIVE
ROCKVILLE, MARYLAND 20850

PROJECT PATUXENT HEIGHTS

AREA TAX MAP NO. 50 PARCEL 426
BLOCK C, LOTS 7, & 8 BLOCK D, LOTS 1 TO 12
BLOCK E, LOTS 1 TO 12 BLOCK F, LOTS 1 TO 6
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP

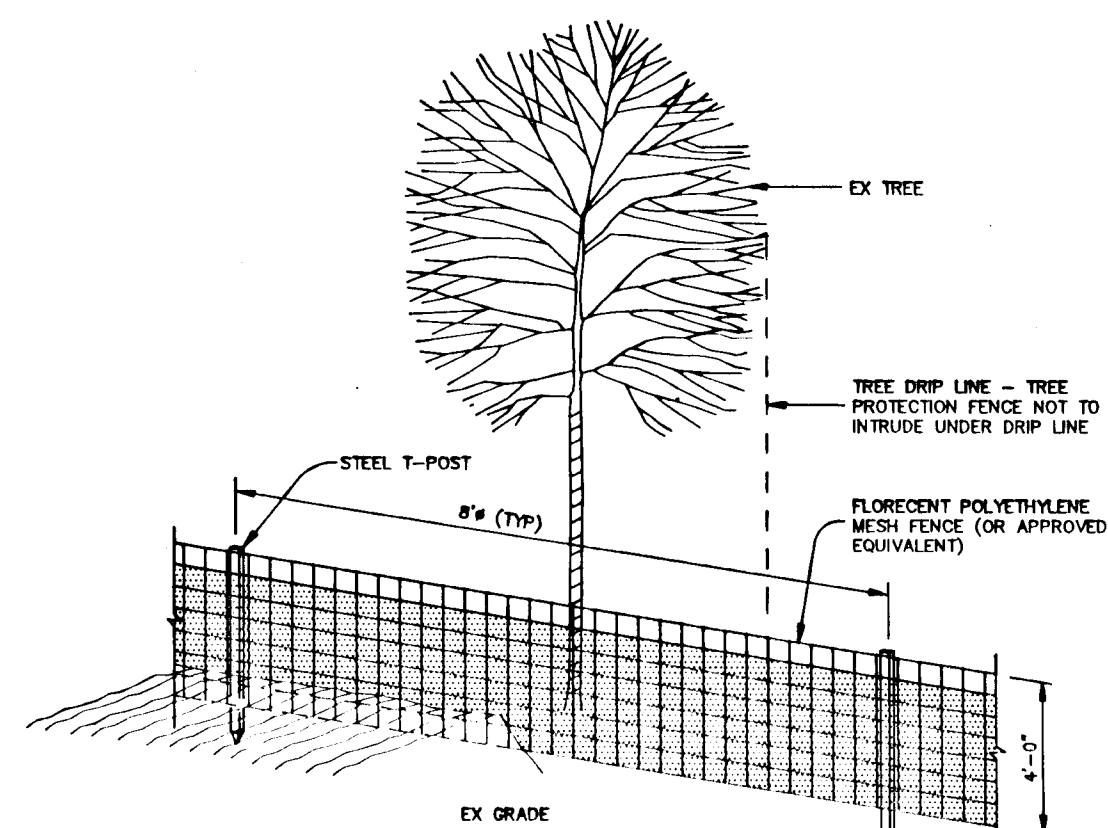
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
301-997-8900 FAX : 301-997-9282

7.21.92 DATE

S-89-88 P-91-12
DESIGNED BY : CB
DRAWN BY : CADD/CB
PROJECT NO : 5780G
DATE : JULY 21, 1992
SCALE : AS SHOWN
DRAWING NO. 5 OF 7



1646



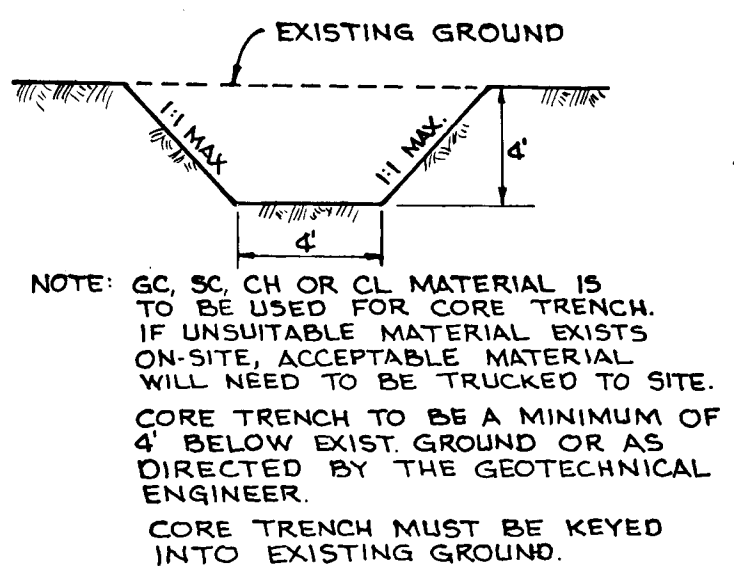
PROTECTIVE TREE FENCING ELEVATION DETAIL
NO SCALE

TREE PRESERVATION PROCEDURES

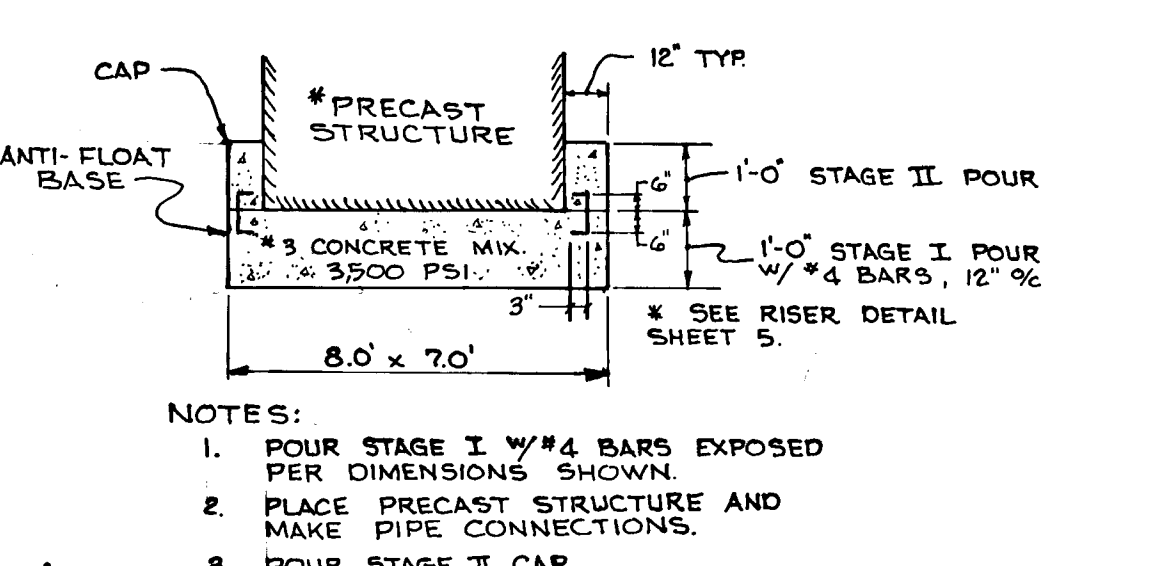
1. THE EDGE OF WOODS TO BE PROTECTED WILL BE MARKED IN THE FIELD PER THE APPROVED SITE DEVELOPMENT PLAN PRIOR TO THE START OF CONSTRUCTION ACTIVITY.
2. PROTECTIVE FENCING SHALL BE INSTALLED AT THE DRIP LINE OF THE EDGE OF WOODS. ALL AREAS WITHIN PROTECTIVE FENCES ARE TO BE CONSIDERED OFF LIMITS FOR ANY CONSTRUCTION ACTIVITY.
3. PROTECTIVE FENCING WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR WILL AFFIX SIGNS TO THE FENCING INDICATING THAT THESE AREAS ARE TREE PRESERVATION AREAS. THE GENERAL CONTRACTOR SHALL TAKE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING THE CONSTRUCTION CYCLE. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE, AND DRAINAGE OF SOLUTIONS CONTAINING MATERIALS HAZARDOUS TO TREE ROOTS.
4. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED. THE GENERAL CONTRACTOR SHALL BE PROHIBITED FROM PARKING ANY CONSTRUCTION EQUIPMENT, OR FROM STORING ANY BUILDING SUPPLIES ON EARTH STOCKPILES WITHIN THE TREE PRESERVATION AREAS.
5. FOOT TRAFFIC, AS WELL AS VEHICULAR TRAFFIC, IN THE TREE PRESERVATION AREAS SHALL BE KEPT TO A MINIMUM. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREE DAMAGED OR DESTROYED WITHIN THE TREE PRESERVATION AREAS, WHETHER CAUSED BY THE CONTRACTOR, HIS AGENTS, EMPLOYEES, SUB-CONTRACTORS, OR LICENSEES.
6. CONSTRUCTION ACTIVITIES EXPRESSLY RESTRICTED WITHIN THE TREE PRESERVATION AREAS: PLACING BACKFILL IN PROTECTED AREAS; FELLING TREES INTO PROTECTED AREAS; DRIVING CONSTRUCTION EQUIPMENT INTO OR THROUGH PROTECTED AREAS; BURNING IN OR IN CLOSE PROXIMITY TO PROTECTED AREAS; STAKING OR STORING SUPPLIES IN PROTECTED AREAS; CONDUCTING TRENCHING OPERATIONS IN PROTECTED AREAS; GRADING WITHIN THE LIMITS OF DISTURBANCE.
7. THE GENERAL CONTRACTOR SHALL PROVIDE A WASH OUT AREA FOR CONCRETE TRUCKS ON SITE, WHICH WILL NOT DRAIN TOWARDS A PROTECTED AREA.
8. ALL TREES WHICH ARE NOT TO BE PRESERVED WITHIN FIFTY FEET OF ANY TREE PRESERVATION AREA ARE TO BE REMOVED IN A MANNER THAT WILL NOT DAMAGE THOSE TREES THAT ARE DESIGNATED FOR PRESERVATION. IT IS HIGHLY RECOMMENDED THAT MACHINE TO MINIMIZE DAMAGE.

Sequence of Construction

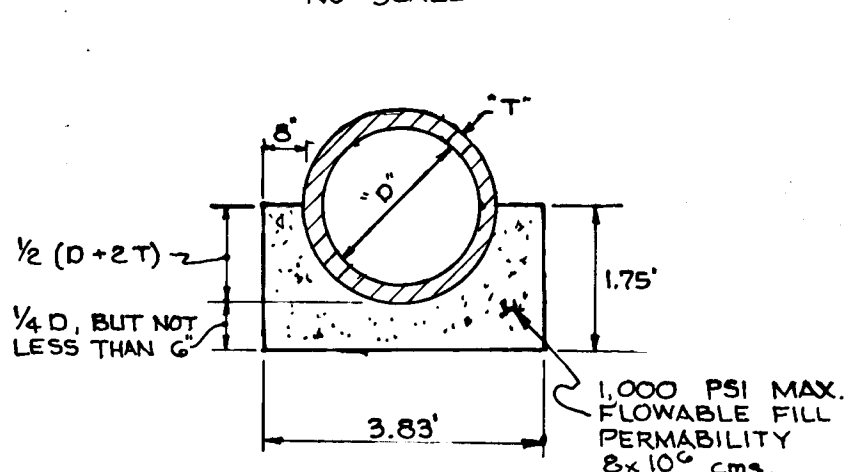
1. Obtain grading permit.
2. Install S.C.E., silt fence, earth dikes, stone outlet trap and riprap outlet trap at site of SWM facility. (Do not install stone trench at this time.)
3. Rough grade site.
4. Install utilities, stabilize disturbed areas in accordance with temporary seeding notes.
5. Install curb and gutter and pave roads.
6. Fine grade. Stabilize in accordance with permanent seeding notes.
7. With approval of sediment inspector and after all areas have been stabilized remove traps as follows:
 - a) Pump any standing water onto a stabilized outfall.
 - b) Remove sediment and dispose on a site with an approved sediment control plan/practices.
 - c) Regrade area at stone outlet trap to provide water quality basin.
 - d) Convert riprap outlet trap into SWM Facility as shown on Sheet 6.
 - e) Install stone trench and upgrade outfall.
 - f) Remove remainder of sediment control practices.
 - g) Stabilize all disturbed areas in accordance with permanent seeding notes.



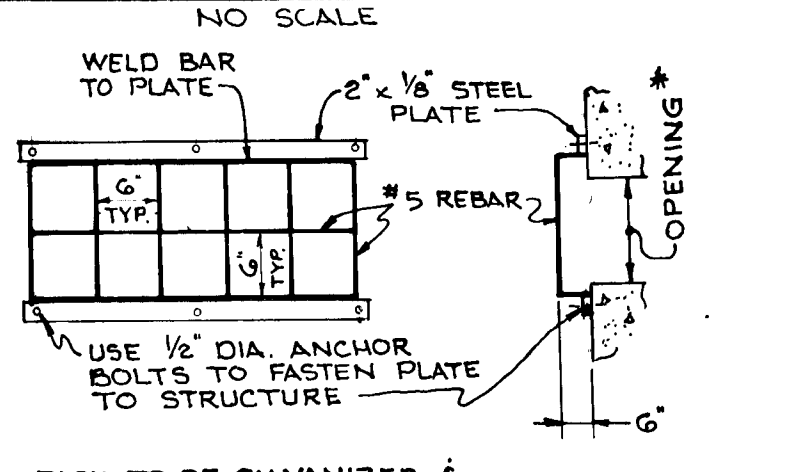
CORE TRENCH DETAIL
NO SCALE



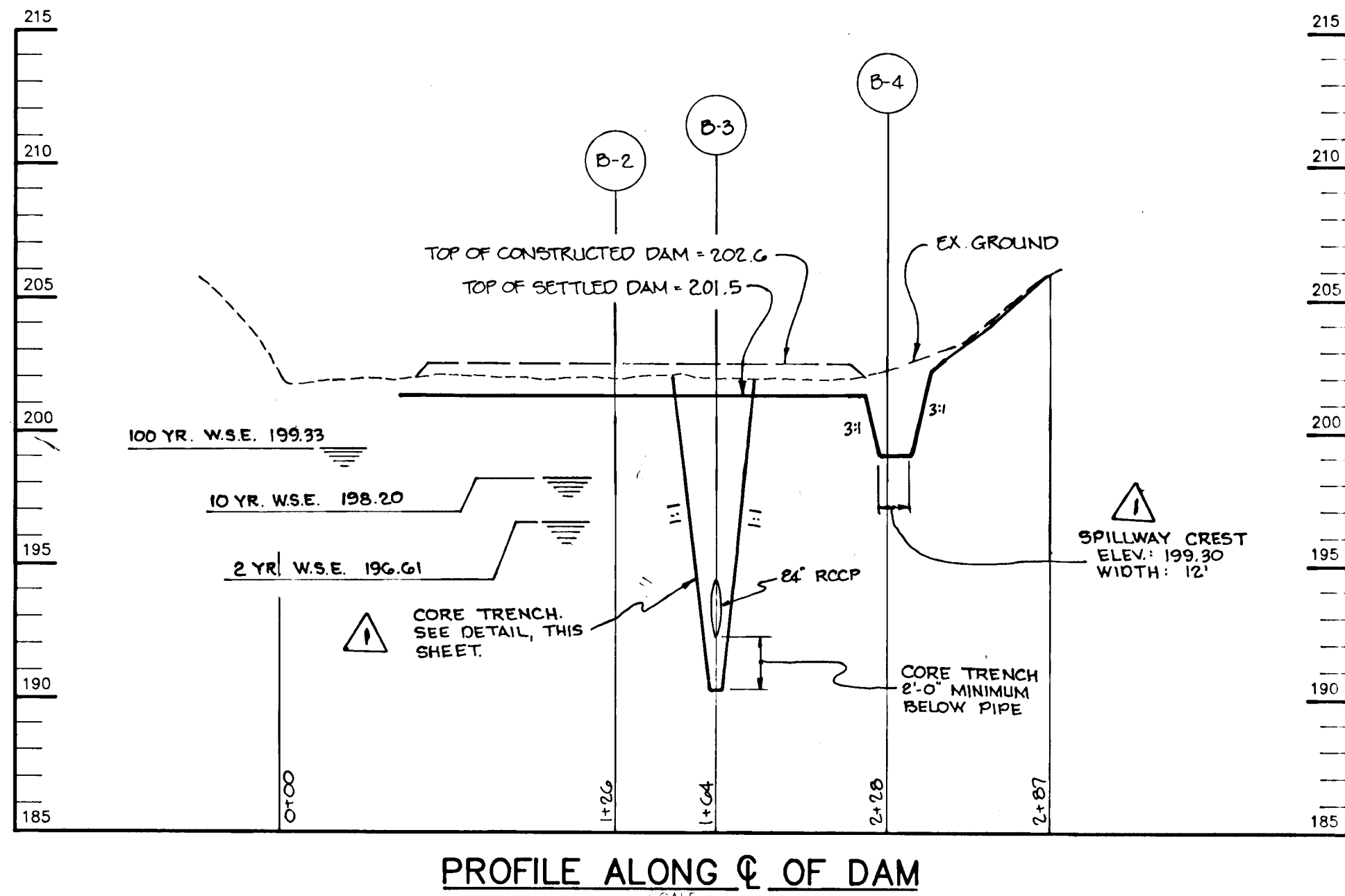
ANTI-FLOTATION BASE FOR SWMF #1
NO SCALE



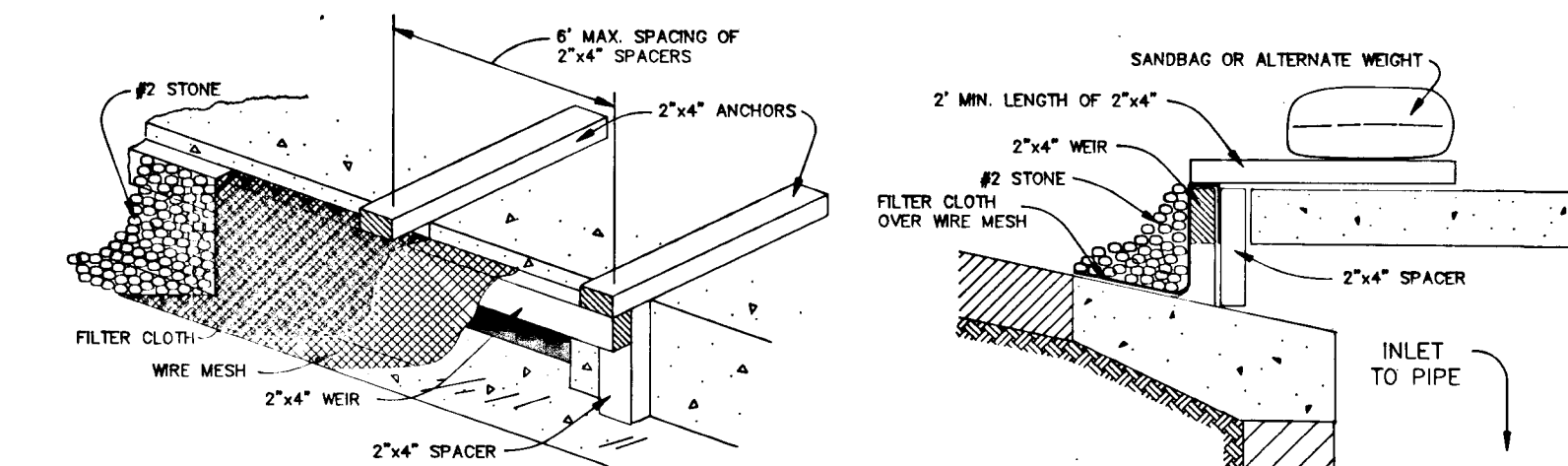
A-2 CONCRETE CRADLE
NO SCALE



TRASH RACK DETAIL
NO SCALE



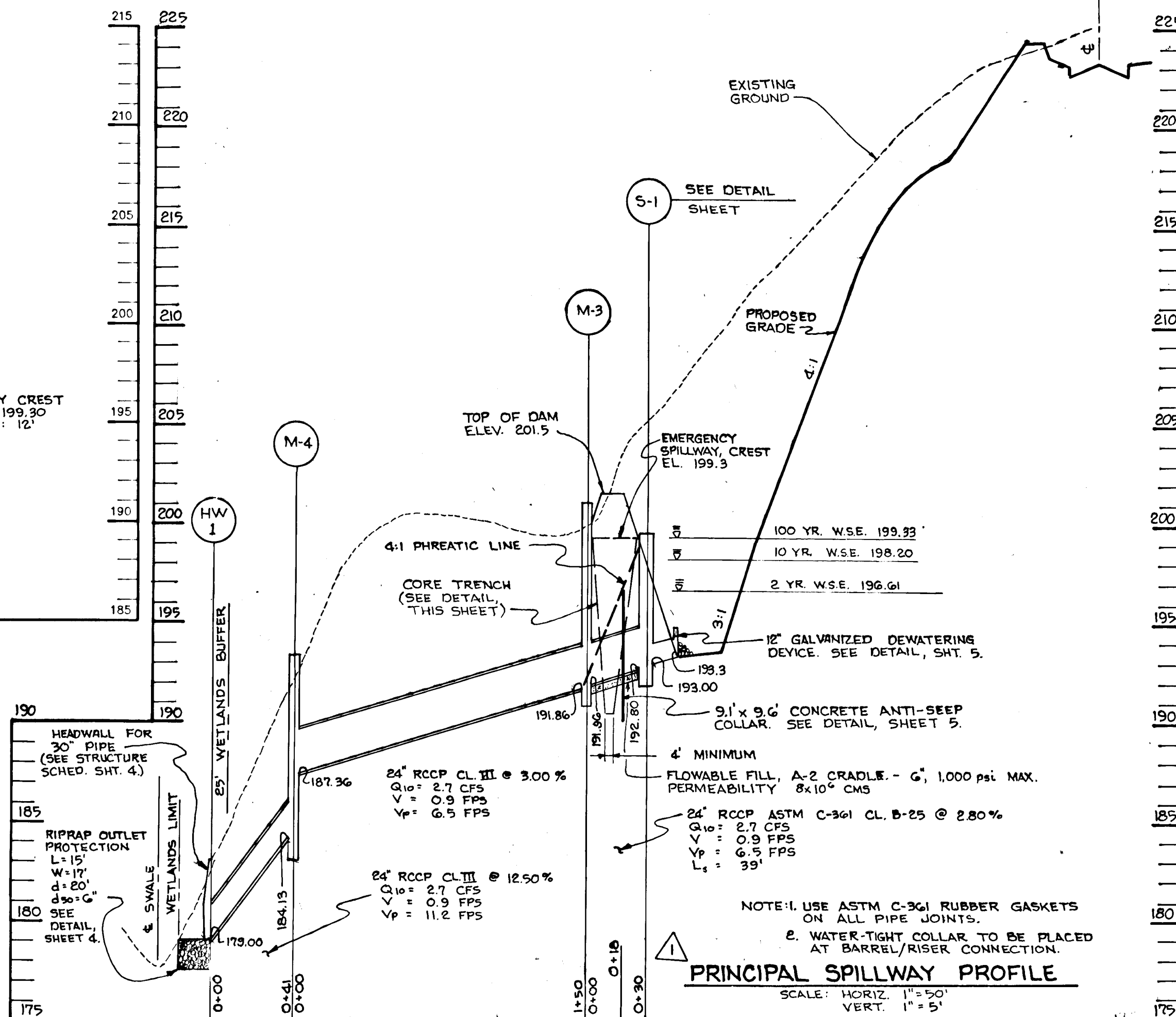
PROFILE ALONG C OF DAM
SCALE: HOR. 1"=50' VERT. 1"=5'



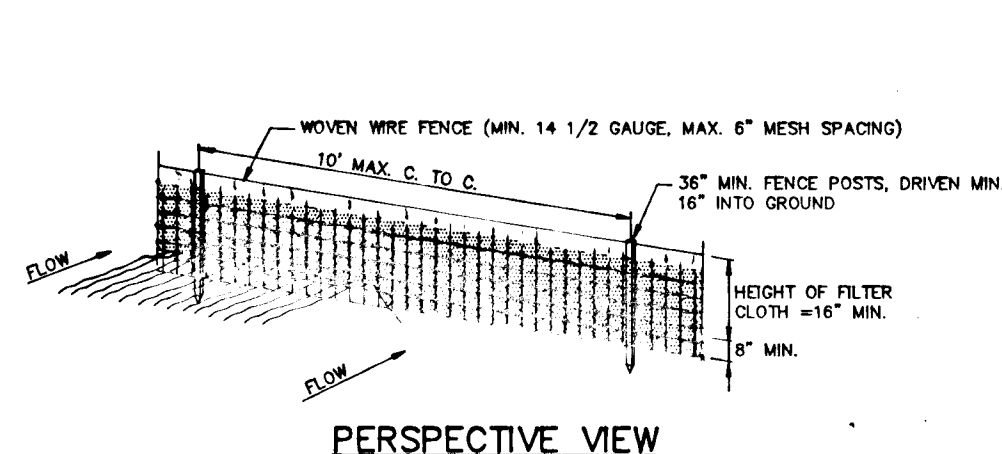
CONSTRUCTION SPECIFICATIONS

- MATERIALS**
 - A. WOODEN FRAME IS TO BE CONSTRUCTED OF 2"x4" CONSTRUCTION GRADE LUMBER.
 - B. WIRE MESH MUST BE OF SUFFICIENT STRENGTH TO SUPPORT FILTER FABRIC, AND STONE, WITH WATER FULLY IMPOUNDED AGAINST IT.
 - C. FILTER CLOTH MUST BE OF A TYPE APPROVED FOR THIS PURPOSE, RESISTANT TO SUNLIGHT WITH A SEIVE SIZE, E80-85, TO ALLOW SUFFICIENT PASSAGE OF WATER AND REMOVAL OF SEDIMENT.
 - D. STONE IS TO BE 2" IN SIZE AND CLEAN, SINCE FINES WOULD CLOG THE CLOTH.
- PROCEDURE (FOR CURB INLET PROTECTION)**
 - A. ATTACH A CONTINUOUS PIECE OF WIRE MESH (50" MIN. WIDTH BY THROAT LENGTH PLUS 4") TO THE 2"x4" WIRE (MEASURING THROAT LENGTH PLUS 2") AS SHOWN ON THE STANDARD DRAWING.
 - B. PLACE A PIECE OF APPROVED FILTER CLOTH (40-85 SEIVE) OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2"x4" WIRE.
 - C. SECURELY NAIL THE 2"x4" WIRE TO 6" LONG VERTICAL SPACERS TO BE LOCATED BETWEEN THE WIRE AND INLET FACE (MAX. 6" APART).
 - D. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2" LENGTHS) OF 2"x4" TO THE TOP OF THE WIRE AT SPACER LOCATIONS. THESE 2"x4" ANCHORS SHALL EXTEND ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
 - E. THE ASSEMBLY SHALL BE PLACED SO THAT THE END SPACERS ARE A MINIMUM 1" BEYOND BOTH ENDS OF THE THROAT OPENING.
 - F. FORM THE WIRE MESH AND FILTER CLOTH TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE 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 OR AROUND THE FILTER CLOTH.
 - G. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE FILTER CLOTH AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
 - H. ASSURE THAT STORM FLOW DOES NOT BYPASS INLET BY INSTALLING TEMPORARY EARTH OR ASPHALT DIKES DIRECTING FLOW INTO INLET.

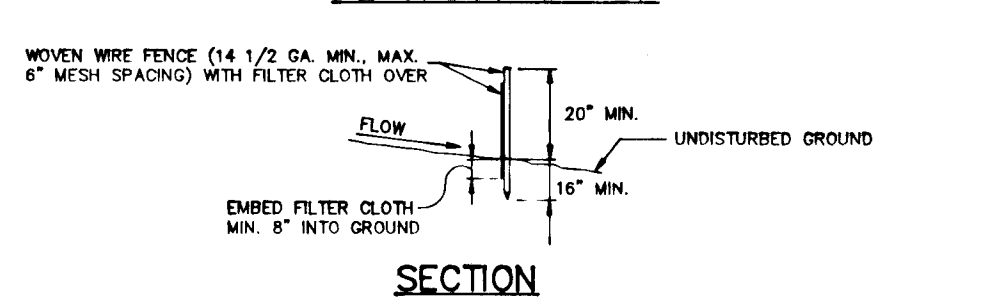
STONE FILTER INLET PROTECTION
NO SCALE



PRINCIPAL SPILLWAY PROFILE
SCALE: HORIZ. 1"=50' VERT. 1"=5'



PERSPECTIVE VIEW

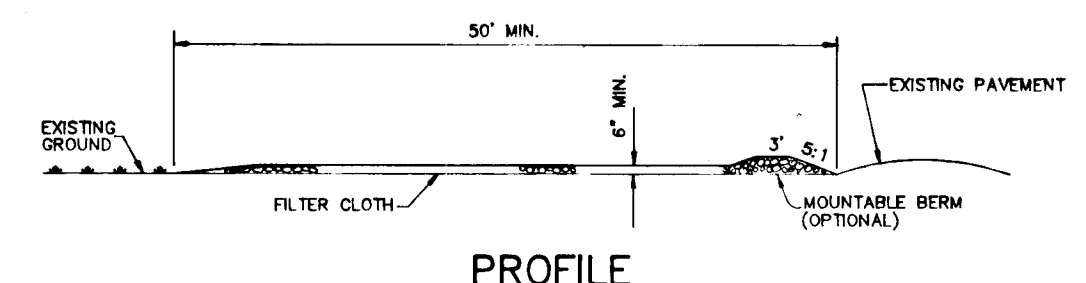


SECTION

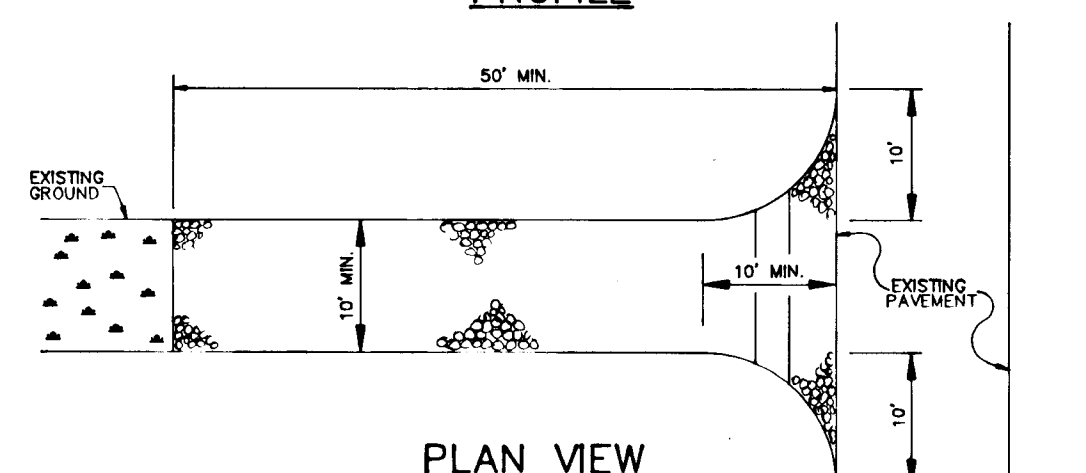
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
 2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 24" at top and mid section.
 3. When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 4. Maintenance shall be performed as needed and material removed when "bulges" develop in the silt fence.
- POSTS: Steel, either T or U type or 2" hardwood FENCE: 14 Ga. 6" mesh open-end FILTER CLOTH: Filter #3, Mifflin 100X, Slabbing 1140N or approved equal. PREFABRICATED UNIT: Geob, Envirofence or approved equal.

SILT FENCE DETAIL
NO SCALE



PROFILE

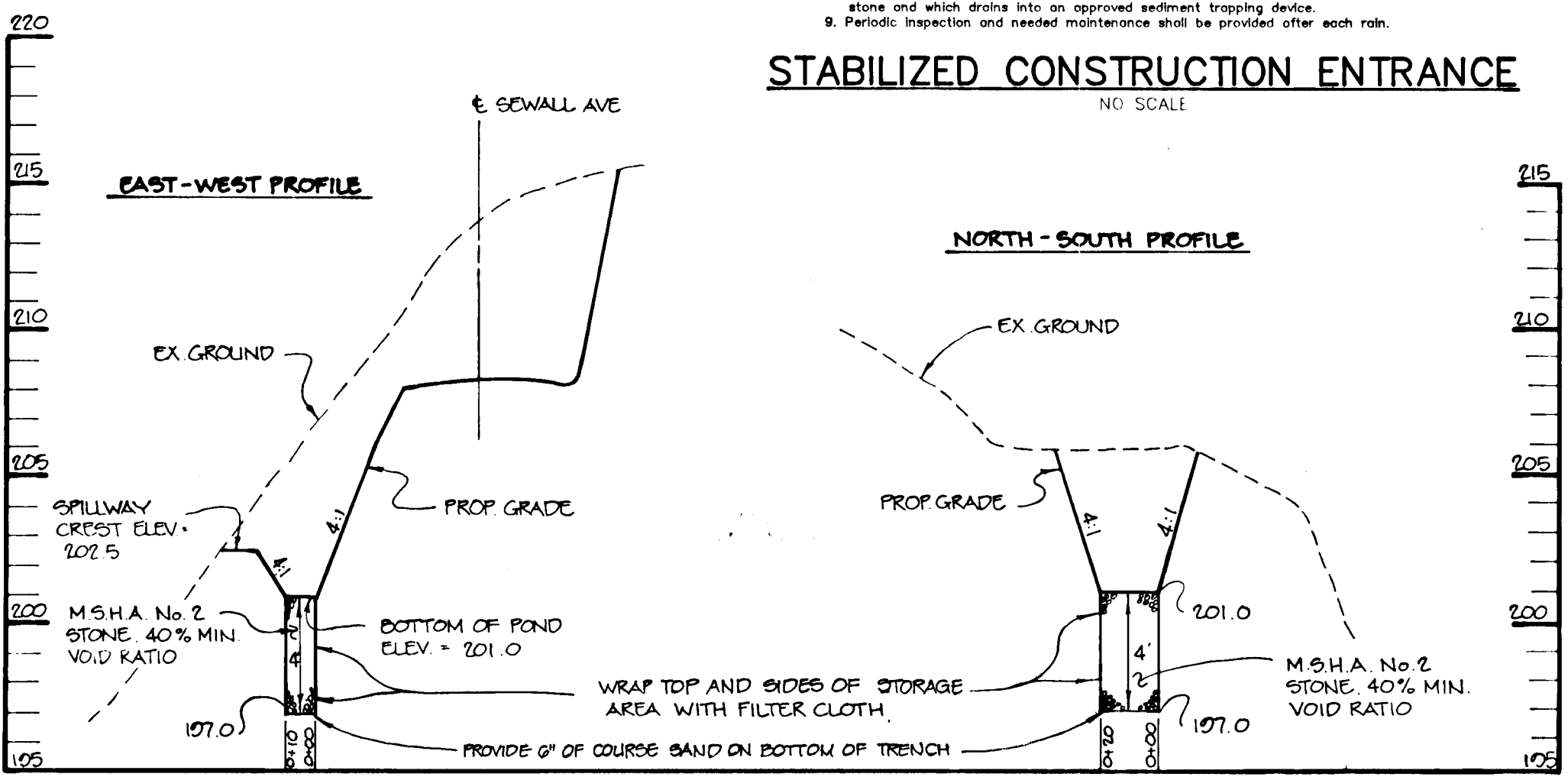


PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply).
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) foot minimum, but not less than the full width of points where ingress and egress occur.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrance shall be piped across the entrance. If piping is impractical, a mountable berm with 6:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE
NO SCALE



INFILTRATION TRENCH PROFILE
SCALE: HORIZ. 1"=50' VERT. 1"=5'

ARTHUR E. MUEGGE P.E.#8707 DATE

BY THE DEVELOPER:
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 THE ENVIRONMENT 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. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

Richard S. Ward 7/3/92
DEVELOPER DATE

BY THE ENGINEER:
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.

Arthur E. Muegge 7/3/92
ENGINEER DATE

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

James J. Doherty 7/2/92
U.S. SOIL CONSERVATION SERVICE DATE

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

Robert J. Ziehm 7/28/92
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND LAND DEVELOPMENT

Anna Holomath 9/4/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John A. Brown 8/2/92
CHIEF, LAND DEVELOPMENT DIVISION DATE

John M. Tamm 7/1/92
CHIEF, BUREAU OF HIGHWAYS DATE

William S. Ray 8/28/92
CHIEF, BUREAU OF ENGINEERING DATE

7/95 REVISED PRINCIPAL SPILLWAY PROFILE, DAM & PROFILE, ANTI-ADDED & DETAILS, CORE TRENCH, A-2 CRADLE, TRASH RACK, FOUNTAIN
DATE NO. REVISION

OWNER / DEVELOPER
WARD DEVELOPMENT COMPANY, INC.
1300 PICCARD DRIVE
ROCKVILLE, MARYLAND 20850

PATUXENT HEIGHTS

AREA TAX MAP NO. 5C FANGL 426
BLOCK C, LOTS 7, & 8 BLOCK D, LOTS 1 TO 12
BLOCK E, LOTS 1 TO 12 BLOCK F, LOTS 1 TO 6
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TITLE STORMWATER MANAGEMENT PROFILES AND DETAILS

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
301-997-8900 FAX: 301-997-9282

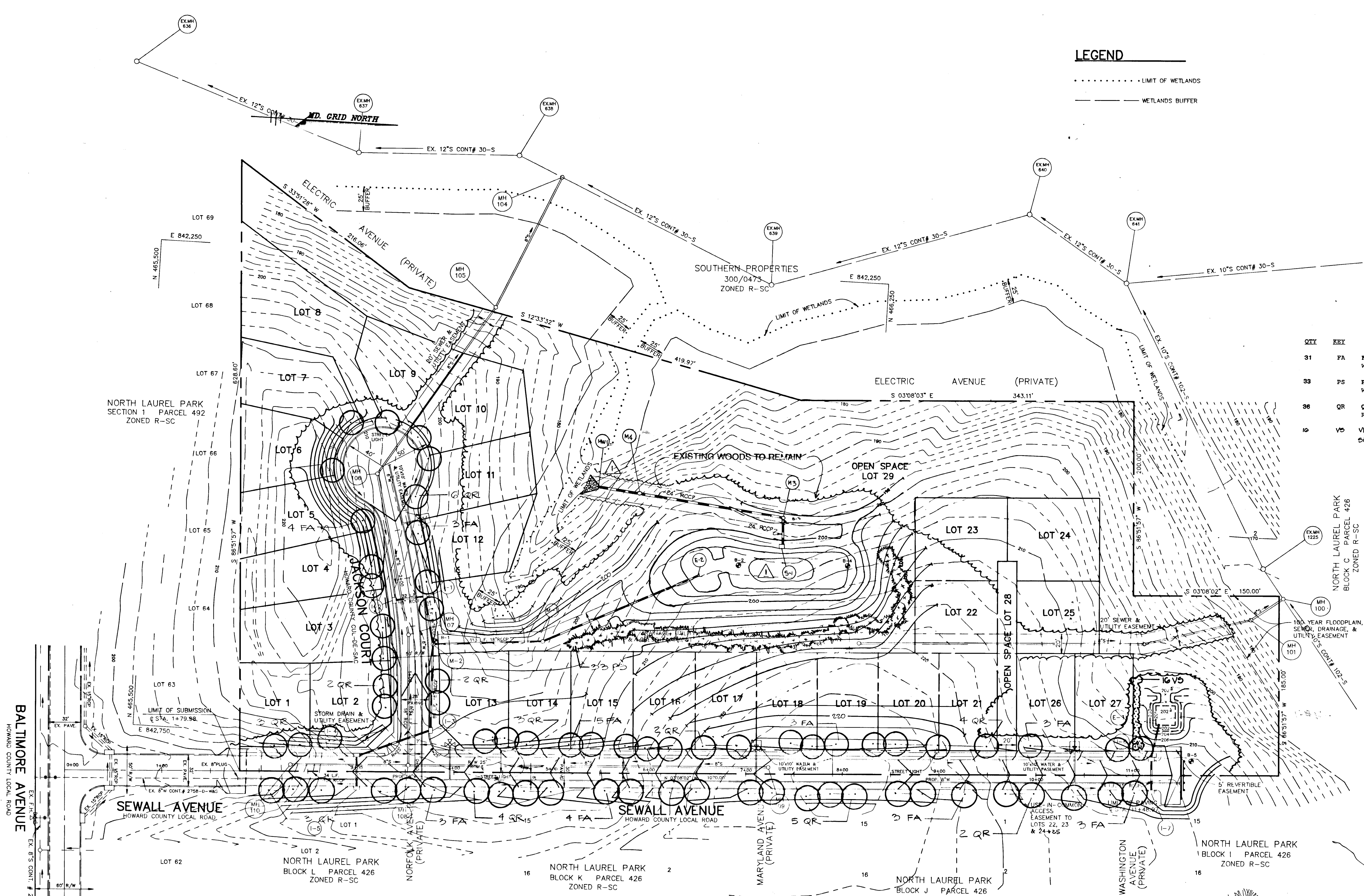
DATE 7-11-95
S-89-88 P-91-12
DESIGNED BY: CR
DRAWN BY: CADD/CB
PROJECT NO: 5780G
DATE: JULY 21, 1992
SCALE: AS SHOWN
DRAWING NO. 6 OF 7



ARTHUR E. MUEGGE P.E.#8707

LEGEND

- LIMIT OF WETLANDS
- WETLANDS BUFFER



PLANT LIST

QTY	KEY	NAME	SIZE	REMARKS
31	FA	FRAXINUS AMERICANA 'AUTUMN PURPLE' White Ash	2 1/2"-3" Cal. 12'-14' Ht.	B&B Full Crown
33	PS	PINUS STROBUS White Pine	6'-8" Ht.	B&B Natural
36	QR	QUERCUS RUBRA Red Oak	2 1/2"-3" Cal. 12'-14' Ht.	B&B Full Crown
10	V5	VIBURNUM NIEBOLDI Siebold Viburnum	4'-5" Ht.	D&D

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND LAND DEVELOPMENT

Anna Helms 9/4/92
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John Brown 8/2/92
CHIEF, LAND DEVELOPMENT DIVISION

John Brown 7/5/92
CHIEF, BUREAU OF HIGHWAYS

William S. Ray 8-28-92
CHIEF, BUREAU OF ENGINEERING

7/95
DATE NO. REVISION

OWNER / DEVELOPER
WARD DEVELOPMENT COMPANY, INC.
1300 PICCARD DRIVE
ROCKVILLE, MARYLAND 20850

PROJECT
PATUXENT HEIGHTS

AREA
"AY MAP" NO. 501 PARCEL 426
BLOCK C, LOTS 7, & 8 BLOCK D, LOTS 1 TO 12
BLOCK E, LOTS 1 TO 12 BLOCK F, LOTS 1 TO 6
6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

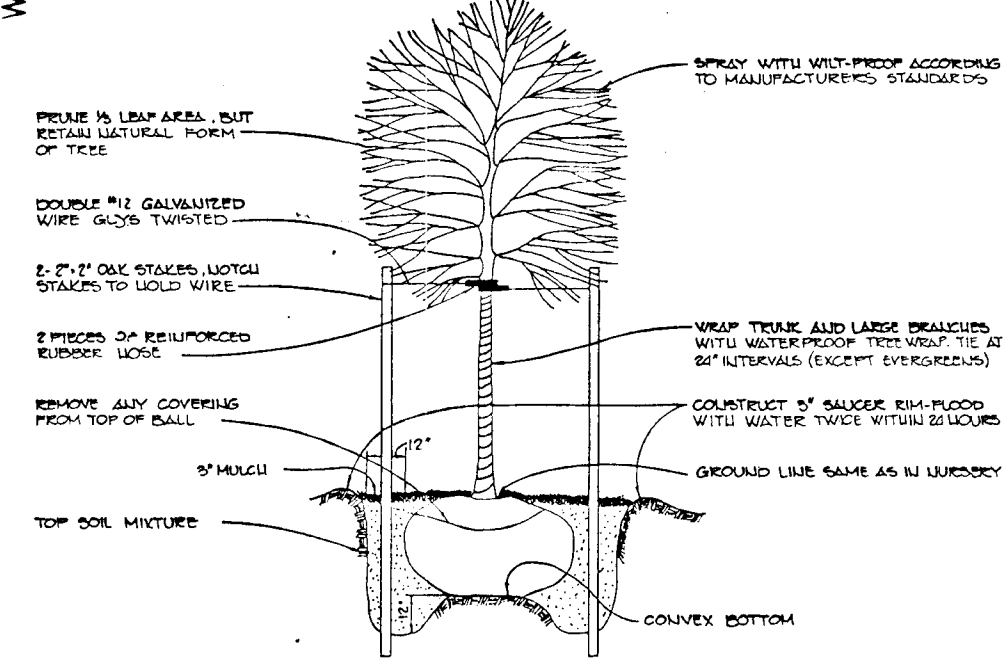
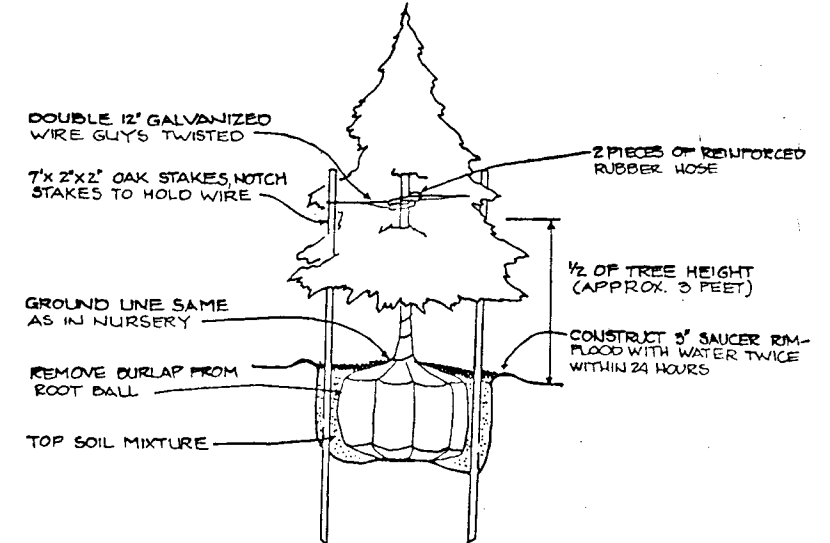
TITLE
LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
8818 Centre Park Drive • Suite 200 • Columbia, Md 21045
301-997-8900 FAX: 301-997-9282

DATE: 7/95
S-89-88 P-91-12
DESIGNED BY: CB
DRAWN BY: CADD/CB
PROJECT NO: 57804
DATE: JULY 21, 1992
SCALE: AS SHOWN
DRAWING NO. 7 OF 7

Melanie Moser
MELANIE MOSER # 551

PLAN
SCALE: 1"=50'



1646