

ROADWAYS, STORM DRAINS AND STORM WATER MANAGEMENT

WYNDEMERE SECTION ONE

6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

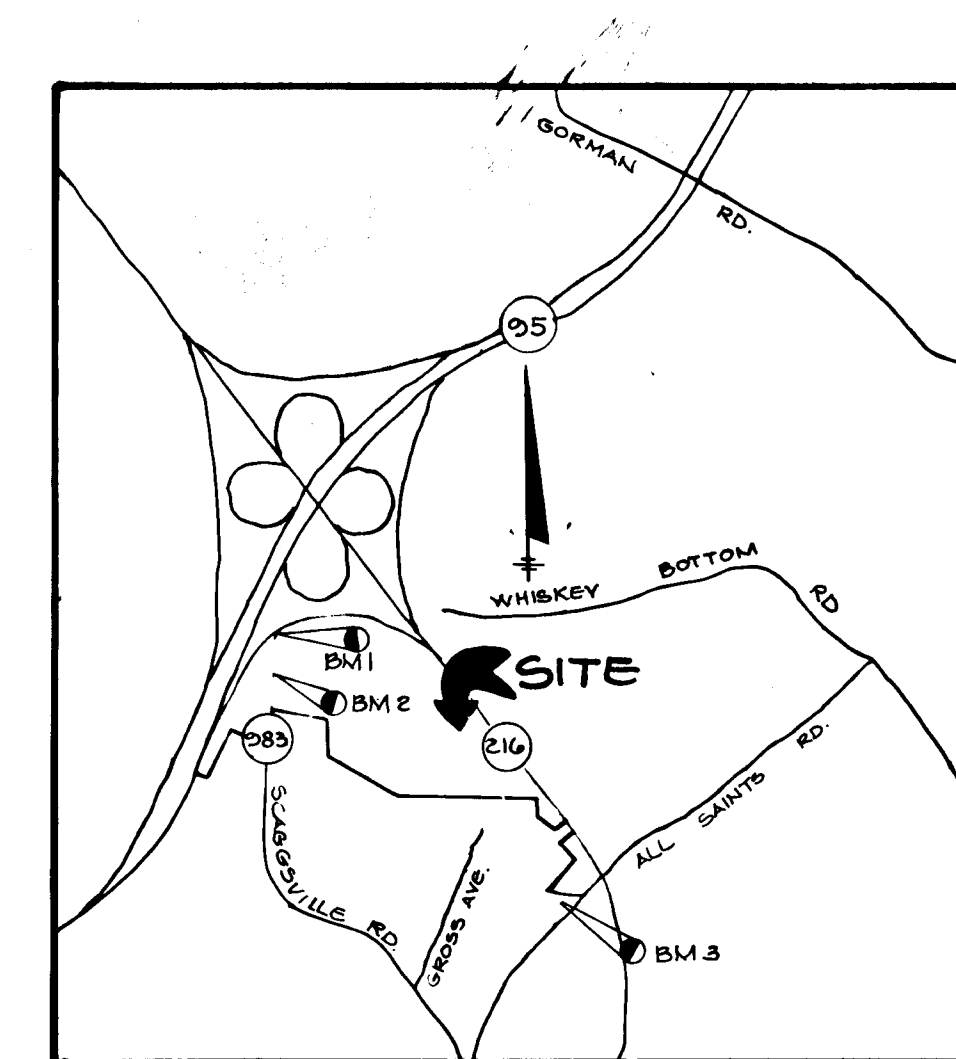
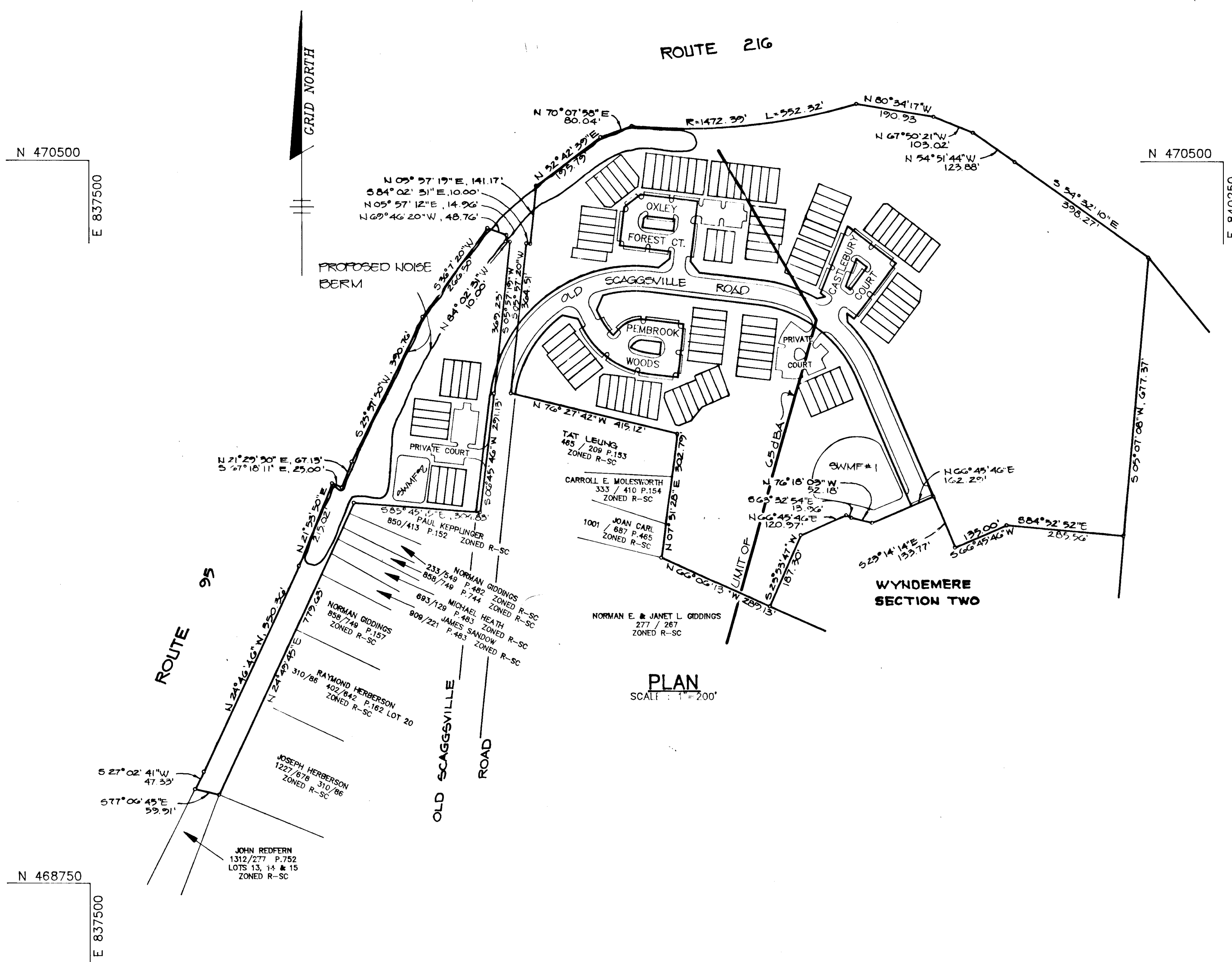
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GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1989 AMENDMENTS.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST 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	1-800-257-7777
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 or 3554
BALTIMORE GAS AND ELECTRIC CO.	539-8000, ext. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
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, 1989 AMENDMENTS.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF 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 60' RIGHT-OF-WAYS	55	M.P.H.
ALL CUL-DE-SACS	30	M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA 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 COMPREHENSIVE ZONING PLAN.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED MAY 1988 BY THE RIEMER GROUP INC.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEHIND SHALL BE CLASS 'C' AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NOS 5-85-42, P.89-13, WP-89-05, WP-89-130
- WP-89-05 IS A WAIVER FOR EXCEEDING THE ALLOWABLE 1200 FEET LENGTH FOR A CUL-DE-SAC ROAD
- WP-89-130 IS A WAIVER TO CONSTRUCT THE NOISE BARRIER PRIOR TO APPROVAL OF SITE DEVELOPMENT PLAN
- LIGHT POLES AND FIXTURES FOR STREET LIGHTS SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME III - ROAD AND BRIDGES, PAGE 4A-26.
- 100 YEAR FLOODPLAIN DELINEATION AS SHOWN FROM APPROVED PRELIMINARY PLAN P.89-13.
- THE PROPOSED NOISE MITIGATION BARRIER WILL BE CONSTRUCTED BY THE BUILDER ON THE SITE DEVELOPMENT PLAN AS REQUIRED WITH DETAILS AND ELEVATIONS OF THE NOISE BARRIER.
- A TREE MAINTENANCE EASEMENT 10' IN WIDTH RUNNING ALONG THE EDGE OF THE PUBLIC ROAD RIGHT-OF-WAY AS SHOWN ON THE PLAT OF SUBDIVISION IS RESERVED UPON ALL LOTS FRONTING ON THE SAID PUBLIC ROAD RIGHT-OF-WAY. THIS EASEMENT ALLOWS HOWARD COUNTY THE RIGHT TO ACCESS THE PROPERTY, WHEN NECESSARY, FOR THE SPECIFIC PURPOSE OF INSTALLATION, REPAIR AND MAINTENANCE OF COUNTY-OWNED TREES LOCATED WITHIN THE BOUNDARIES OF PRIVATE LOTS. NO BUILDING OR STRUCTURE OF ANY KIND SHALL BE LOCATED ON OR OVER THE SAID EASEMENT AREA.

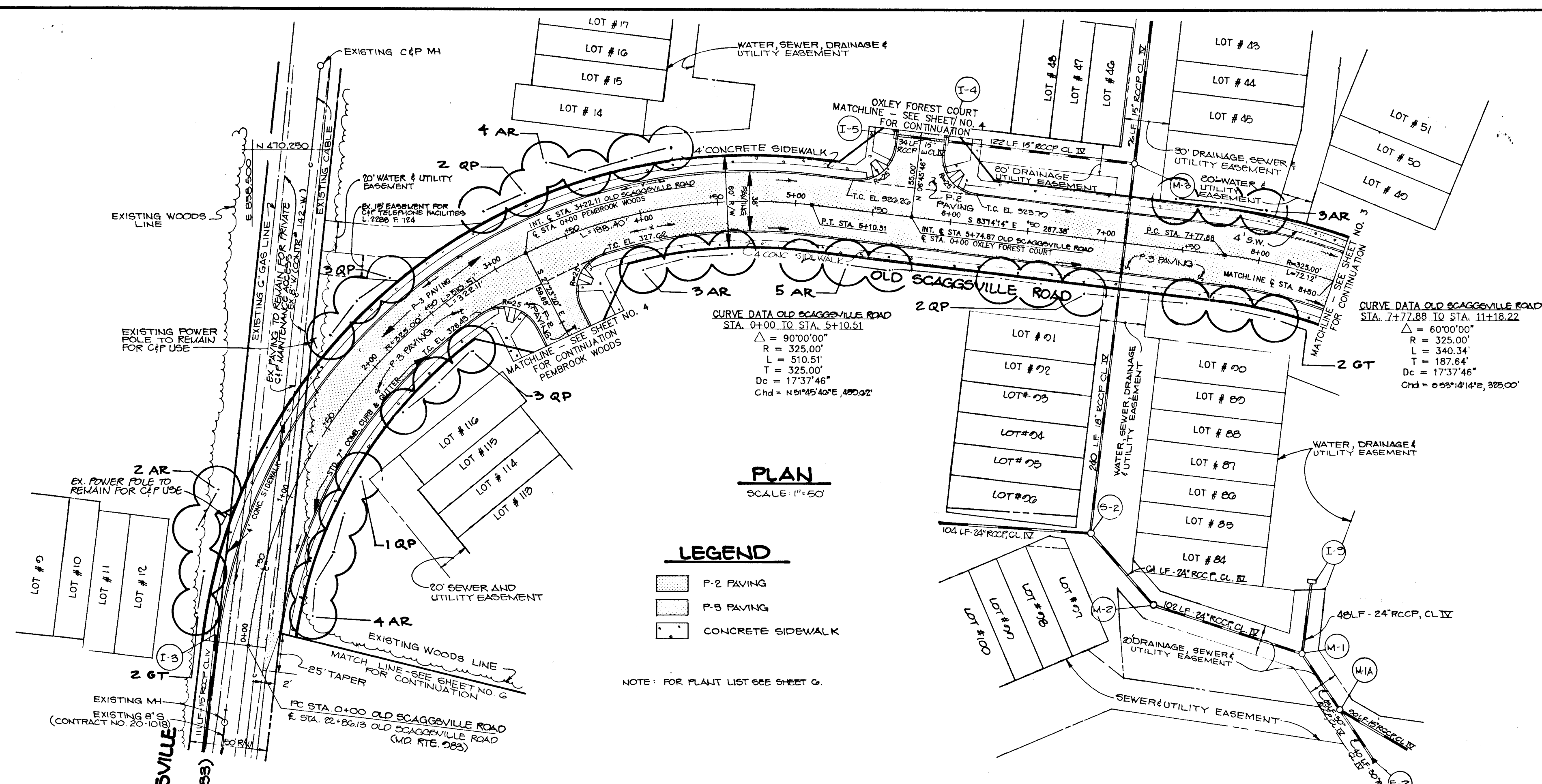


VICINITY MAP
SCALE: 1" = 2000'

BENCH MARKS

- BM #1 - RR SPIKE SET IN 80' E POLE # 468261 WEST SIDE OF OLD SCAGGSVILLE ROAD @ FENCE FOR RT 95. ELEV. 334.08
- BM #2 - RR SPIKE SET IN 86' E POLE # 375252 WEST SIDE OF OLD SCAGGSVILLE ROAD 50' S SOUTH OF GUARD RAIL. ELEV. 338.00
- BM #3 - RR SPIKE SET IN POLE CAP #13 AT INTERSECTION OF ALL SAINTS ROAD AND LYON AVE. IN SOUTH-WEST CORNER. ELEV. 222.27

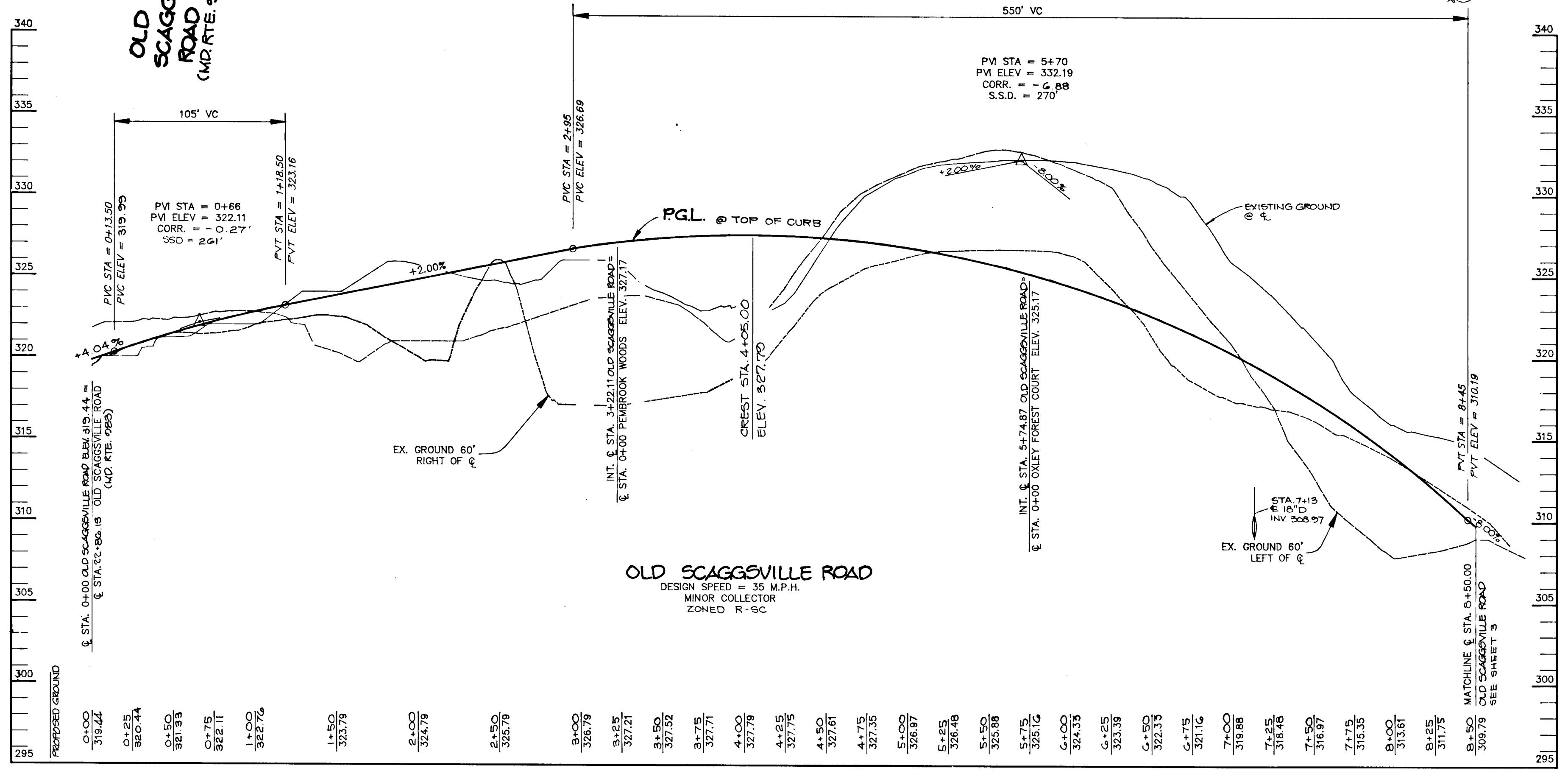
AS BUILT CERTIFICATION	
ENGINEER _____	DATE _____
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Donna L. Dwyer</i>	9/1/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE 75
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>John M. Duggan</i>	9/1/90
CHIEF, LAND DEVELOPMENT DIVISION	DATE
<i>Drummond W. Welstead</i>	8/1/90
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>William C. Reden</i>	_____
CHIEF, BUREAU OF ENGINEERING	DATE
0.15.01	REVISED LOTS
DATE NO	REVISION
OWNER/DEVELOPER	
J.J.M., INC. 5570 STERRETT PLACE SUITE 205 COLUMBIA, MARYLAND 21044	
PROJECT	
WYNDEMERE SECTION ONE LOTS 1-118 A SINGLE FAMILY ATTACHED SUBDIVISION	
AREA	TAX MAP NO. 47 ZONED R-SC
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE	
TITLE SHEET	
RIEMER MUEGGE & ASSOCIATES, INC.	
A Land Planning, Engineering and Consulting Firm 3105 North Ridge Road Ellicott City, Maryland 21043 301-461-2690 FAX: 301-750-3176	
7-10-90 DATE	5-85-42, P.89-13 WP-89-05, WP-89-130
	DESIGNED BY: W.C.W.
<i>Arthur E. Muegge</i>	DRAWN BY: C.A.D.
ARTHUR E. MUEGGE #8707	PROJECT NO: 48001
	DATE: JULY 16, 1990
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 13



PLAN
SCALE 1"=50'

- LEGEND**
- P-2 PAVING
 - P-3 PAVING
 - CONCRETE SIDEWALK

NOTE: FOR PLANT LIST SEE SHEET G.

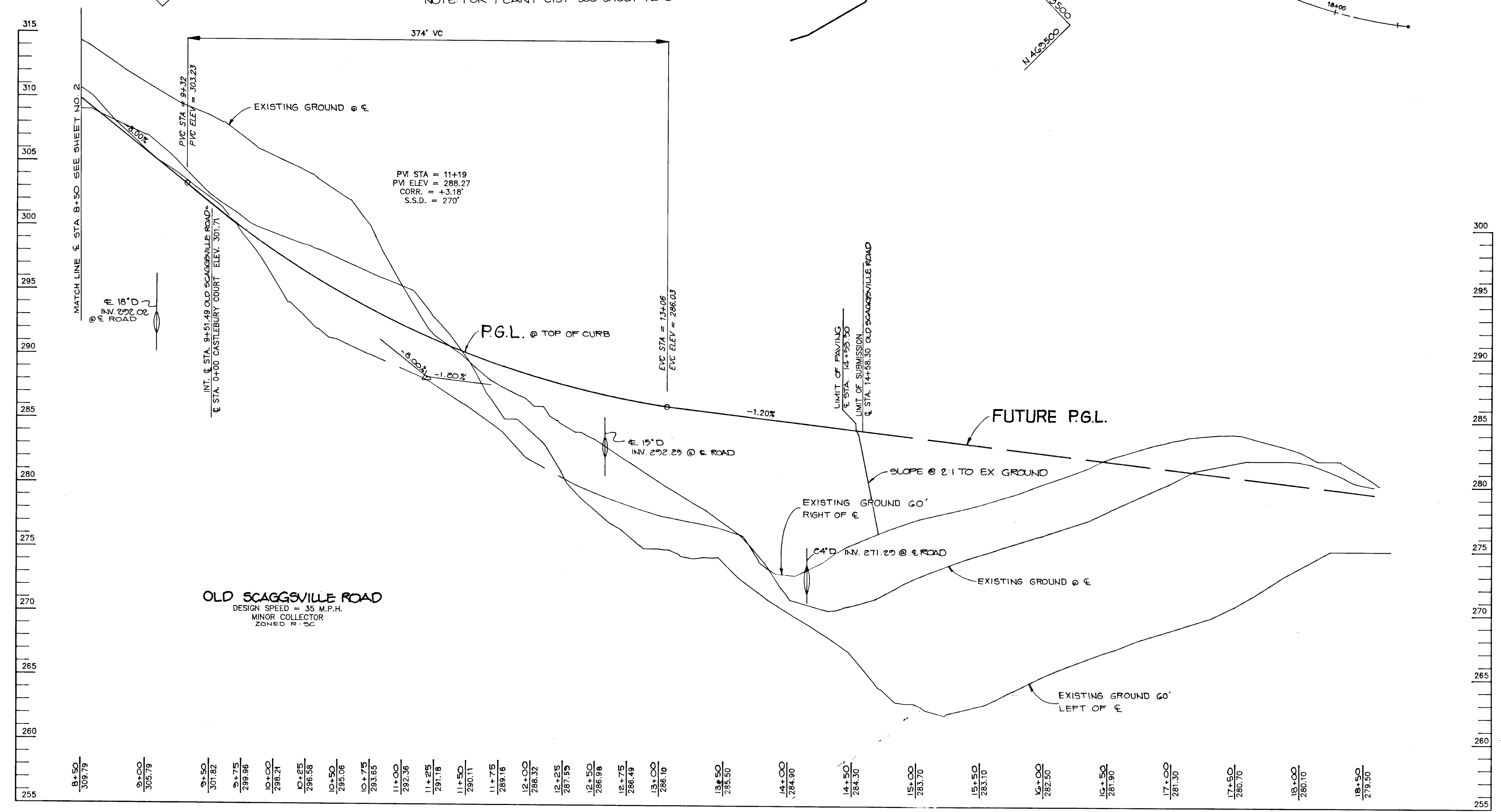
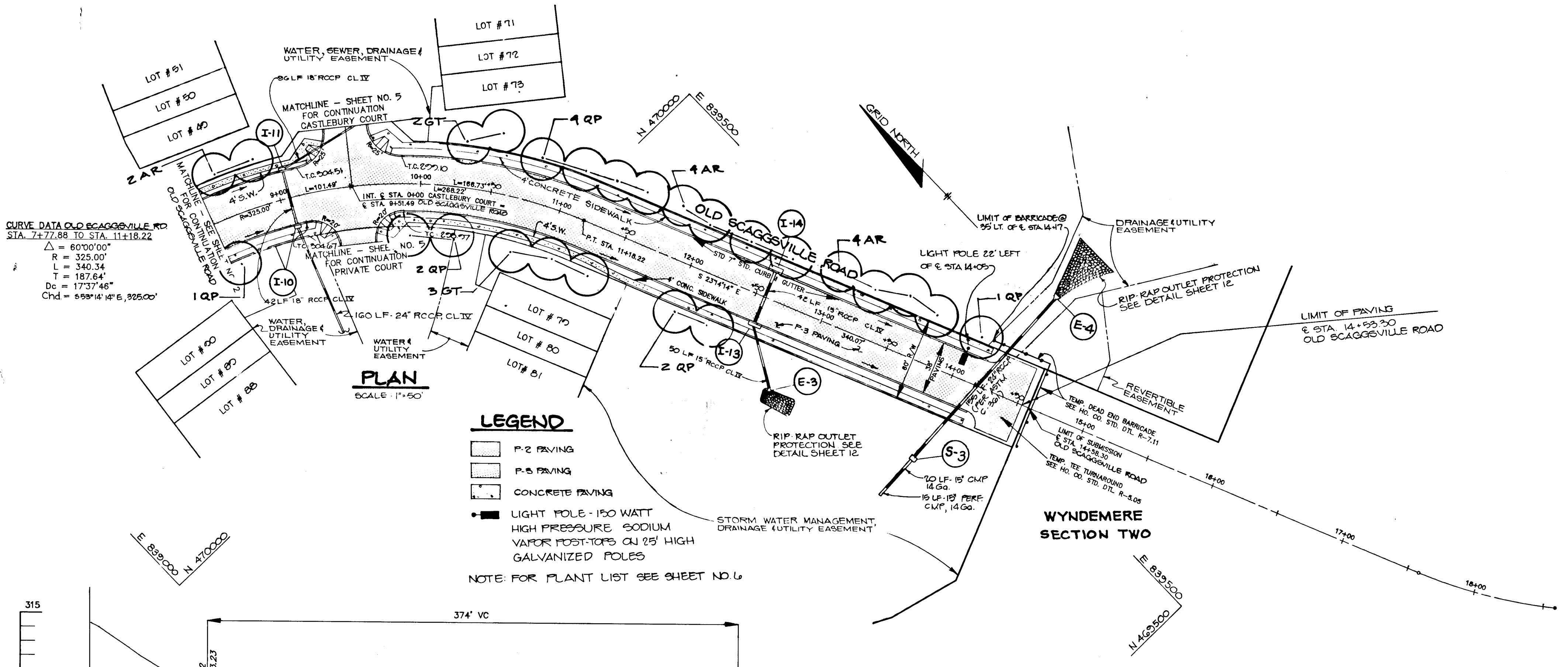


PROFILE
SCALE
HORIZ. - 1"=50'
VERT. - 1"=5'

AS BUILT CERTIFICATION	
ENGINEER _____	DATE _____
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Paul J. Temple</i>	7/17/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>John M. Ferguson</i>	9/11/90
CHIEF, LAND DEVELOPMENT DIVISION	DATE
<i>Brannville W. Willard</i>	8/17/90
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>John R. ...</i>	9/11/90
CHIEF, BUREAU OF ENGINEERING	DATE
10-7-94 2	REV. SW. LOCATION NEXT TO LOT 49
0-10-01 1	REVISED LOTS & STORM DRAINS REMOVED WATER QUALITY STRUCTURES
DATE	NO. REVISION
OWNER/DEVELOPER	
J.J.M., INC. 5570 STERRETT PLACE SUITE 205 COLUMBIA, MARYLAND 21044	
PROJECT	
WYNDEMERE SECTION ONE LOTS 1-118 A SINGLE FAMILY ATTACHED SUBDIVISION	
AREA: TAX MAP NO. 47 ZONED R-5C 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: PLAN AND PROFILE OLD SCAGGSVILLE ROAD	
RIEMER MUEGGE & ASSOCIATES, INC. A Land Planning, Engineering and Consulting Firm 3105 North Ridge Road Ellicott City, Maryland 21043 301-461-2690 FAX: 301-750-3176	
7/10/90 DATE	S 88-42, P. 89-13 WP. 89-05, WP. 89-130
<i>Arthur E. Muegge</i>	DESIGNED BY: W.C.W.
	DRAWN BY: C.A.D.
ARTHUR E. MUEGGE #10107	PROJECT NO: 48001
DATE	DATE: JULY 19, 1990
SCALE: AS SHOWN	DRAWING NO. 2 OF 13

SIDEWALK REVISION ONLY
REVISION #2 10/1/94

1589



AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
David S. Langley 9/12/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John M. Duggan 9/14/90
 CHIEF, LAND DEVELOPMENT DIVISION

Frank W. Wiersma 8/17/90
 CHIEF, BUREAU OF HIGHWAYS

John S. ... 9-12-...
 CHIEF, BUREAU OF ENGINEERING

10-7-94	2	REV. S.W. LOCATION NEXT TO LOTS 40 & 70
9-19-91	1	REVISED LOTS 1 STORY DRAIN REMOVED WATER QUALITY STRUCTURE
DATE	NO.	REVISION

OWNER/DEVELOPER
 J.J.M., INC.
 5570 STERRETT PLACE SUITE 205
 COLUMBIA, MARYLAND 21044

PROJECT: **WYNDEMERE SECTION ONE LOTS 1-110**
 A SINGLE FAMILY ATTACHED SUBDIVISION

AREA TAX MAP 130 47 ZONED R-5C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE OLD SCAGGSVILLE ROAD**

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-770-3176

7-10-90 DATE
 9:00 A.M. P. 80-13 WP-89-03, WP-89-130
 DESIGNED BY: W.C.W.

DRAWN BY: CAD

PROJECT NO.: 48001

DATE: JULY 10, 1990

SCALE: AS SHOWN

DRAWING NO.: 3 OF 13

7-10-90 DATE
 9:00 A.M. P. 80-13 WP-89-03, WP-89-130
 DESIGNED BY: W.C.W.

DRAWN BY: CAD

PROJECT NO.: 48001

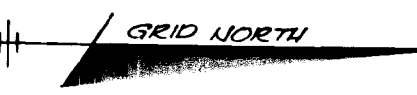
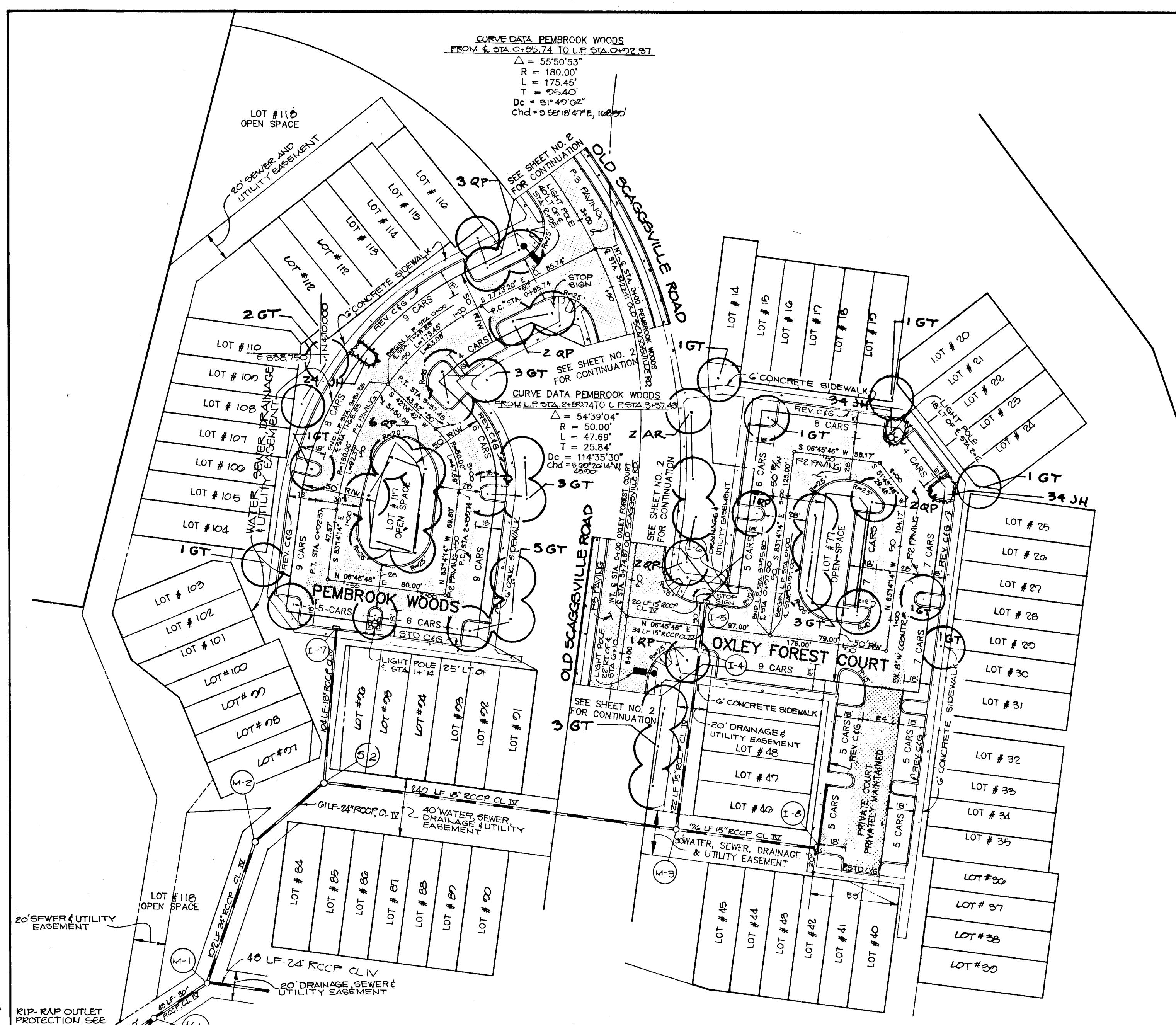
DATE: JULY 10, 1990

SCALE: AS SHOWN

DRAWING NO.: 3 OF 13

SIDEWALK REVISION ONLY
 REVISION 10-7-94

1569

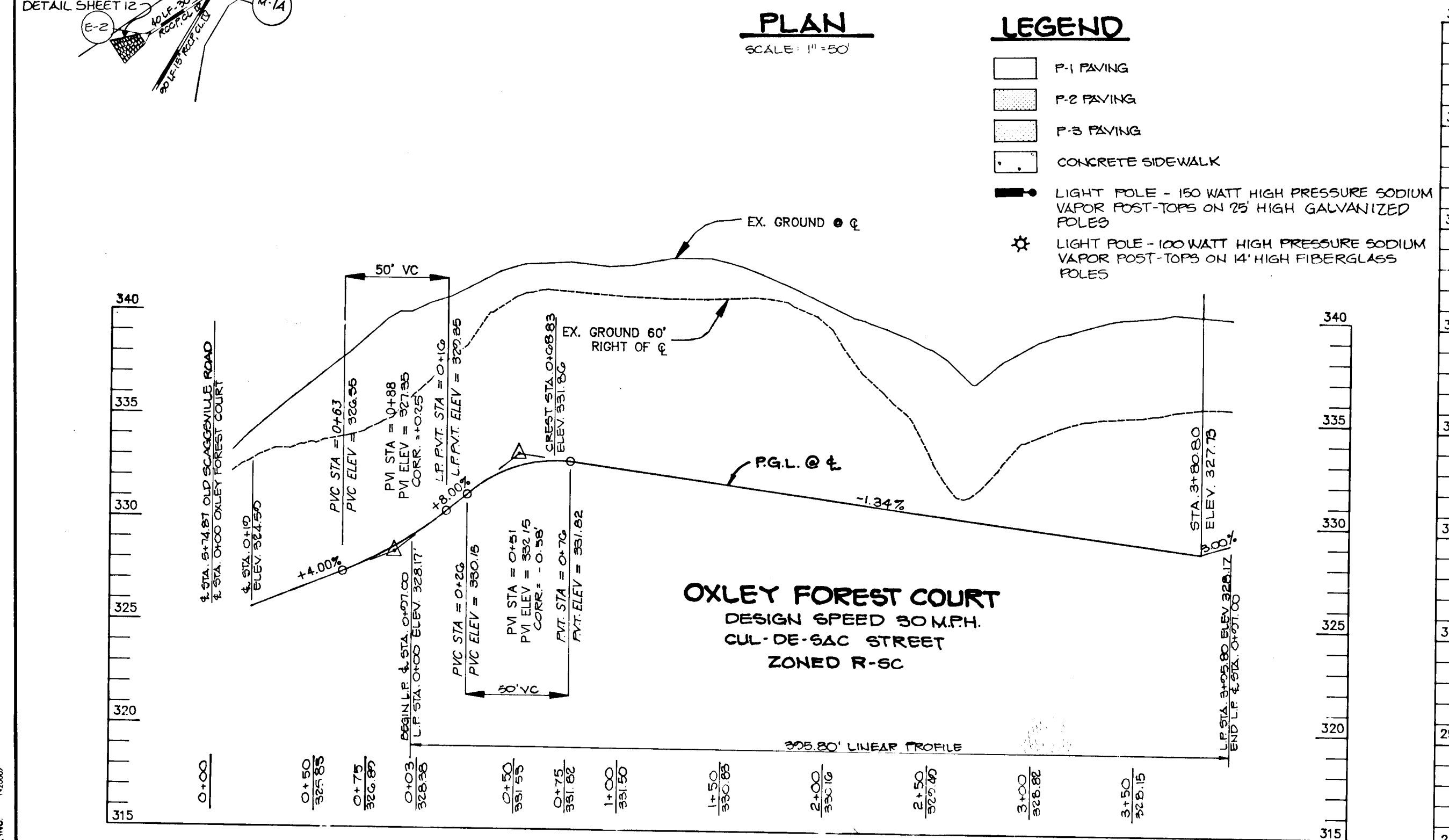


NOTE: 1. ALL CURB RADII TO BE 5' UNLESS OTHERWISE NOTED.
 2. THE LIMITS OF PUBLIC MAINTENANCE FOR PEMBROOK WOODS & OXLEY FOREST COURT WILL BE THE 28' WIDE TRAVEL WAY.
 3. FOR PLANT LIST SEE SHEET NO. 6

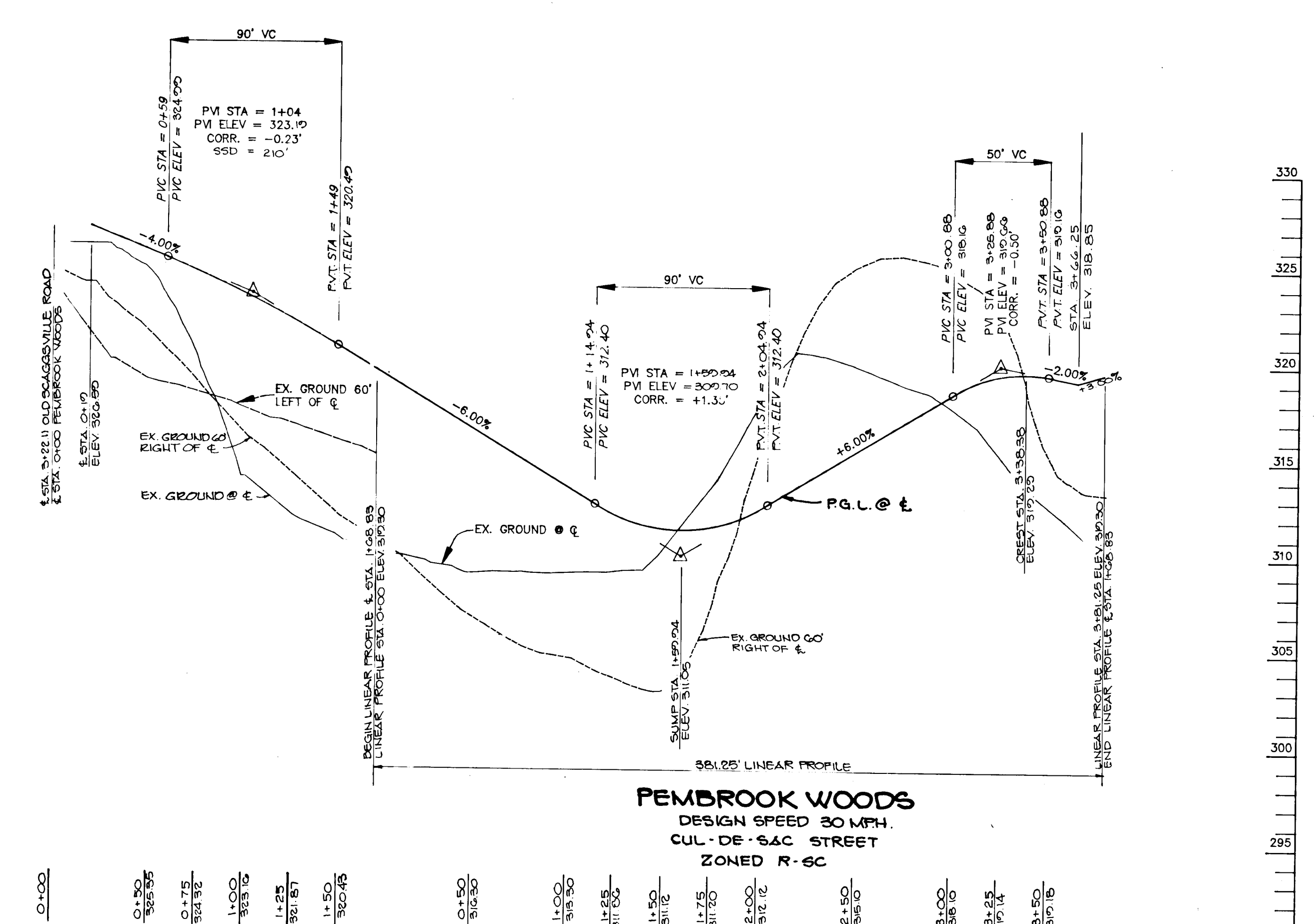
PLAN
SCALE: 1"=50'

LEGEND

- P-1 PAVING
- P-2 PAVING
- P-3 PAVING
- CONCRETE SIDEWALK
- LIGHT POLE - 150 WATT HIGH PRESSURE SODIUM VAPOR POST-TOPS ON 25 HIGH GALVANIZED PDL'S
- LIGHT POLE - 100 WATT HIGH PRESSURE SODIUM VAPOR POST-TOPS ON 14' HIGH FIBERGLASS POLES



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



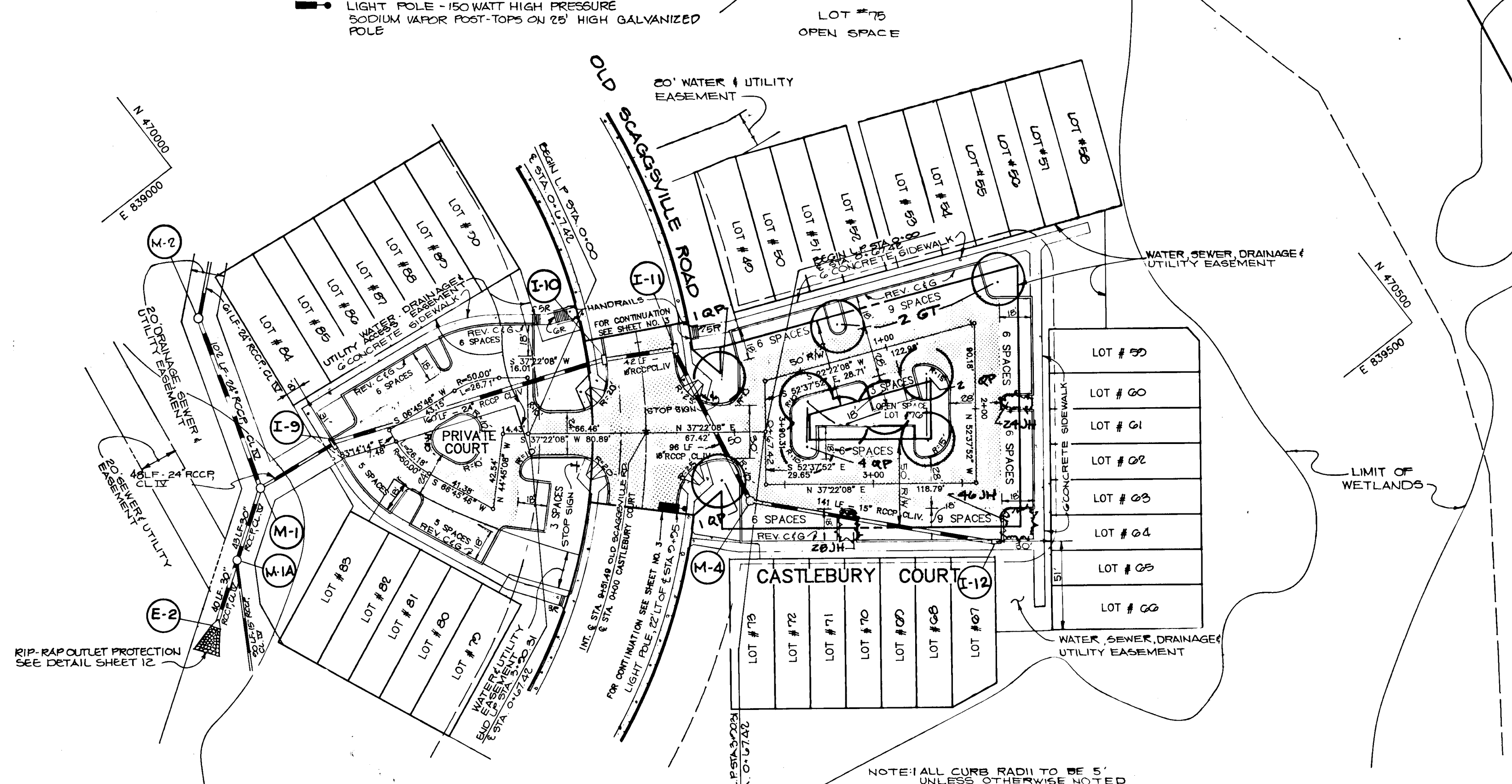
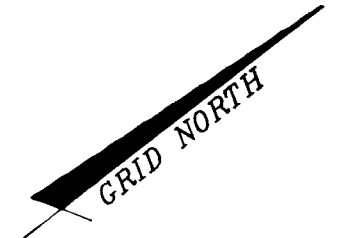
PROFILE
SCALE: HOR: 1"=50'
VERT: 1"=5'

AS BUILT CERTIFICATION	
ENGINEER _____	DATE _____
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING	
<i>Richard J. Kuehl</i>	7/1/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE 25
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>John M. Dugan</i>	9/1/90
CHIEF, LAND DEVELOPMENT DIVISION	DATE 4
<i>Francis W. Weiland</i>	8/17/90
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>James J. & Co.</i>	9-12-90
CHIEF, BUREAU OF ENGINEERING	DATE
DATE 10-13-01	REVISION 1 REVISED LOTS, REMOVE WATER QUALITY STRUCTURE, REVISED STORM DRAINS
OWNER/DEVELOPER	
J.J.M., INC. 5570 STERRETT PLACE SUITE 205 COLUMBIA, MARYLAND 21044	
PROJECT	
WYNDEMERE SECTION ONE LOTS 1-118 A SINGLE FAMILY ATTACHED SUBDIVISION	
AREA TAX MAP NO. 47	ZONED R-5C
GTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: PLAN AND PROFILE PEMBROOK WOODS AND OXLEY FOREST COURT	
RIEMER MUEGGE & ASSOCIATES, INC.	
A Land Planning, Engineering and Consulting Firm 3105 North Ridge Road Ellicott City, Maryland 21043 301-461-2690 FAX: 301-750-3176	
7-10-90	3-BB-42 P.85-13 WP-89-05 WP-89-130
	DESIGNED BY: W.C.W.
DRAWN BY: CAD	
PROJECT NO: 46001	
DATE: JULY 16, 1990	
SCALE: AS SHOWN	
DRAWING NO: 4 OF 13	

1589

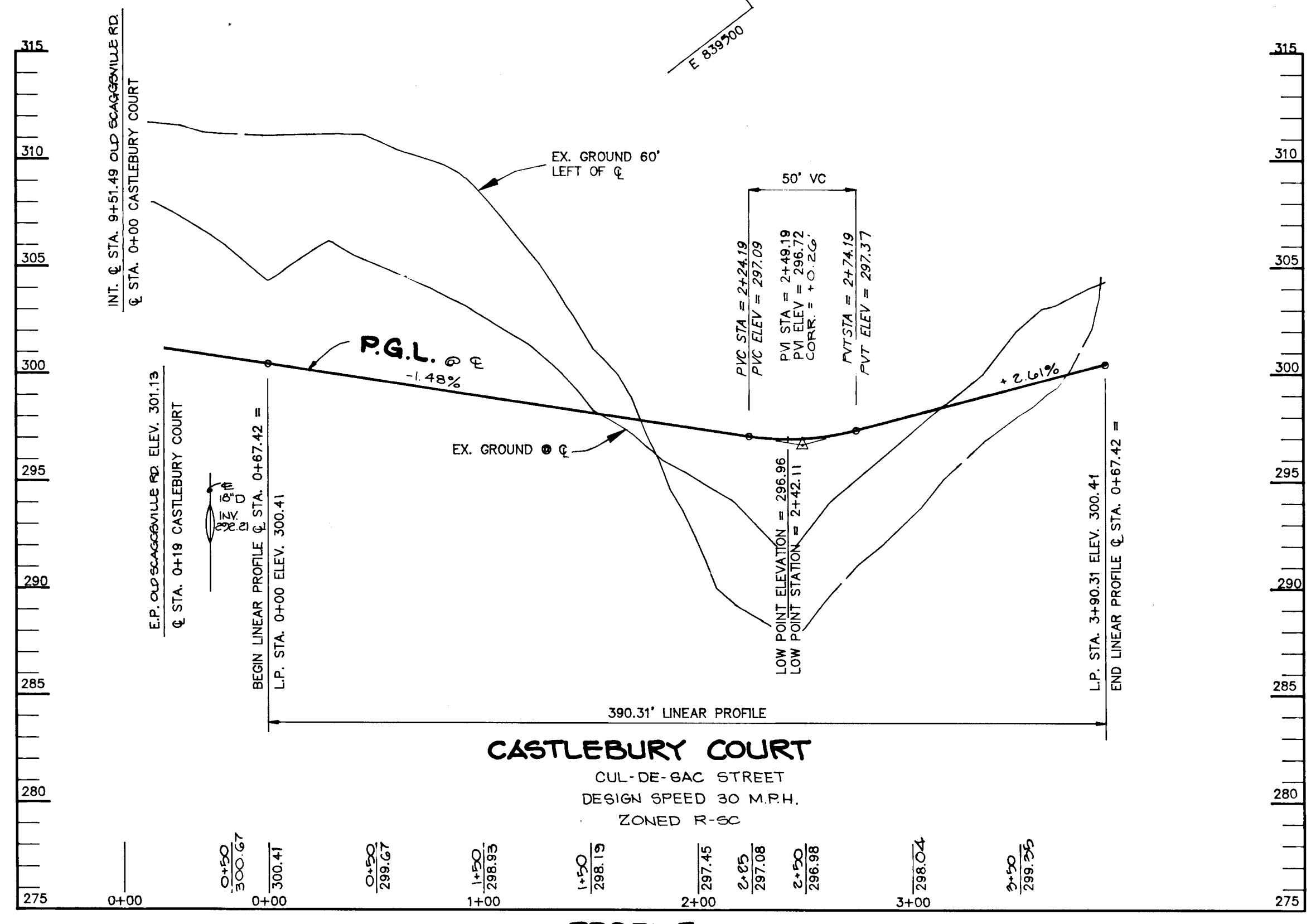
LEGEND

- P-1 PAVING
- P-2 PAVING
- P-3 PAVING
- CONCRETE SIDEWALK
- LIGHT POLE - 150 WATT HIGH PRESSURE SODIUM VAPOR FOOT-TOPS ON 25' HIGH GALVANIZED POLE



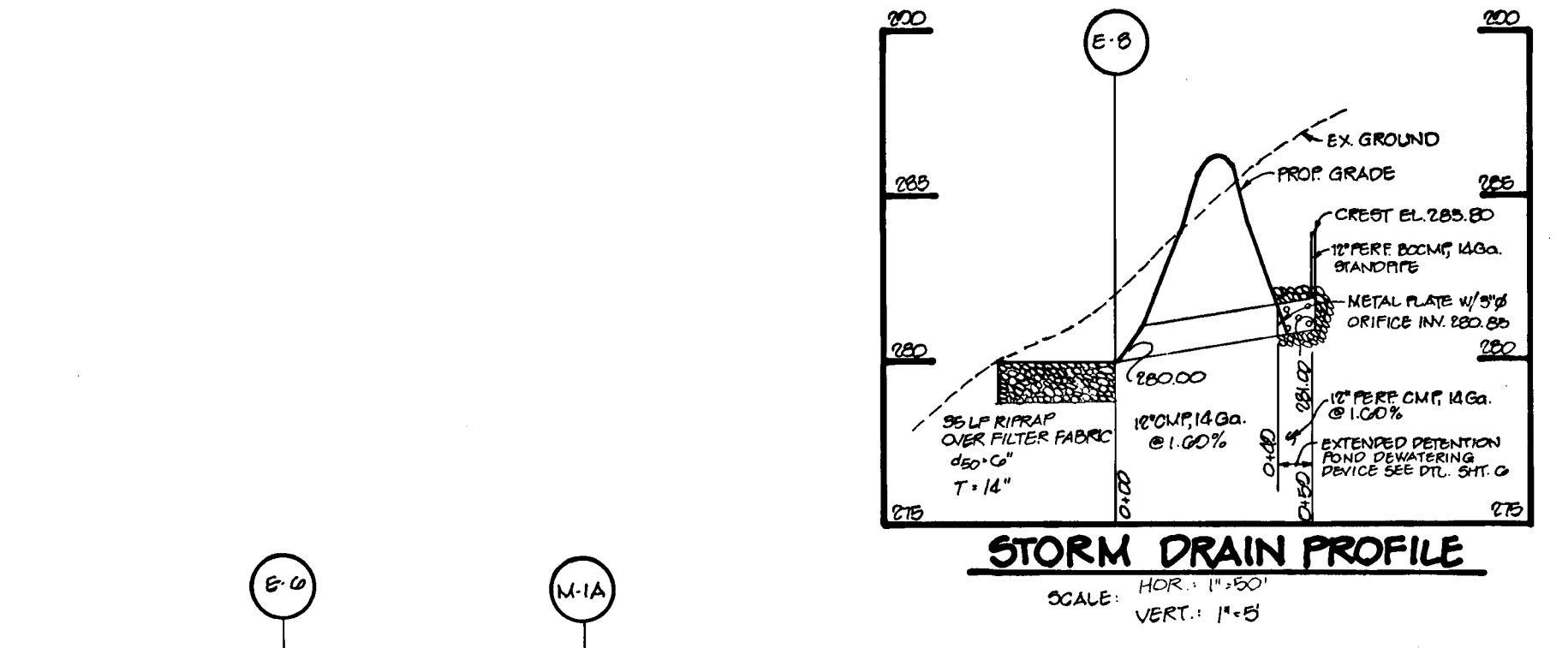
PLAN
SCALE: 1" = 50'

NOTE: ALL CURBS RADI TO BE 5' UNLESS OTHERWISE NOTED
 1. THE LIMITS OF PUBLIC MAINTENANCE IN CASTLEBURY COURT WILL BE THE 25' WIDE TRAVELED WAY.
 2. FOR PLANT LIST SEE SHEET NO. U.

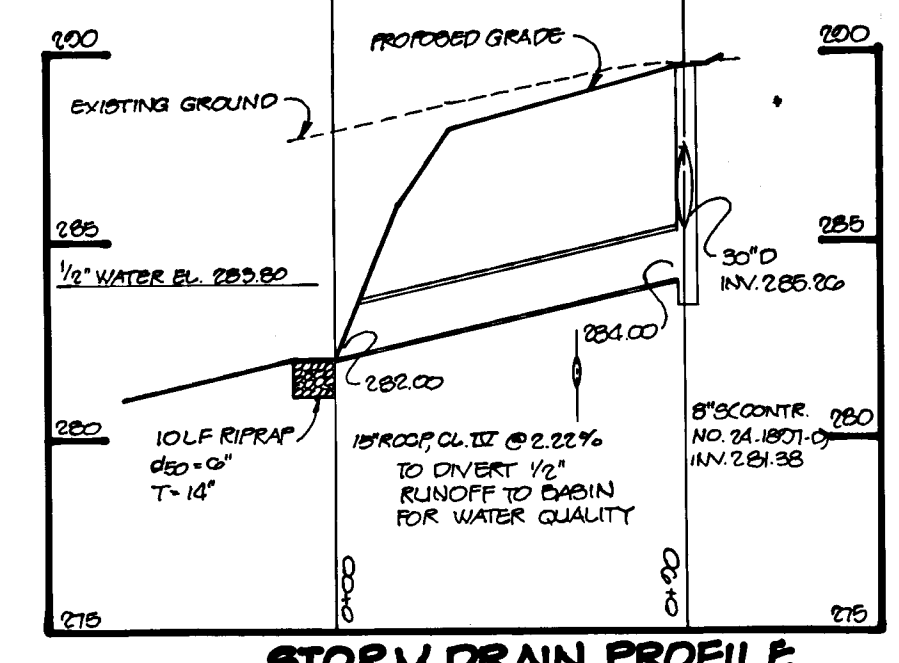


CASTLEBURY COURT
CUL-DE-SAC STREET
DESIGN SPEED 30 M.P.H.
ZONED R-5C

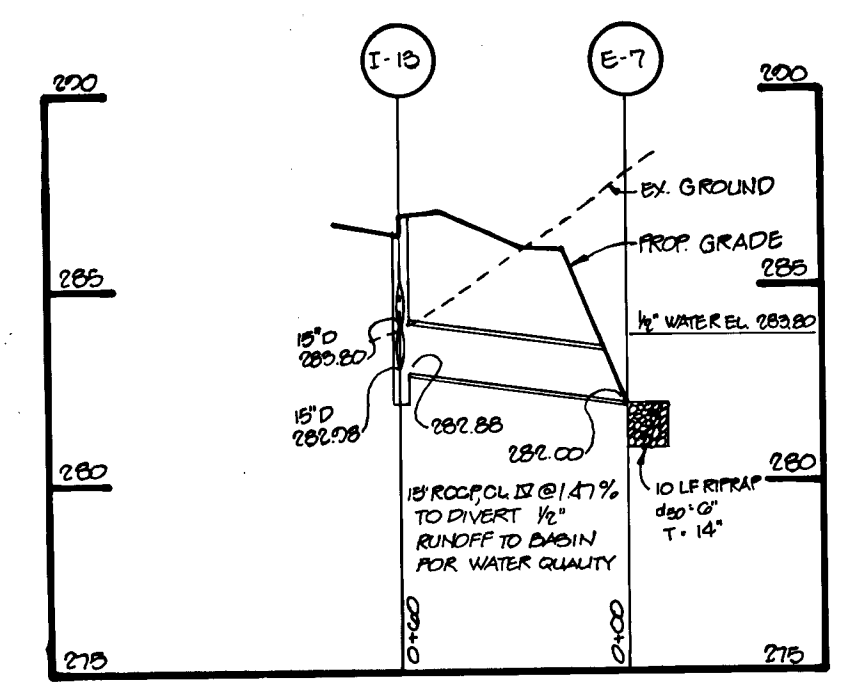
PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



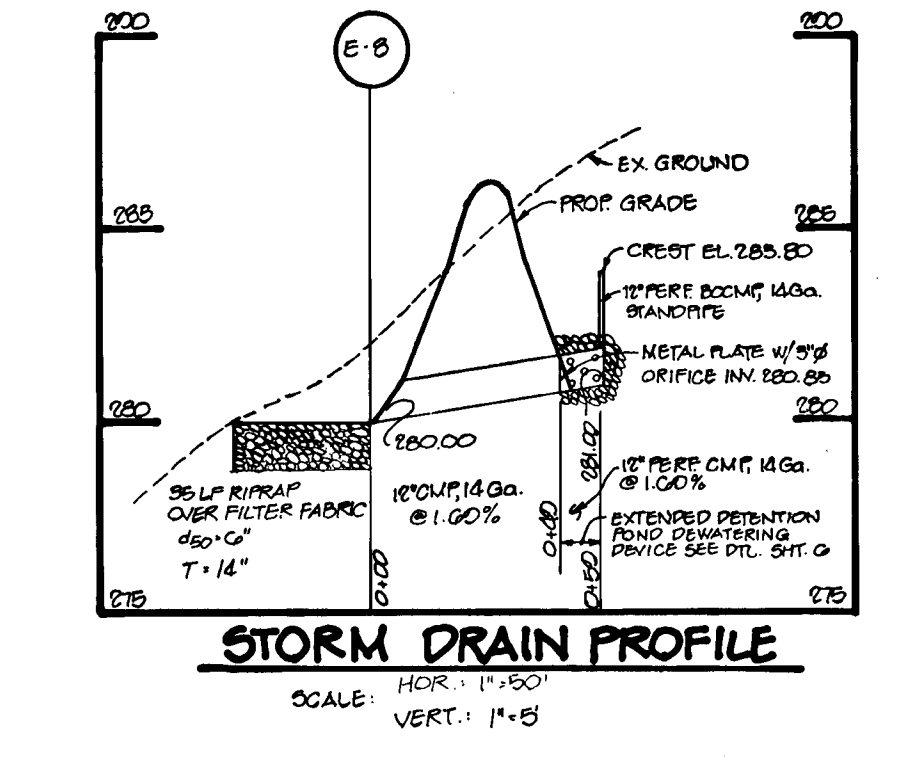
STORM DRAIN PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



STORM DRAIN PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



STORM DRAIN PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'



STORM DRAIN PROFILE
SCALE: HOR. 1" = 50'
VERT. 1" = 5'

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
David J. Dwyer 9/11/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Alan M. Taylor 9/11/90
 CHIEF, LAND DEVELOPMENT DIVISION

Annelle M. Wallace 8/17/90
 CHIEF, BUREAU OF HIGHWAYS

John E. Ray 9-12-90
 CHIEF, BUREAU OF ENGINEERING

9-13-91 1 REVISED LOTS & STORM DRAIN REMOVE WATER QUALITY STRUCTURE

DATE NO REVISION

OWNER/DEVELOPER
 J.J.M., INC.
 5570 STERRETT PLACE SUITE 205
 COLUMBIA, MARYLAND 21044

PROJECT
WYNDEMERE SECTION ONE LOTS 1-118
 A SINGLE FAMILY ATTACHED SUBDIVISION

AREA TAX MAP NO. 47 ZONED R-5C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE
PLAN AND PROFILE CASTLEBURY COURT

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-750-3176

7-10-90 DATE
 WP-89-05, WP-89-130
 DESIGNED BY: W.C.W.

7-10-90 DATE
 NO. 8708 REGISTERED PROFESSIONAL ENGINEER
 ARTHUR E. MUEGGE #8707

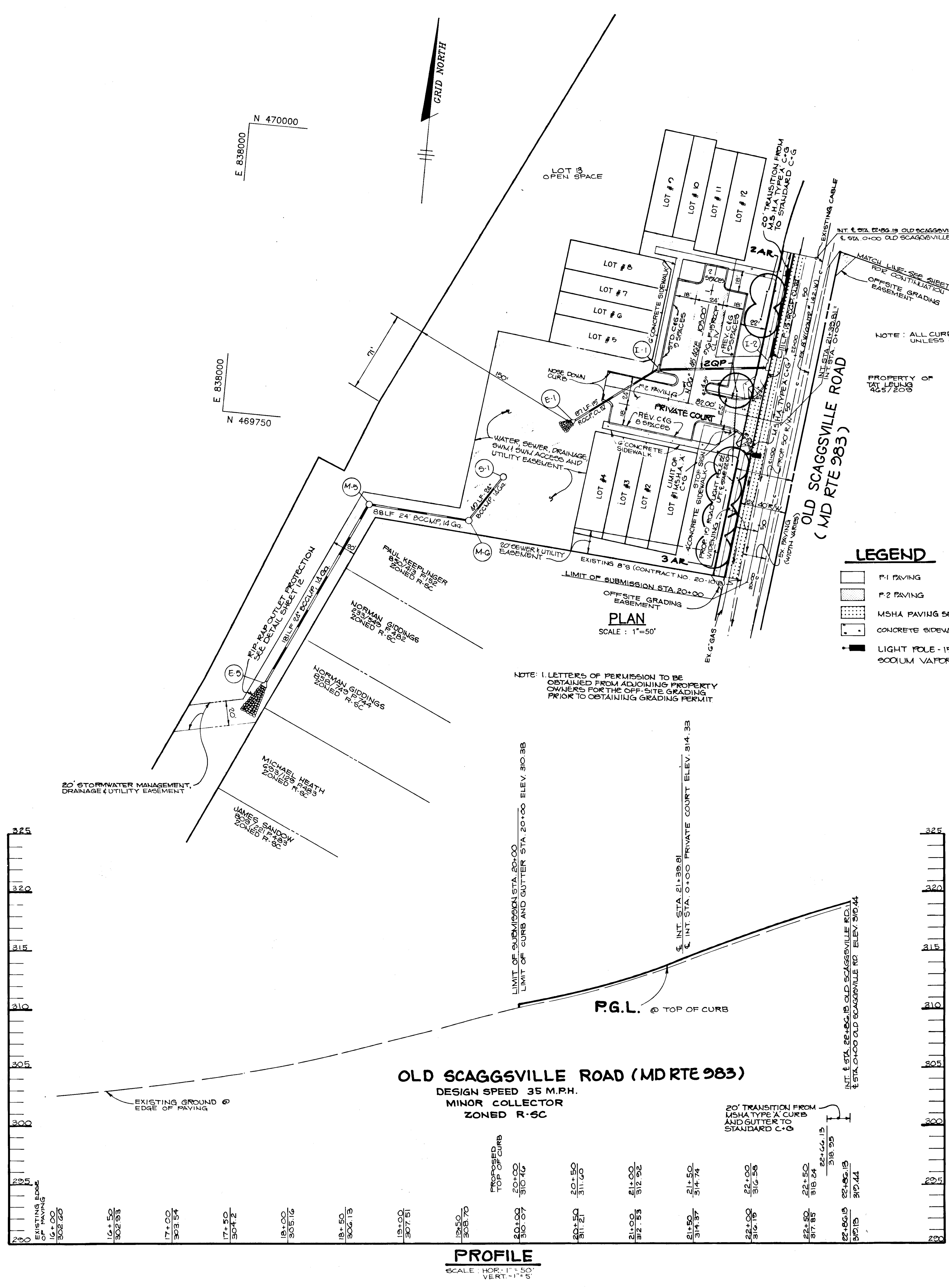
5-88-42, P-89-13
 DESIGNED BY: W.C.W.
 DRAWN BY: G.D.H.
 PROJECT NO: 48001
 DATE: JULY 10, 1990
 SCALE: AS SHOWN
 DRAWING NO. 5 OF 13

1589

MARYLAND BLUPRINT CO., INC. 100007

1589

MARYLAND BLUEPRINT CO. INC. 12/20/97



7-10-90

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

PE # _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
David S. Dwyer 9/10/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Alan M. Tamm 9/11/90
 CHIEF, LAND DEVELOPMENT DIVISION DATE
Travis W. Williams 8/17/90
 CHIEF, BUREAU OF HIGHWAYS DATE
John P. ... 9...
 CHIEF, BUREAU OF ENGINEERING DATE

015-01	1	SHIFTED PART OF PRIVATE COURT 2', REVISED NO. OF LOTS
DATE	NO	REVISION

OWNER/DEVELOPER
 J.J.M., INC.
 5570 STERRETT PLACE SUITE 205
 COLUMBIA, MARYLAND 21044

PROJECT: **WYNDEMERE**
 SECTION ONE LOTS 1-118
 A SINGLE FAMILY ATTACHED SUBDIVISION

AREA TAX MAP NO. 47 ZONED R-5C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

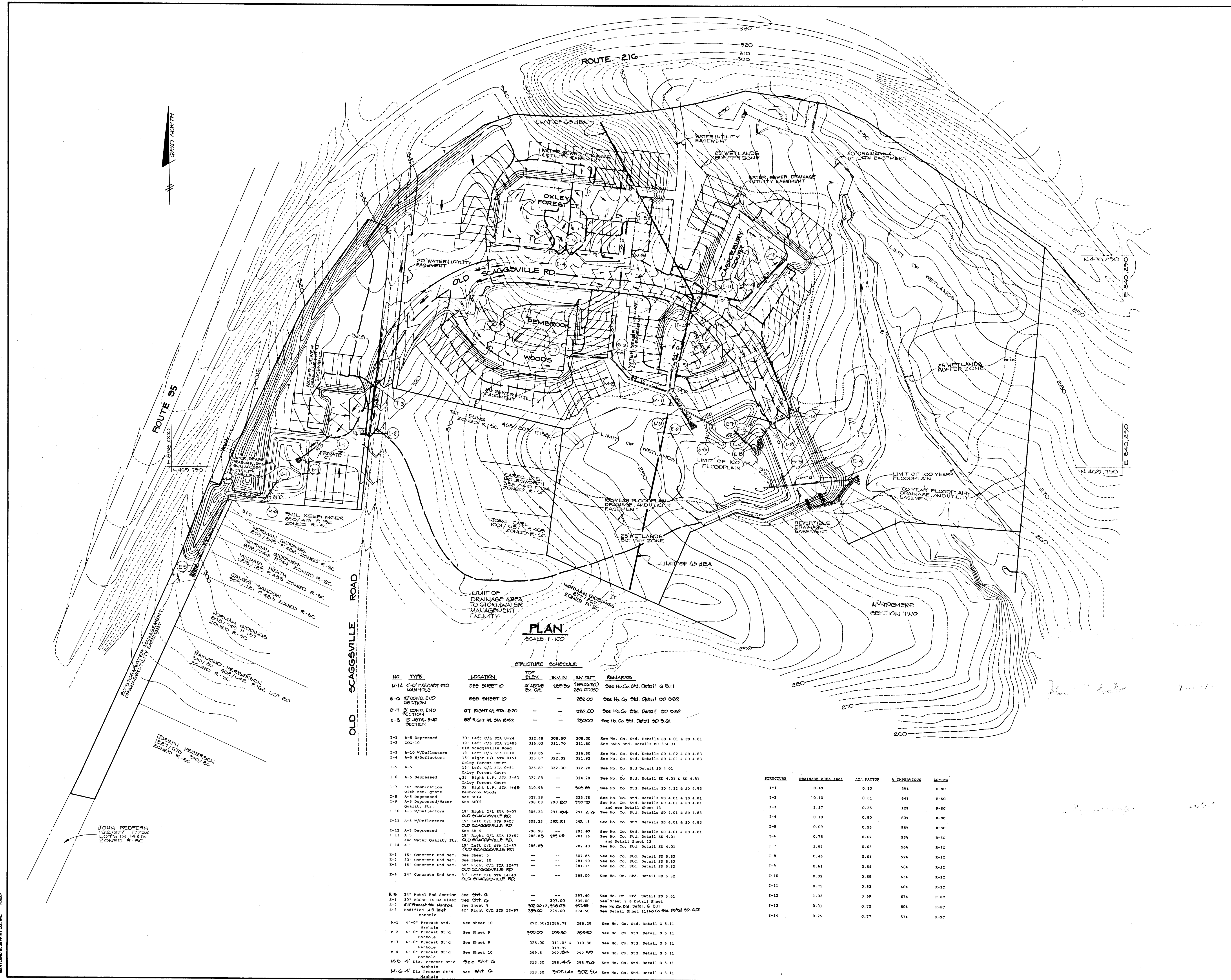
TITLE: **PLAN AND PROFILE
 OLD SCAGGSVILLE ROAD**

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-750-3176

DATE: 7-10-90
 DESIGNED BY: W.C.W.
 DRAWN BY: REA.
 PROJECT NO: 48001
 DATE: JULY 10, 1990
 SCALE: AS SHOWN
 DRAWING NO. 6 OF 13

ARTHUR E. MUEGGE, P.E. 6570

F-90-41



PLAN
SCALE 1"=100'

NO.	TYPE	LOCATION	ELEV.	INV. IN.	INV. OUT.	REMARKS
M-1A	4'-0" PRECAST STD MANHOLE	SEE SHEET 10	225.00	225.00	225.00	See Ho. Co. Std. Detail G 5.11
E-10	15" CONC. END SECTION	SEE SHEET 10	---	---	282.00	See Ho. Co. Std. Detail SD 5.52
E-7	15" CONC. END SECTION	07' RIGHT OF STA 15+00	---	---	282.00	See Ho. Co. Std. Detail SD 5.52
E-8	15" CONC. END SECTION	85' RIGHT OF STA 15+02	---	---	280.00	See Ho. Co. Std. Detail SD 5.51
1-1	A-5 Depressed	30' Left C/L STA 0+24	312.48	308.50	308.30	See Ho. Co. Std. Details SD 4.01 & SD 4.81
1-2	00-10	19' Left C/L STA 3+45	316.03	311.10	311.60	See H&M Std. Details HO-374.31
1-3	A-10 W/Deflectors	19' Left C/L STA 0+10	319.85	---	316.50	See Ho. Co. Std. Details SD 4.02 & SD 4.83
1-4	A-5 W/Deflectors	15' Right C/L STA 0+51	325.87	322.02	322.92	See Ho. Co. Std. Details SD 4.01 & SD 4.83
1-5	A-5	Oxley Forest Court	325.87	322.30	322.30	See Ho. Co. Std. Detail SD 4.01
1-6	A-5 Depressed	32' Right L.P. STA 1+43	327.88	---	324.20	See Ho. Co. Std. Detail SD 4.01 & SD 4.81
1-7	3" Combination with ext. grate	32' Right L.P. STA 1+43	310.98	---	305.85	See Ho. Co. Std. Details SD 4.32 & SD 4.93
1-8	A-5 Depressed	See SHEET 4	327.58	---	323.75	See Ho. Co. Std. Details SD 4.01 & SD 4.81
1-9	A-5 Depressed/Water Quality Str.	See SHEET 4	298.08	290.80	290.70	See Ho. Co. Std. Details SD 4.01 & SD 4.81 and see Detail Sheet 13
1-10	A-5 W/Deflectors	19' Right C/L STA 9+07	305.23	291.04	291.44	See Ho. Co. Std. Details SD 4.01 & SD 4.83
1-11	A-5 W/Deflectors	19' Left C/L STA 9+07	305.23	292.21	292.11	See Ho. Co. Std. Details SD 4.01 & SD 4.83
1-12	A-5 Depressed	See SHEET 4	296.98	---	293.40	See Ho. Co. Std. Details SD 4.01 & SD 4.81
1-13	A-5	19' Right C/L STA 12+57	286.85	282.08	281.35	See Ho. Co. Std. Detail SD 4.01
1-14	A-5	19' Left C/L STA 12+57	286.85	---	282.40	See Ho. Co. Std. Detail SD 4.01
E-1	15" Concrete End Sec.	See Sheet 6	---	---	307.85	See Ho. Co. Std. Detail SD 5.52
E-2	30" Concrete End Sec.	See Sheet 10	---	---	284.50	See Ho. Co. Std. Detail SD 5.52
E-3	15" Concrete End Sec.	15' Right C/L STA 12+77	---	---	281.15	See Ho. Co. Std. Detail SD 5.52
E-4	24" Concrete End Sec.	81' Left C/L STA 14+48	---	---	265.00	See Ho. Co. Std. Detail SD 5.52
E-5	24" Metal End Section	See SHEET 6	---	---	297.40	See Ho. Co. Std. Detail SD 5.51
S-1	30" ROCK 14 GA RISER	See SHEET 7	---	---	307.00	See SHEET 7 & Detail Sheet
S-2	40" Precast Std. Manhole	See Sheet 9	302.00	296.05	297.95	See Ho. Co. Std. Detail G 5.11
S-3	Modified A-5 Inlet Manhole	47' Right C/L STA 13+97	292.00	275.00	274.10	See Detail Sheet 1196.00, Detail SD 4.01
M-1	4'-0" Precast Std. Manhole	See Sheet 10	292.50(2)286.79	286.29	---	See Ho. Co. Std. Detail G 5.11
M-2	4'-0" Precast Std. Manhole	See Sheet 9	299.00	295.50	299.50	See Ho. Co. Std. Detail G 5.11
M-3	4'-0" Precast Std. Manhole	See Sheet 9	325.00	311.05 & 310.80	---	See Ho. Co. Std. Detail G 5.11
M-4	4'-0" Precast Std. Manhole	See Sheet 10	299.6	292.84	292.99	See Ho. Co. Std. Detail G 5.11
M-5	4' Dia. Precast Std. Manhole	See SHEET 6	313.50	298.44	298.54	See Ho. Co. Std. Detail G 5.11
M-6	4' Dia. Precast Std. Manhole	See SHEET 6	313.50	302.14	302.54	See Ho. Co. Std. Detail G 5.11

STRUCTURE	DRAINAGE AREA (AC)	CF FACTOR	% IMPERVIOUS	ROUNDS
I-1	0.49	0.53	39%	R-8C
I-2	0.10	0.61	64%	R-8C
I-3	2.37	0.25	12%	R-8C
I-4	0.10	0.80	80%	R-8C
I-5	0.09	0.55	56%	R-8C
I-6	0.76	0.62	53%	R-8C
I-7	1.63	0.63	56%	R-8C
I-8	0.46	0.61	52%	R-8C
I-9	0.61	0.64	56%	R-8C
I-10	0.32	0.65	63%	R-8C
I-11	0.75	0.53	40%	R-8C
I-12	1.03	0.69	67%	R-8C
I-13	0.31	0.70	60%	R-8C
I-14	0.25	0.77	57%	R-8C

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

PE # _____ DATE _____

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Paul J. Dangle 7/17/90
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John M. Johnson 9/1/90
 CHIEF, LAND DEVELOPMENT DIVISION

Garrison W. Welland 8/13/90
 CHIEF, BUREAU OF HIGHWAYS

Arthur E. Muegge 8/13/90
 CHIEF, BUREAU OF ENGINEERING

OWNER/DEVELOPER
 J.J.M., INC.
 5570 STERRETT PLACE SUITE 205
 COLUMBIA, MARYLAND 21044

PROJECT: WYNDEMERE SECTION ONE LOTS 1-116
 A SINGLE FAMILY ATTACHED SUBDIVISION

AREA: TAX MAP 47 ZONED R-6C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

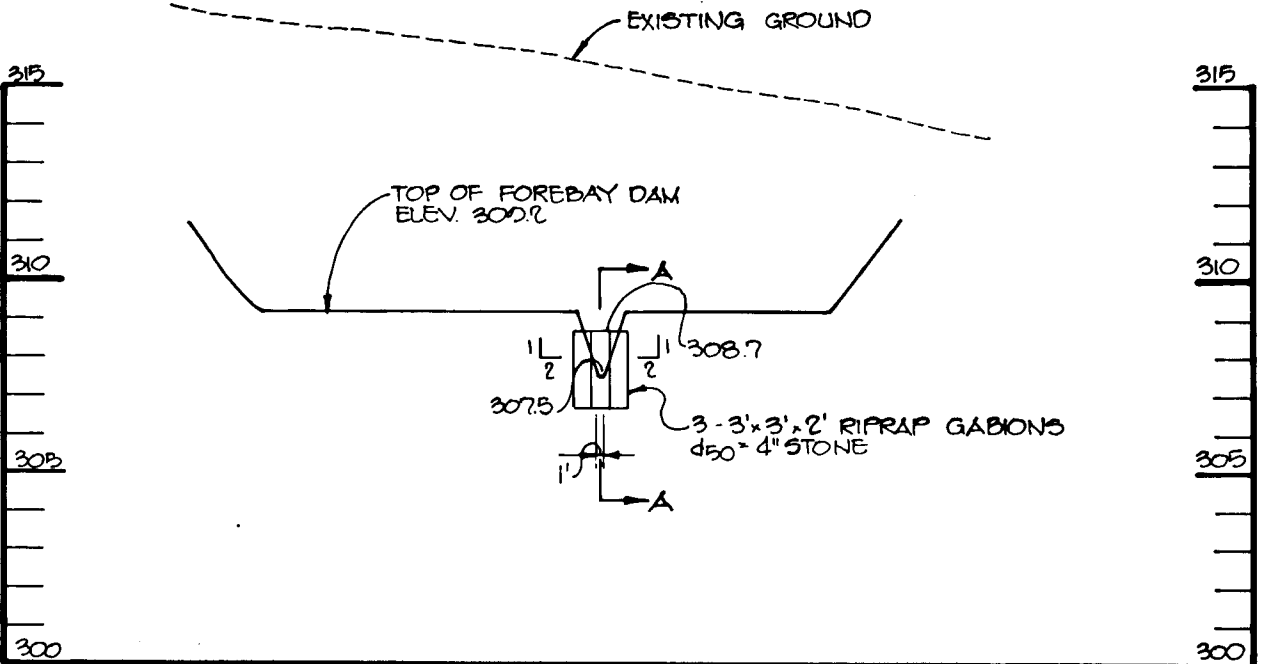
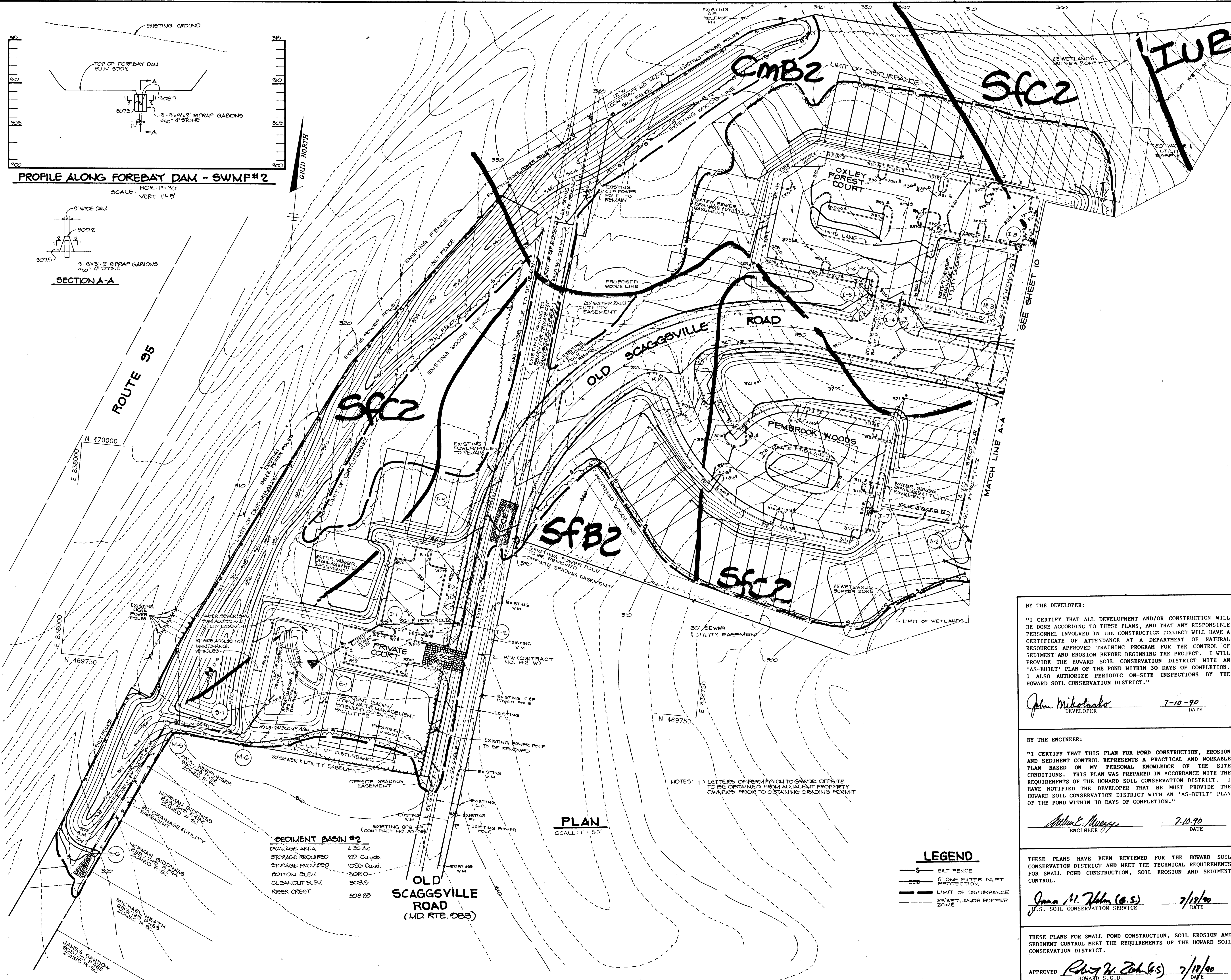
TITLE: DRAINAGE AREA MAP

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-750-3176

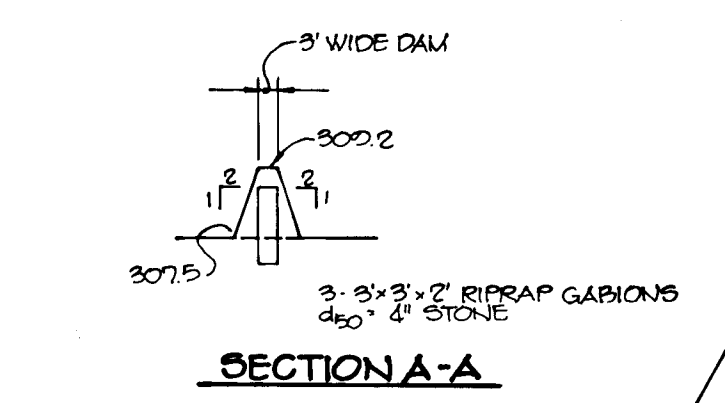
DATE: 7-10-90
 DESIGNED BY: C.J.R./W.C.W.
 DRAWN BY: CAD
 PROJECT NO: 48001
 DATE: JULY 10, 1990
 SCALE: AS SHOWN
 DRAWING NO. 8 OF 13

STATE OF MARYLAND PROFESSIONAL ENGINEER ARTHUR E. MUEGGE #8707

1589



PROFILE ALONG FOREBAY DAM - SWMF#2
SCALE: HOR: 1\"/>



SECTION A-A

SEDIMENT BASIN #2

DRAINAGE AREA	4.33 AC.
STORAGE REQUIRED	201 Cu. Yds.
STORAGE PROVIDED	1050 Cu. Yd.
BOTTOM ELEV.	308.0
CLEANOUT ELEV.	308.5
RISER CREST	308.85

OLD SCAGGSVILLE ROAD
(MD. RTE. 085)

PLAN
SCALE: 1\"/>

LEGEND

---	SILT FENCE
---	STONE FILTER INLET PROTECTION
---	LIMIT OF DISTURBANCE
---	25' WETLANDS BUFFER ZONE

NOTES: 1.) LETTERS OF PERMISSION TO GRADE OFFSITE TO BE OBTAINED FROM ADJACENT PROPERTY OWNERS PRIOR TO OBTAINING GRADING PERMIT.

- SEQUENCE OF CONSTRUCTION
- Obtain grading permit and wetlands and water quality permits prior to any site grading.
 - Obtain temporary offsite grading easements from adjoining property owners.
 - Install stabilized construction entrances.....(1/2 days)
 - Install silt fence north dike, stone outlet sediment traps #1&2, sediment basin #2 and perform grading for SHALE #1.....(2 weeks)
 - Perform clearing and grubbing to allow for road grading.....(1 week)
 - Perform grading and install all utilities. Install stone filter inlet protection as necessary.....(4 weeks)
 - Stabilize all disturbed areas in accordance with the temporary seeding notes.....(2 days)
 - Complete construction activities including curb and gutter paving and sidewalks.....(3 weeks)
 - Install street trees, street lights and stabilize all disturbed areas in accordance with the permanent seeding notes.....(1 week)
 - Upon permission of the Howard County Department of Public Works Sediment Control Inspector remove all sediment control devices and perform the following:
 - Pump water out of sediment basin #2.....(1/2 days)
 - Remove sediment and deposit as per Ho. Co. Sediment Control Inspector.....(1 day)
 - Grade for and install forebay as per sheet 9.....(3 days)
 - Remove construction device and install low flow orifice w/ trash rack on river #1.....(1/2 days)
 - Stabilize all disturbed areas in accordance with the permanent seeding notes.....(1 day)

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____
 APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Frank S. J. Langley 7/17/90 DATE 3s
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Alan M. Tanner 9/14/90 DATE 4
 CHIEF, LAND DEVELOPMENT DIVISION
Drumville W. Weland 8/17/90 DATE
 CHIEF, BUREAU OF HIGHWAYS
Michael E. Ryan 9-17-90 DATE
 CHIEF, BUREAU OF ENGINEERING

BY THE DEVELOPER:
 "I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."
John Mikolacko 7-10-90 DATE
 DEVELOPER

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 7-10-90 DATE
 ENGINEER (P)

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

James M. Tobin (S.S.) 7/18/90 DATE
 S.S. SOIL CONSERVATION SERVICE

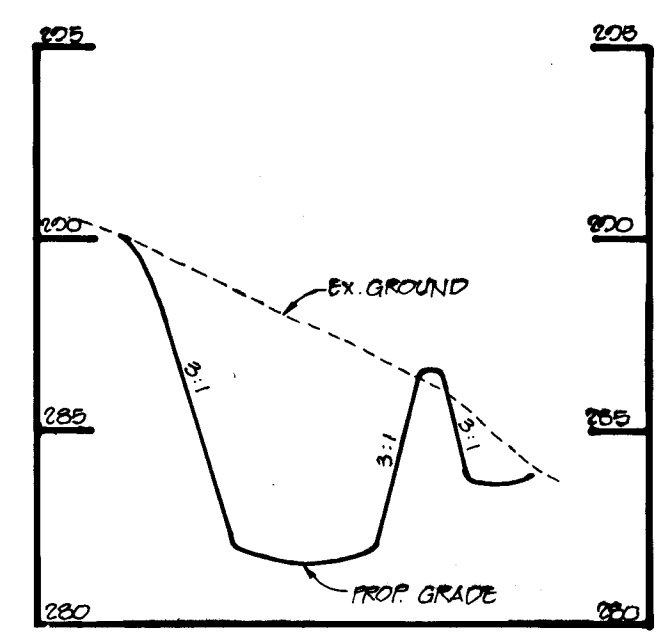
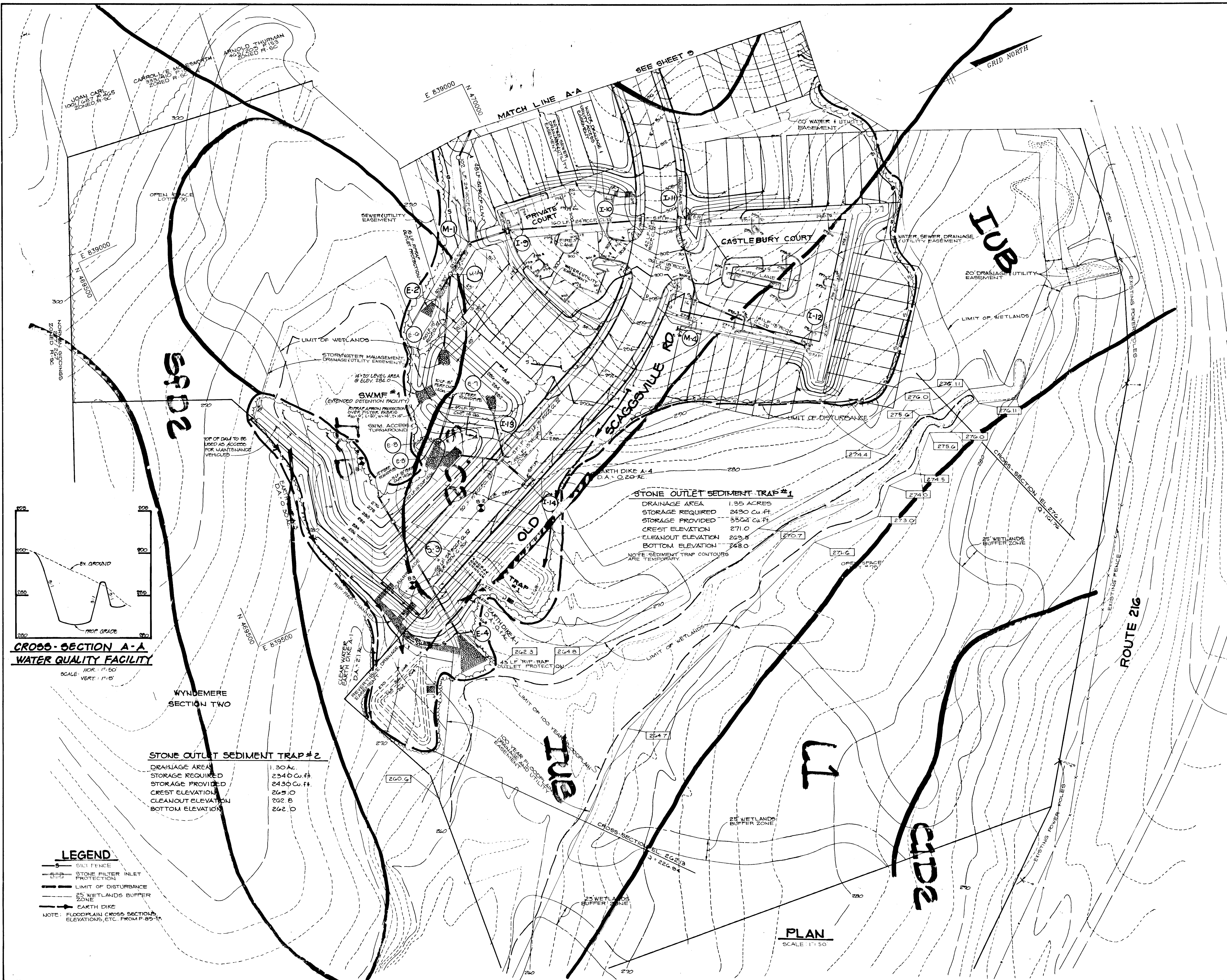
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED *Robert W. Zook (S.S.)* 7/18/90 DATE
 HOWARD S.C.D.

0-10-91	REVISED LOTS, STORM DRAINS & SEQUENCE OF CONSTRUCTION REMOVED WATER QUALITY STRUCTURE
DATE	NO REVISION
OWNER	J.J.M., INC. 5570 STERRETT PLACE SUITE 205 COLUMBIA, MARYLAND 21044

PROJECT: **WYDEMERE**
SECTION ONE LOTS 1-118
 A SINGLE FAMILY ATTACHED SUBDIVISION
 AREA TAX MAP NO. 47 ZONED R-6C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 TITLE: **GRADING AND SEDIMENT CONTROL PLAN**

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-750-3176

7-10-90 DATE
 S 88-42 P 80-13
 WP-88-05 WP-88-130
 DESIGNED BY: W.C.W. & C.J.R.
 DRAWN BY D.O.S.
 PROJECT NO: 48001
 DATE: JULY 16, 1990
 SCALE: AS SHOWN
 DRAWING NO. 9 OF 13



CROSS-SECTION A-A
WATER QUALITY FACILITY
 SCALE: HOR. 1" = 50'
 VERT. 1" = 5'

STONE OUTLET SEDIMENT TRAP #2

DRAINAGE AREA	1.30 Ac.
STORAGE REQUIRED	2340 Cu. ft.
STORAGE PROVIDED	2430 Cu. ft.
CREST ELEVATION	265.0
CLEANOUT ELEVATION	262.8
BOTTOM ELEVATION	262.0

STONE OUTLET SEDIMENT TRAP #1

DRAINAGE AREA	1.35 ACRES
STORAGE REQUIRED	2430 Cu. ft.
STORAGE PROVIDED	3364 Cu. ft.
CREST ELEVATION	271.0
CLEANOUT ELEVATION	269.5
BOTTOM ELEVATION	268.0

NOTE: SEDIMENT TRAP CONTOURS ARE TEMPORARY.

- LEGEND**
- SILT FENCE
 - STONE FILTER INLET PROTECTION
 - LIMIT OF DISTURBANCE
 - 25' WETLANDS BUFFER ZONE
 - EARTH DIKE
- NOTE: FLOODPLAIN CROSS SECTIONS, ELEVATIONS, ETC. FROM 89-15

PLAN
 SCALE: 1" = 50'

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

John Miklacker DEVELOPER 7-10-90 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 ENGINEER 7-10-90 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.

Jane M. Allen (S.S.) U.S. SOIL CONSERVATION SERVICE 7/10/90 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED *Robert W. Cichy (S.S.)* HOWARD S.C.D. 7/10/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Frank J. D'Amico CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 7/10/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Ch. M. Dugan CHIEF, LAND DEVELOPMENT DIVISION 9/4/90 DATE

Tranville W. Weiland CHIEF, BUREAU OF HIGHWAYS 8/17/90 DATE

K. S. ... CHIEF, BUREAU OF ENGINEERING 9-10-90 DATE

0-15-01 | REVISED LOTS & DRIVE GRADING, REVISED WATER QUALITY STRUCTURE ADDED WATER QUALITY FACILITY

DATE	NO.	REVISION

OWNER: J.J.M., INC.
 5570 STERRETT PLACE SUITE 205
 COLUMBIA, MARYLAND 21044

PROJECT: **WYNDEMERE SECTION ONE LOTS 1-116**
 A SINGLE FAMILY ATTACHED SUBDIVISION

AREA: TAX MAP NO 47 ZONED R-9C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

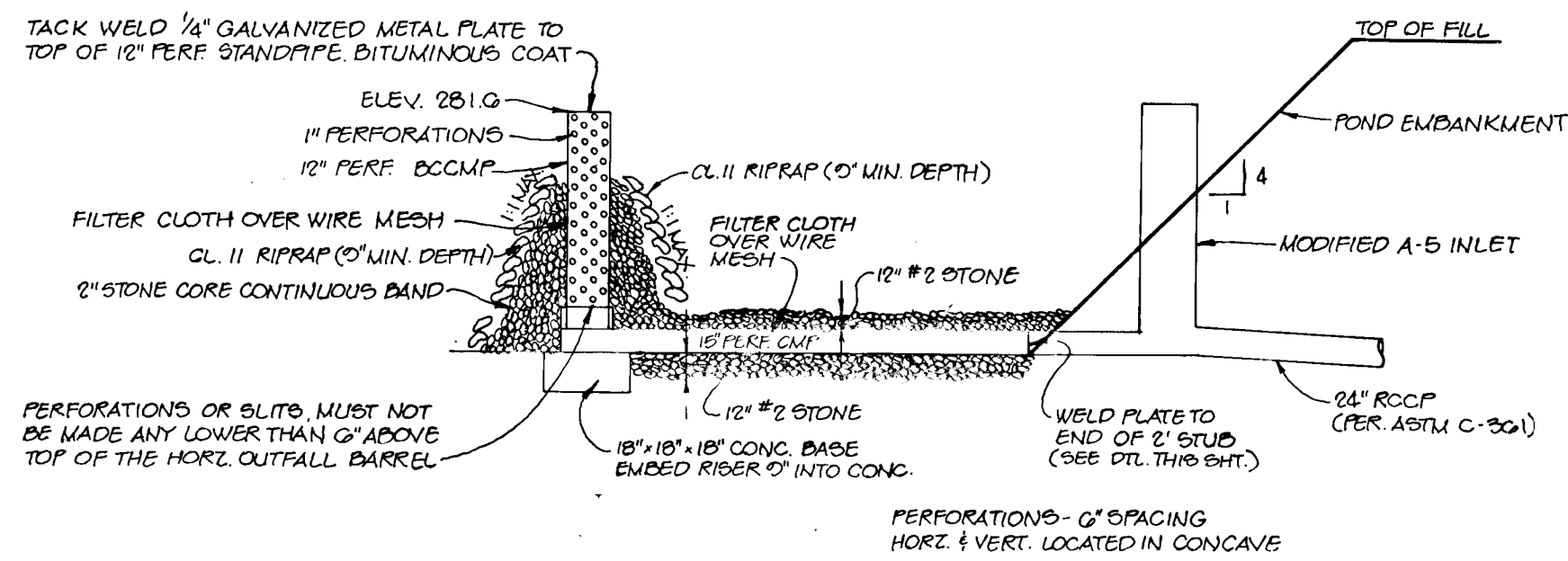
TITLE: **GRADING AND SEDIMENT CONTROL PLAN**

RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-750-3176

DATE: 7-10-90
 DESIGNED BY: C.J.R.
 DRAWN BY: D.O.S.
 PROJECT NO: 48001
 DATE: JULY 16, 1990
 SCALE: AS SHOWN
 DRAWING NO. 10 OF 13

Arthur E. Muegge ARTHUR E. MUEGGE #6707

1589

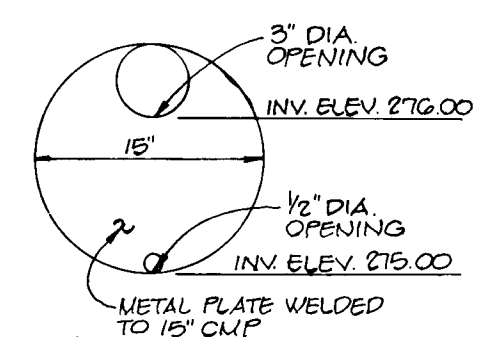


NOTES FOR DEWATERING DEVICE:

- WELD METAL PLATE TO 1/2" LOW FLOW STUD OUT 3" DIA. HOLE IN PLATE (SEE METAL PLATE DETAIL, THIS SHEET)
- PERFORATED PIPE SHALL BE WELDED TO LOW FLOW STUD
- PERFORATED PIPE SHALL BE SECURELY WRAPPED WITH APPROVED FILTER CLOTH AND SHALL BE COVERED ON ALL SIDES WITH NO. 2 STONE. PERFORATED PIPE LAID HORIZONTALLY SHALL BE COVERED ON ALL SIDES WITH 1/2" MINIMUM OF NO. 2 STONE.
- AT PERFORATED STANDPIPE, NO. 2 STONE TO BE COVERED ON ALL SIDES WITH 3" MINIMUM CLASS II RIPRAP.
- STONE AT PERFORATED STANDPIPE TO COMPLETELY ENCLOSE STANDPIPE MINIMUM SIDESLOPE FOR PLACING STONE SHALL BE 1:1.
- FLANGE TO BE U.S. PIPE STANDARD COMPANION FLANGED FITTING U-480 OR APPROVED EQUAL.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
- SET PERFORATED PIPE AT INVERTS SPECIFIED ON STORMWATER MANAGEMENT PLANS. PROFILE THRU PRINCIPAL SPILLWAY, SEE THIS SHEET.

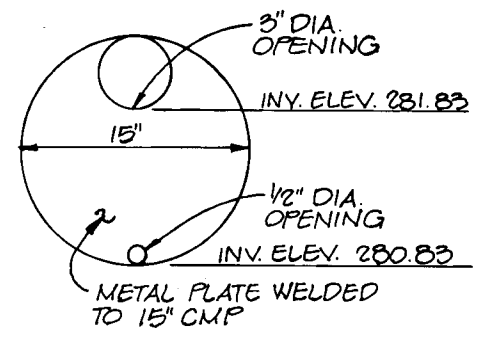
EXTENDED DETENTION POND DEWATERING DEVICE

NO SCALE



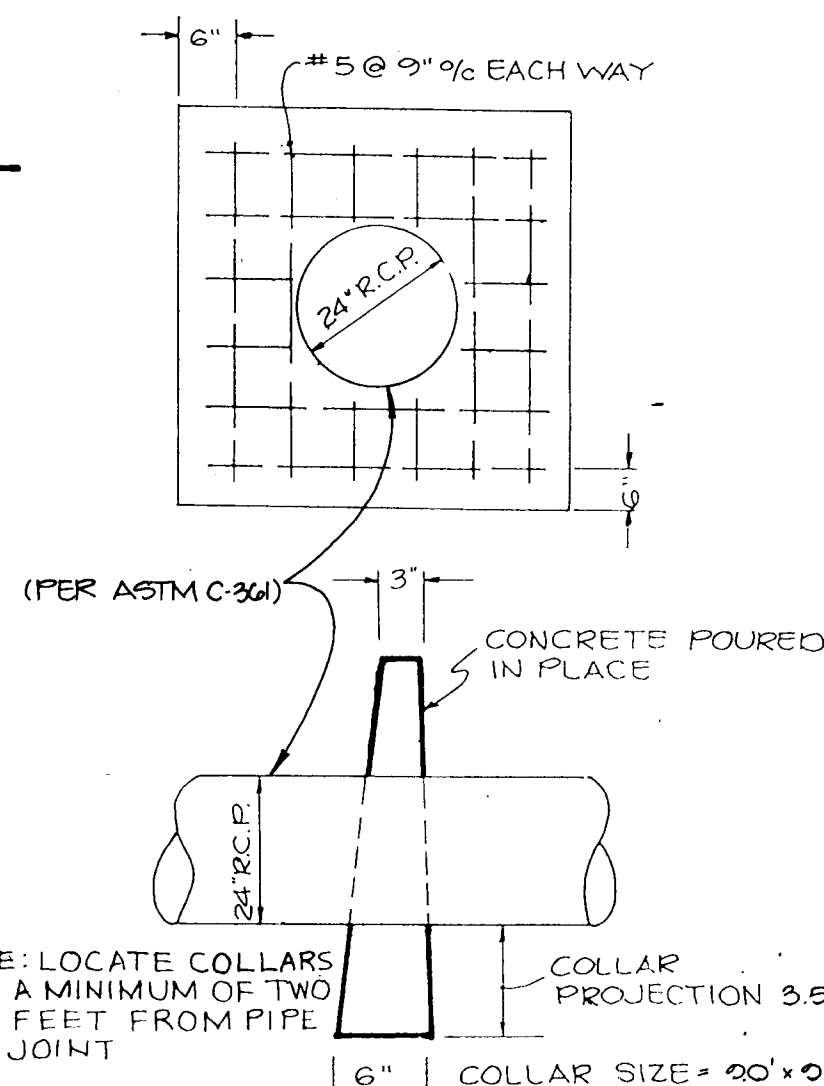
METAL PLATE FOR DEWATERING DEVICE FOR EXTENDED DETENTION FACILITY

NO SCALE



METAL PLATE FOR DEWATERING DEVICE FOR WATER QUALITY FACILITY

NO SCALE



NOTE: LOCATE COLLARS A MINIMUM OF TWO FEET FROM PIPE JOINT

ANTI-SEEP COLLAR - S.W.M.F.#1

NO SCALE

These specifications are appropriate to ponds within the scope of the Standard for Practice 378.

I. SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and steep breaks shall be sloped to no steeper than 1:1.

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

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

II. FILL

Material

The fill material shall be taken from approved designated borrow areas or areas. It shall be free of roots, stumps, wood, rubbish, oversize stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as 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. Intermediate borrow material shall be placed in the downstream portions of the embankment.

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

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

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be as shown on the drawings, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability. CL, CH, CMH, M, MO, MCL, TO BE USED FOR CUTOFF TRENCH.

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 tamper or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a complete fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

All pipes shall be circular in cross section.

A. Corrugated Metal Pipe

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

Steel pipes with polymeric coatings shall have a minimum coating thickness of 0.01 inch (10 mil) on both sides of the pipe. The following coatings are commercially available: Neoson, Plastico-Crete, Mac-Klad, and Beth-Cu-Loy. Coated corrugated steel pipe shall meet the requirements of AASHTO M-243 and M-246.

2. Connections - All connections with pipes must be completely watertight. The drain pipe or barrel connection to the riser shall be welded all around when the pipe and riser are metal. Watertight coupling bands or flanges shall be used at all joints. Anti-seep collars shall be connected to the pipe in such a manner as to the completely watertight. Dipole bands are not considered to be 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 side.

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.

B. Reinforced Concrete Pipe

1. Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-301. An approved equivalent is ANMA Specification C-301.

2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the side of the pipe at least 10% of its outside diameter with a

minimum thickness of 3", or as shown on the drawings.

3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.

4. Backfilling shall conform to structural backfill as shown above.

5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

6. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

a. Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.

b. Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.

c. Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.

d. Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.

e. Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 3:1 to 4:1. Gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

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

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

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

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

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

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

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

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

9. Placing Temperature - Concrete may not be placed at temperatures below 32°F with the temperature falling, or 50°F with the temperature rising.

STABILIZATION

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

VII. EROSION AND SEDIMENT CONTROL

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

AS-BUILT CERTIFICATION

ENGINEER _____ DATE _____
 PE # _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

John Mitolack DEVELOPER 7-10-90 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 ENGINEER 7-10-90 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.

Dana M. Helm U.S. SOIL CONSERVATION SERVICE 7/12/90 DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zick APPROVED HOWARD S.C.D. 7/12/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Daniel W. Dangle CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT 7/12/90 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John M. Doman CHIEF, LAND DEVELOPMENT DIVISION 7/12/90 DATE

Franklin W. Weiland CHIEF, BUREAU OF HIGHWAYS 8/17/90 DATE

CHIEF, BUREAU OF ENGINEERING _____ DATE _____

DATE NO REVISION

OWNER/DEVELOPER

J.J.M., INC.
 5570 STERRETT PLACE SUITE 205
 COLUMBIA, MARYLAND 21044

PROJECT

WYNEMERE
 SECTION ONE LOTS 1-118
 A SINGLE FAMILY ATTACHED SUBDIVISION
 AREA TAX MAP NO. 47 ZONED R-5C
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

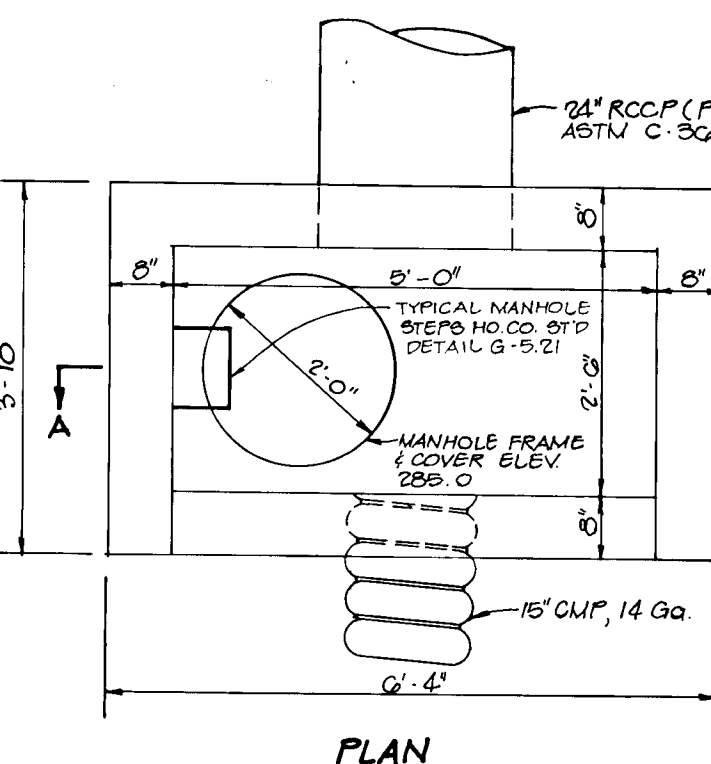
TITLE

SWM NOTES, PROFILES AND DETAILS

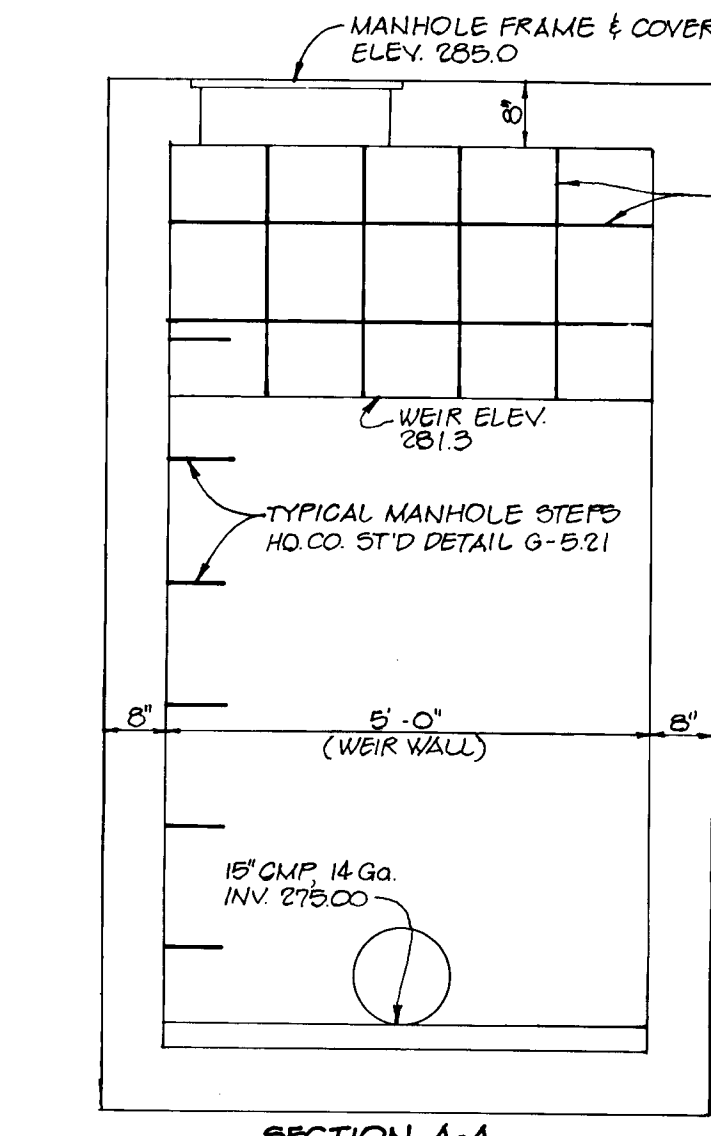
RIEMER MUEGGE & ASSOCIATES, INC.
 A Land Planning, Engineering and Consulting Firm
 3105 North Ridge Road Ellicott City, Maryland 21043
 301-461-2690 FAX: 301-750-3176

DESIGNED BY C.J.R.
 DRAWN BY D.O.S.
 PROJECT NO. 48001
 DATE JULY 10, 1990
 SCALE AS SHOWN
 DRAWING NO. 11 OF 13

F-20-41



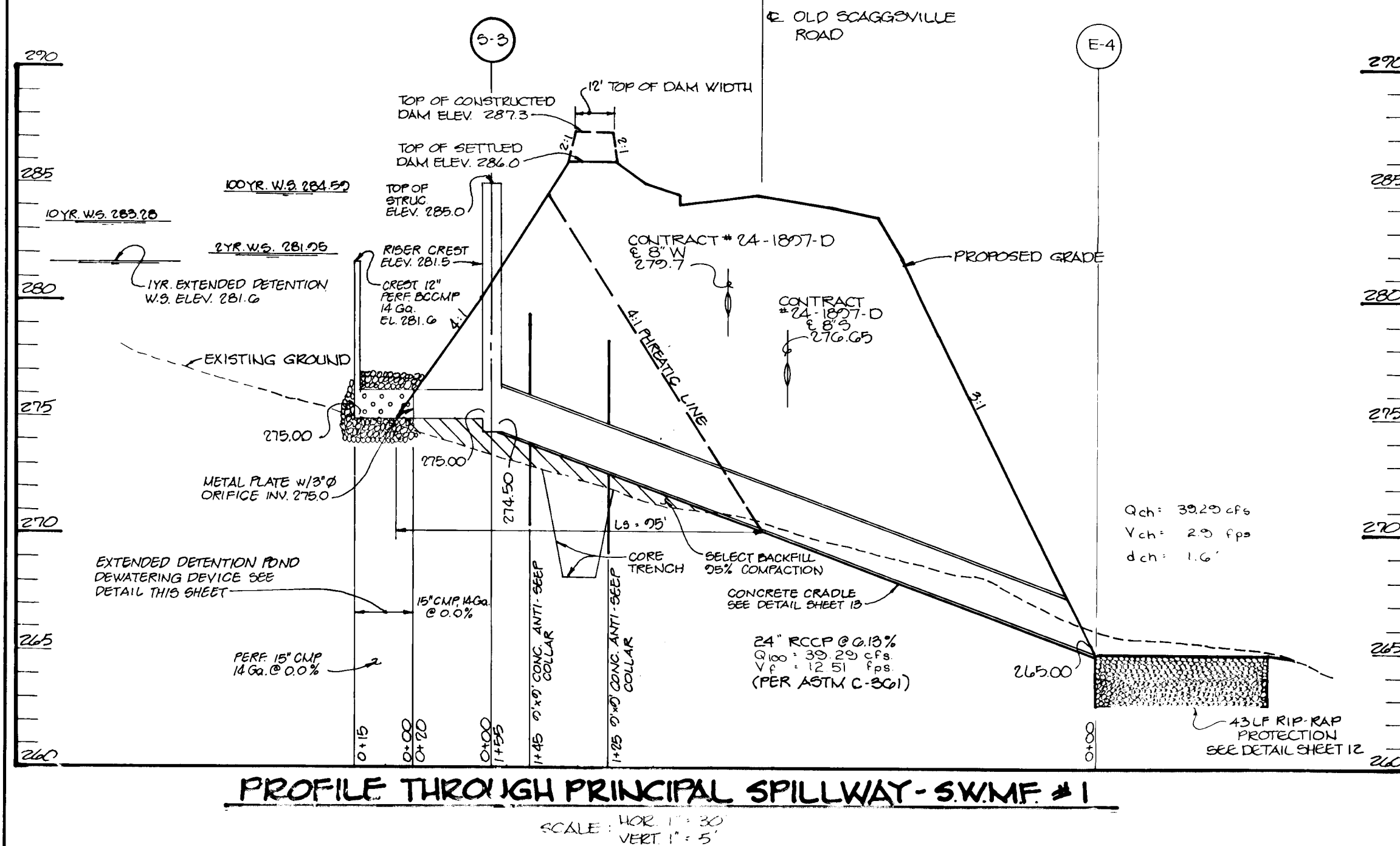
PLAN



SECTION A-A

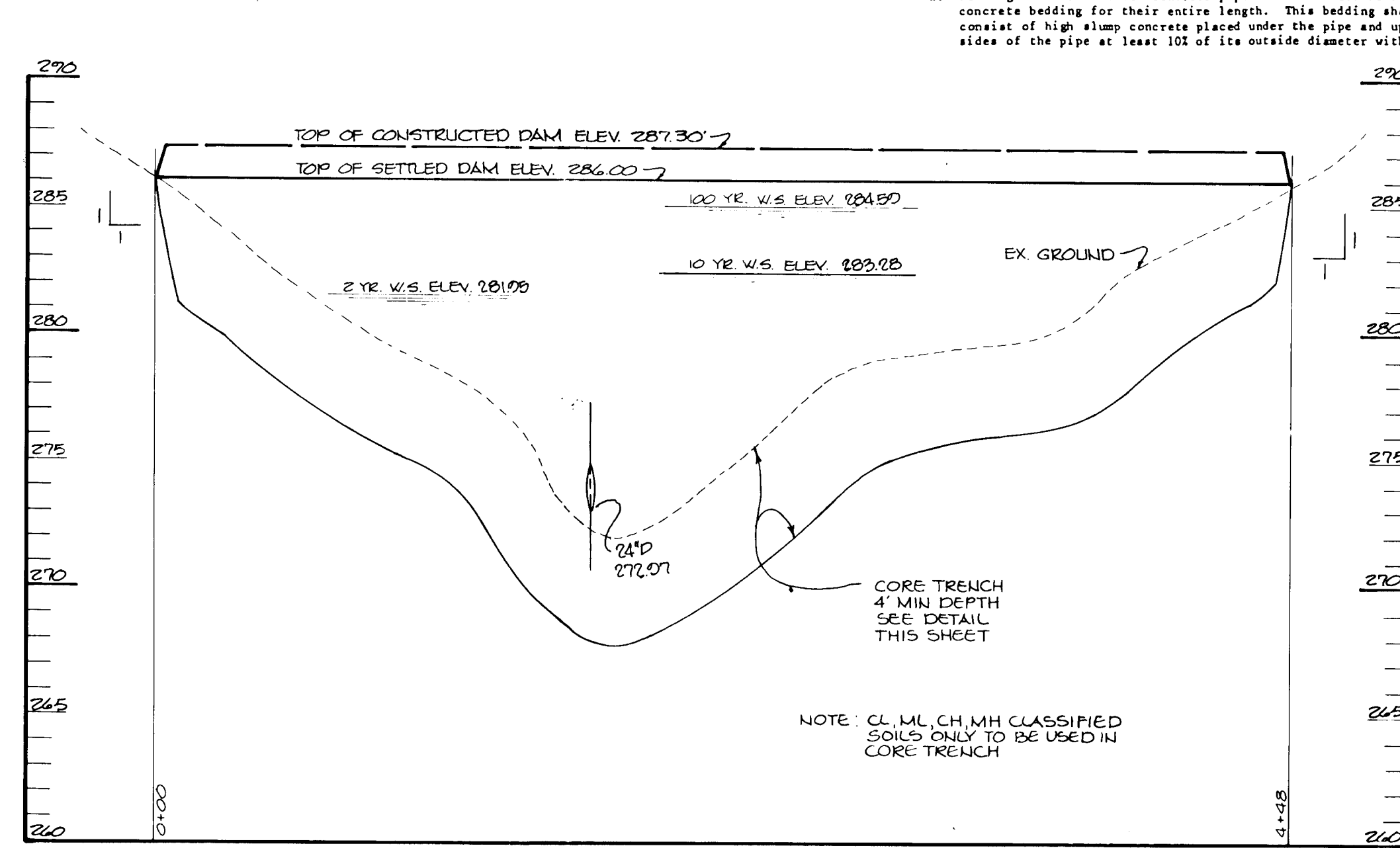
CONTROL STRUCTURE S-3 DETAIL

NO SCALE



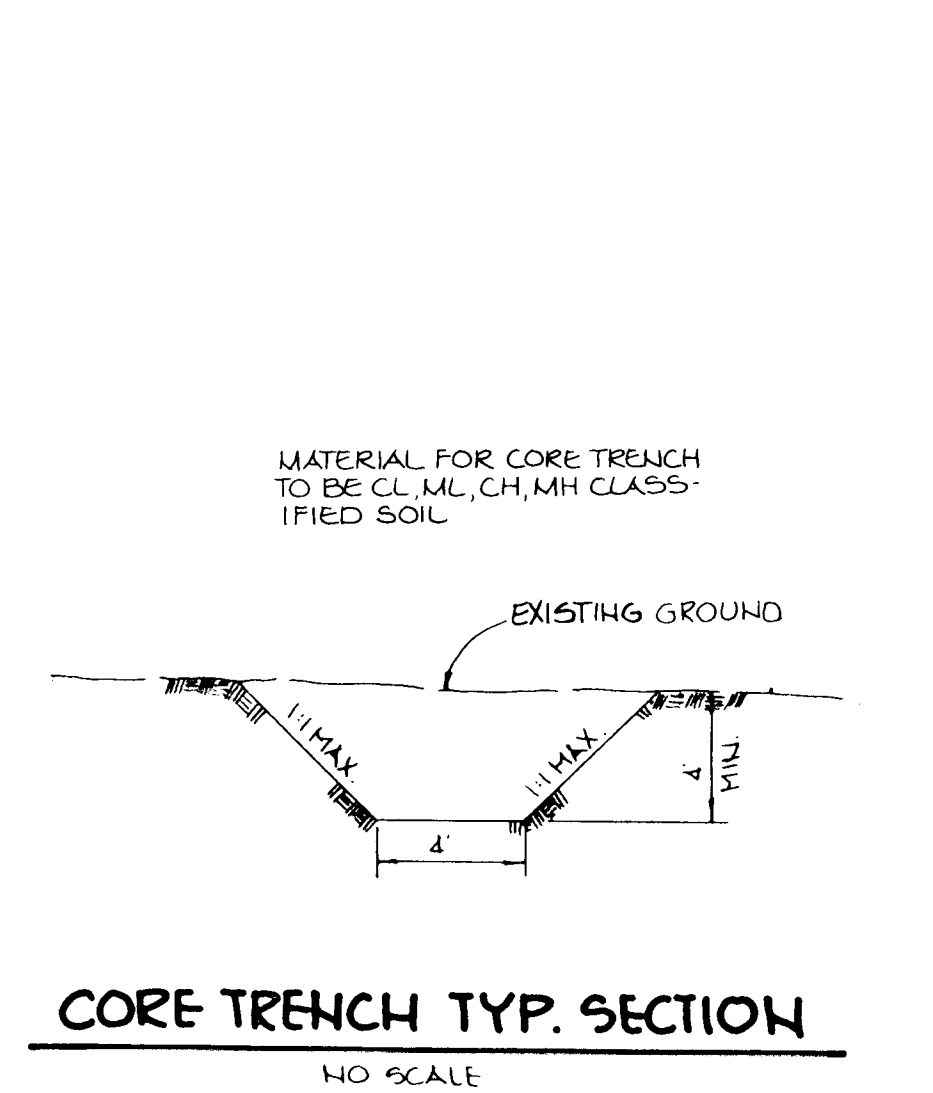
PROFILE THROUGH PRINCIPAL SPILLWAY - SWMF #1

SCALE: HORIZ. 1"=50' VERT. 1"=5'



PROFILE ALONG E OF EMBANKMENT SWMF #1

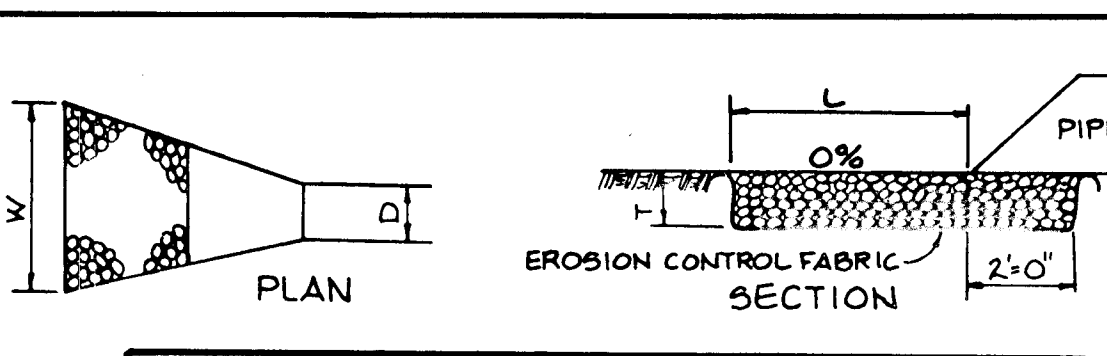
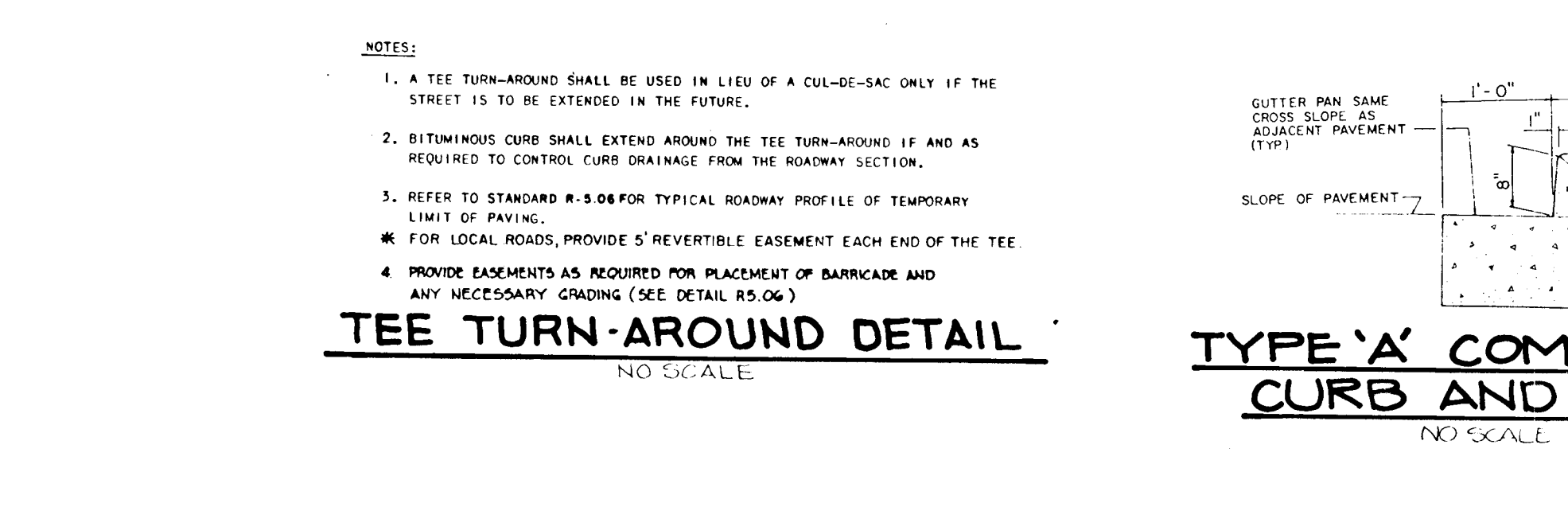
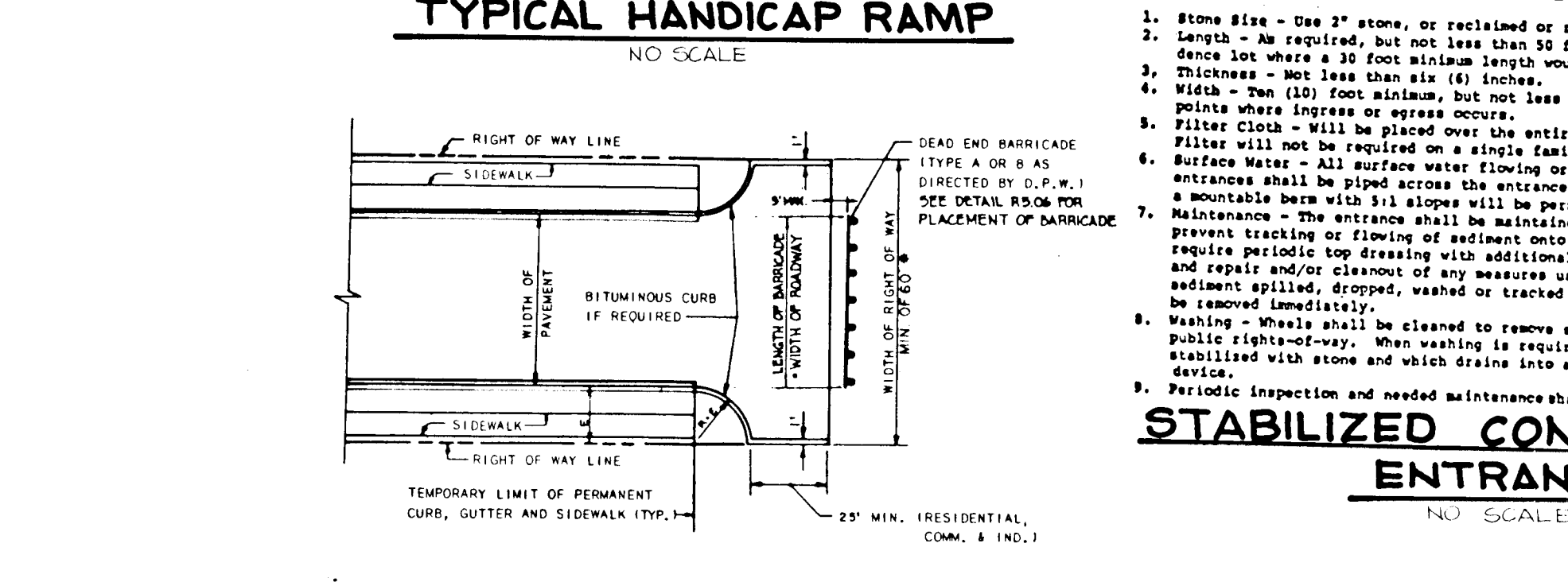
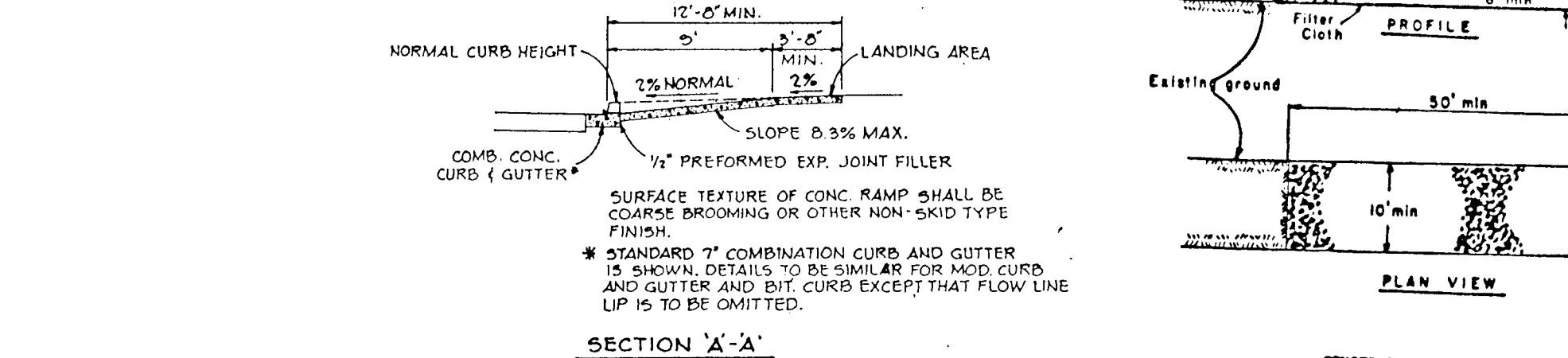
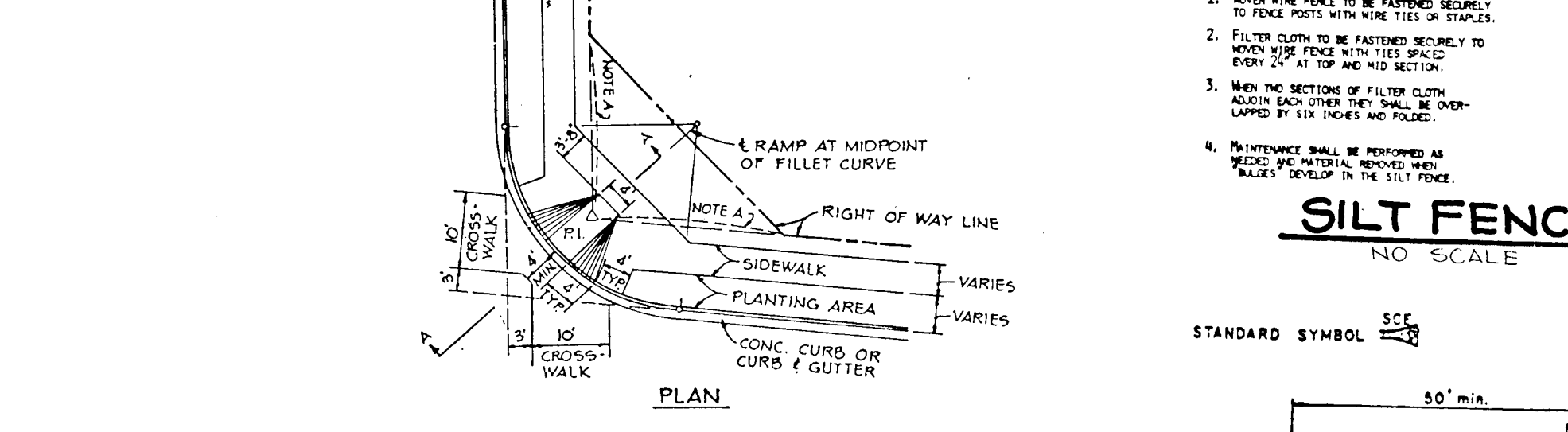
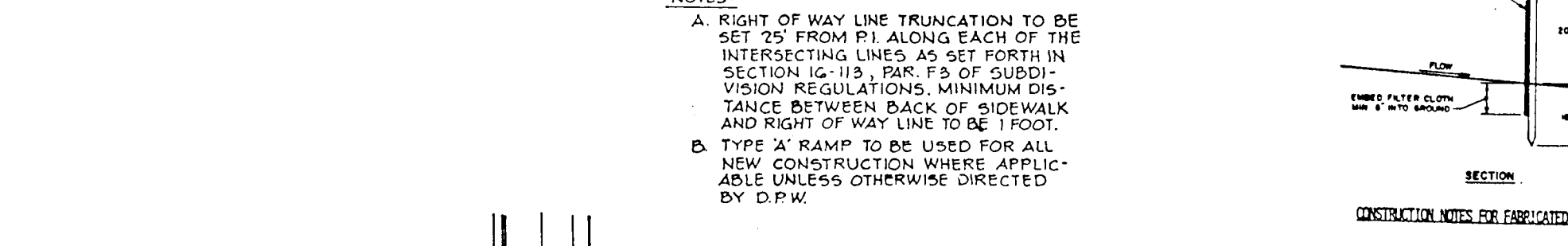
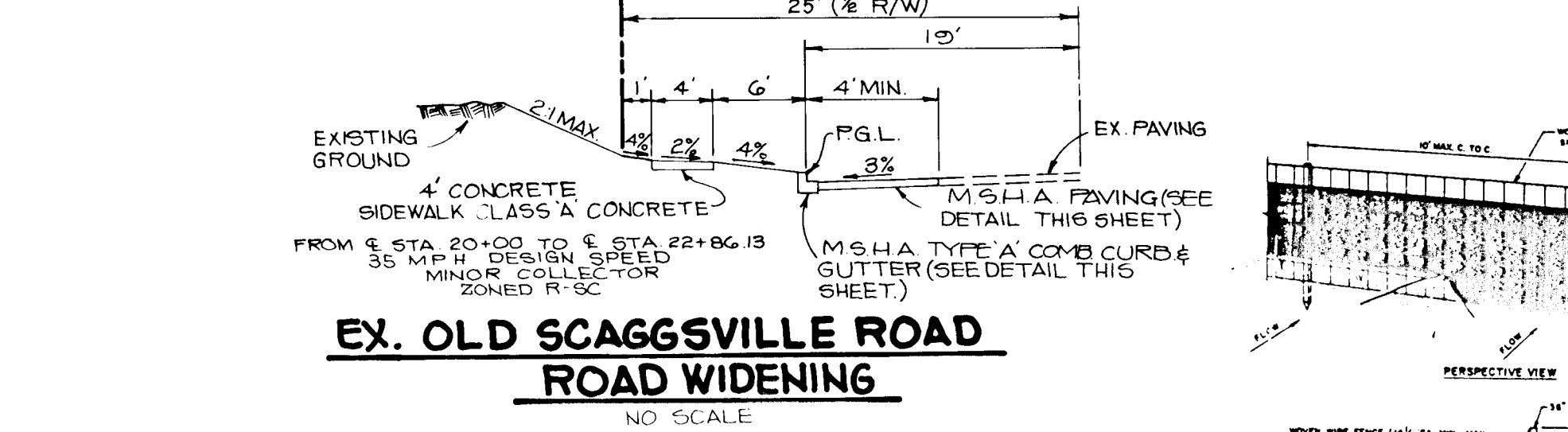
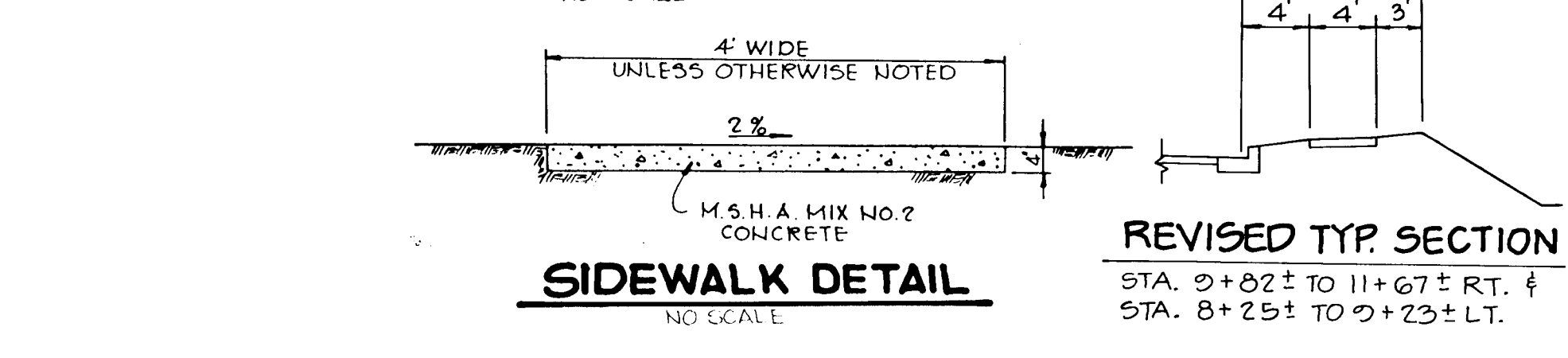
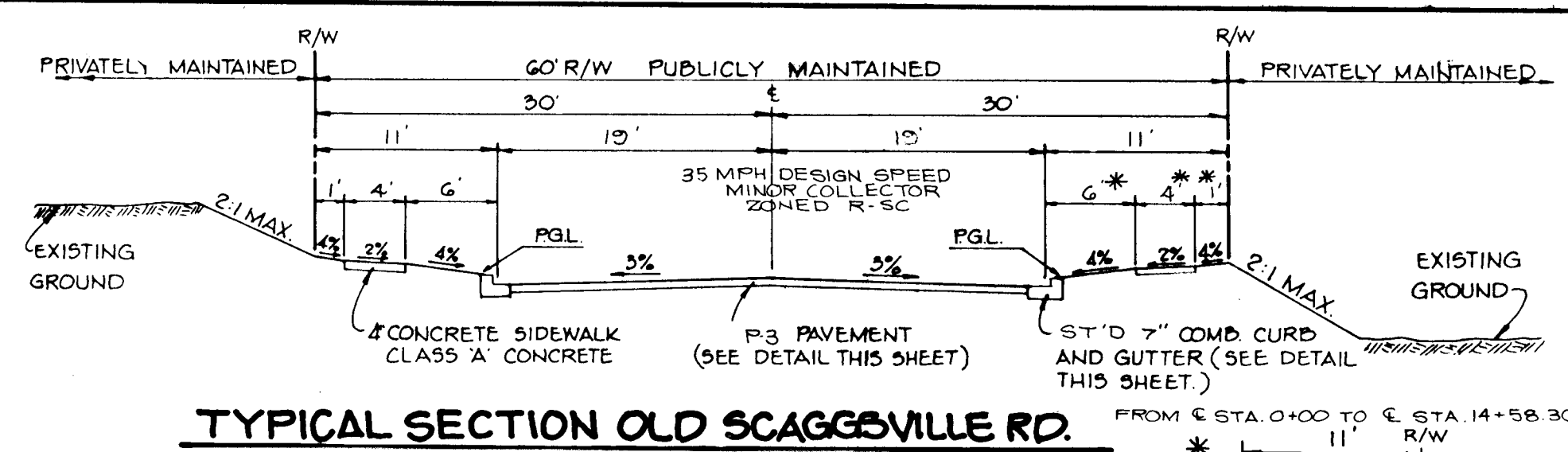
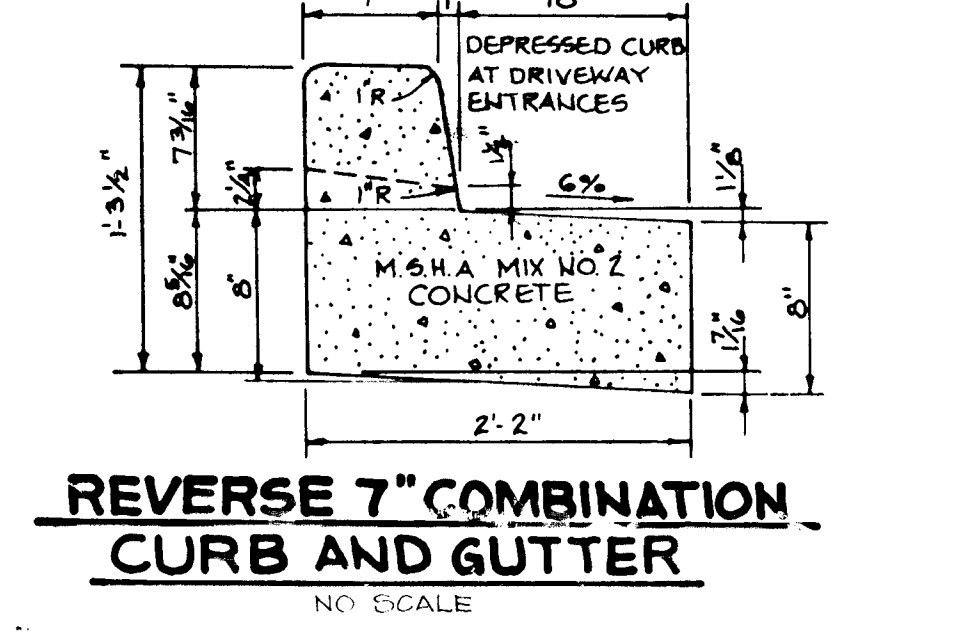
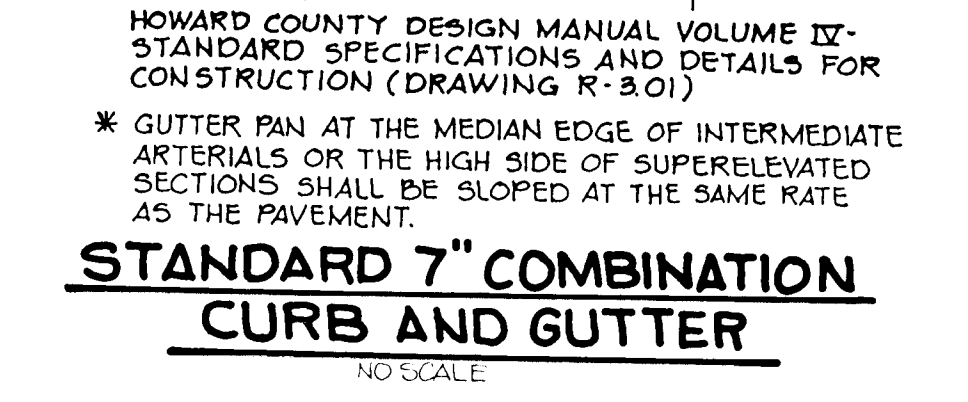
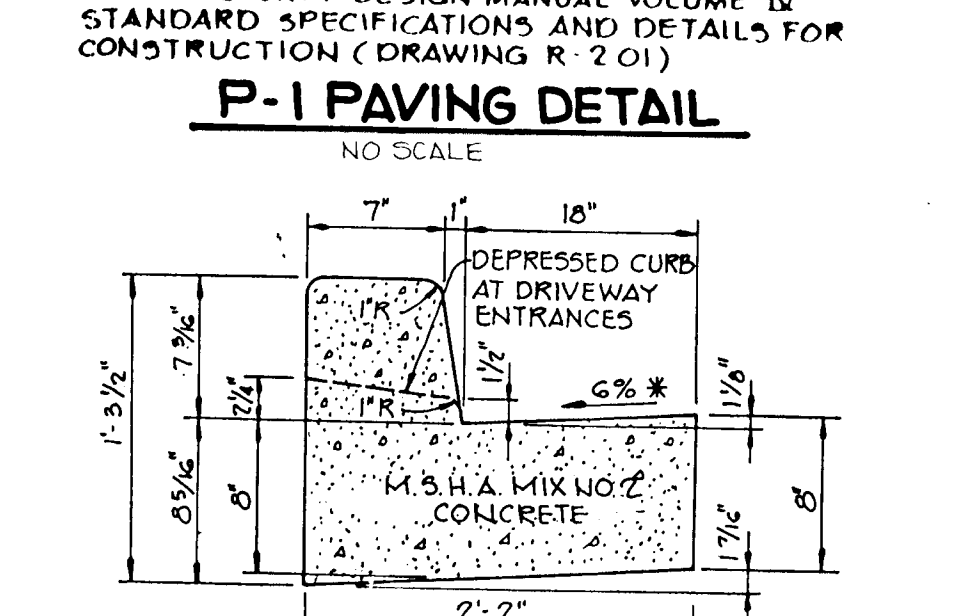
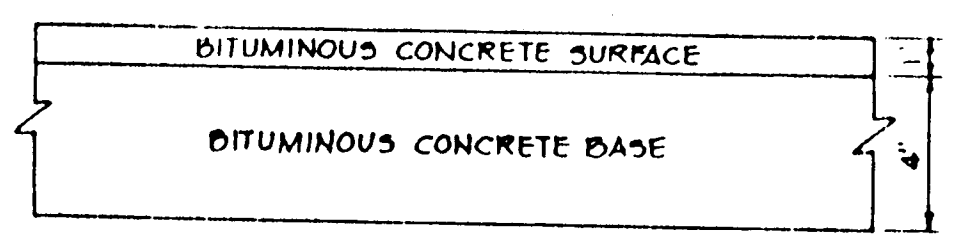
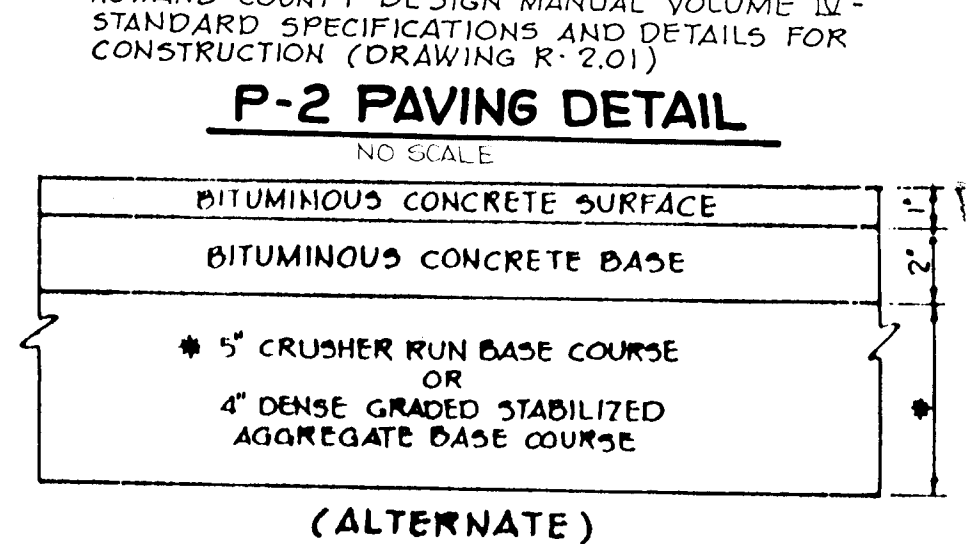
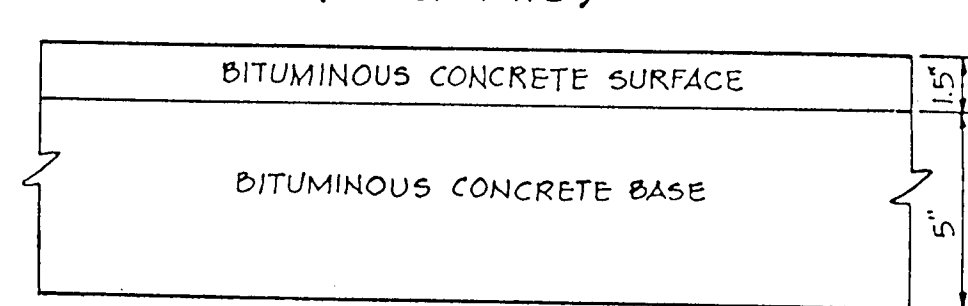
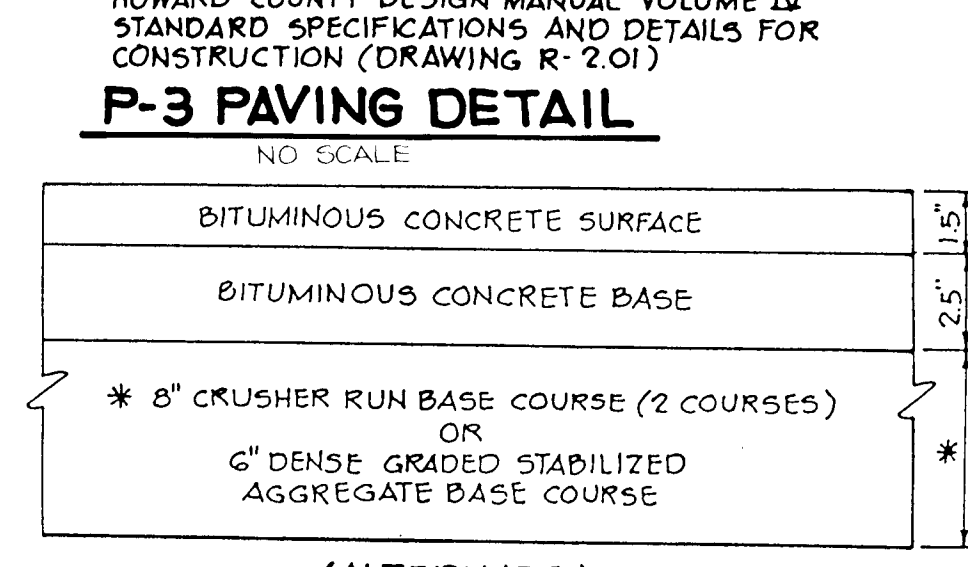
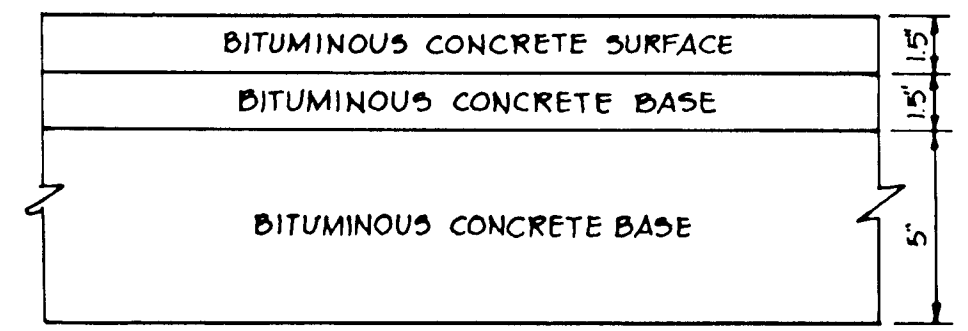
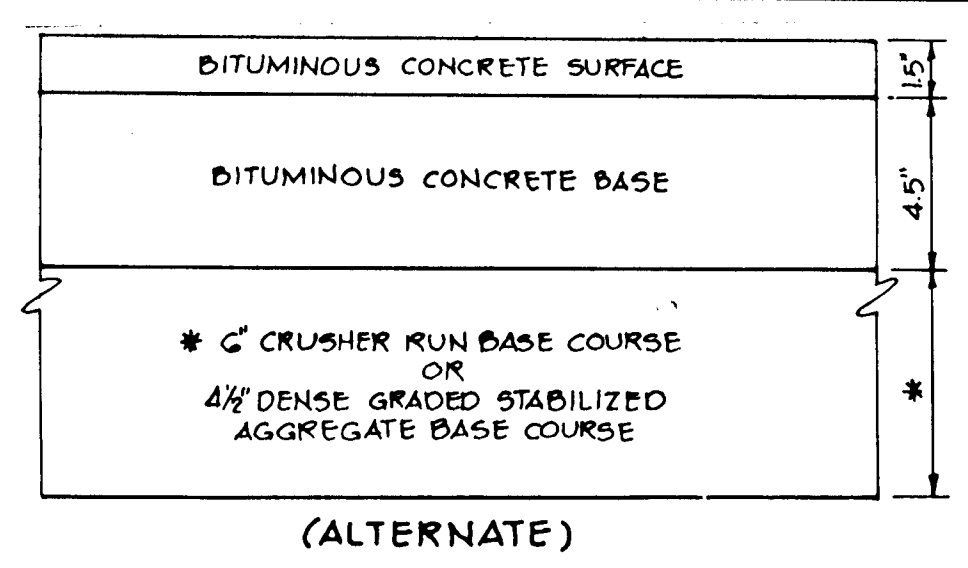
SCALE: HORIZ. 1"=50' VERT. 1"=5'



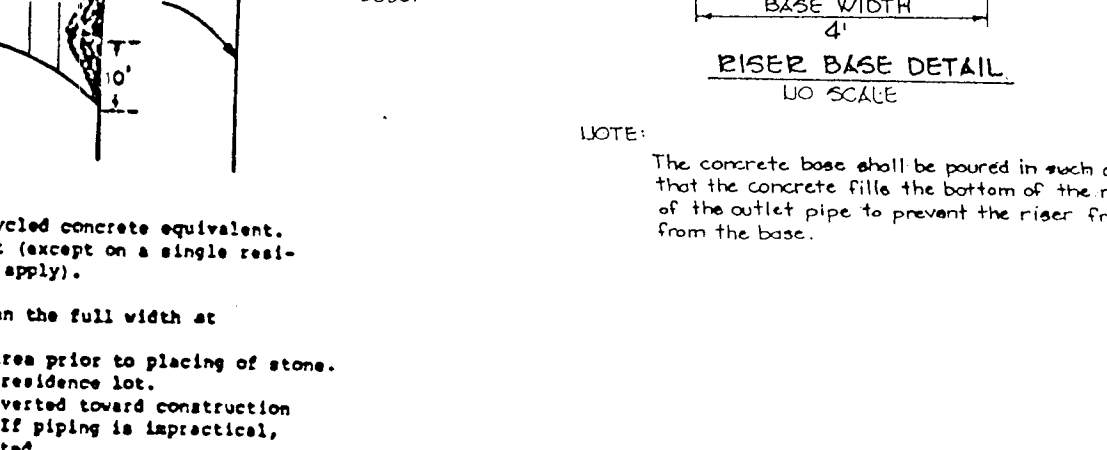
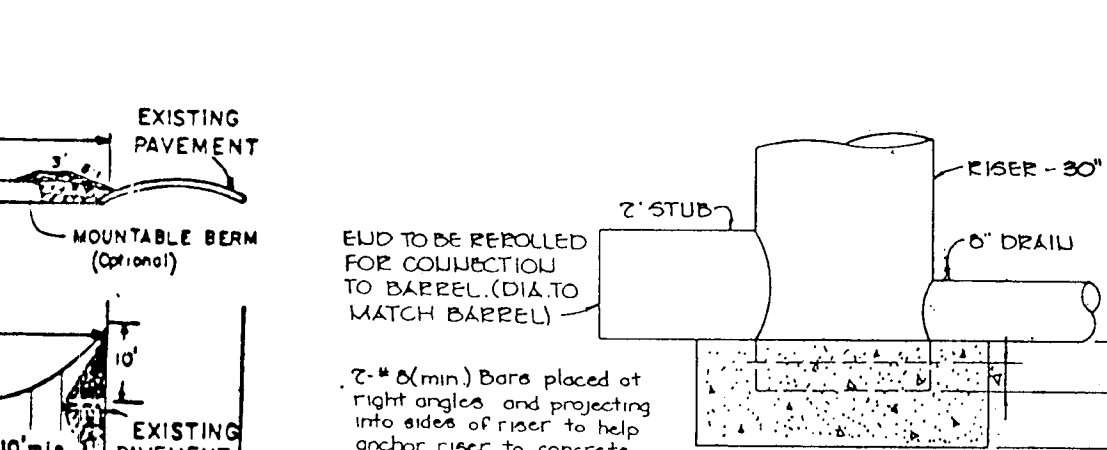
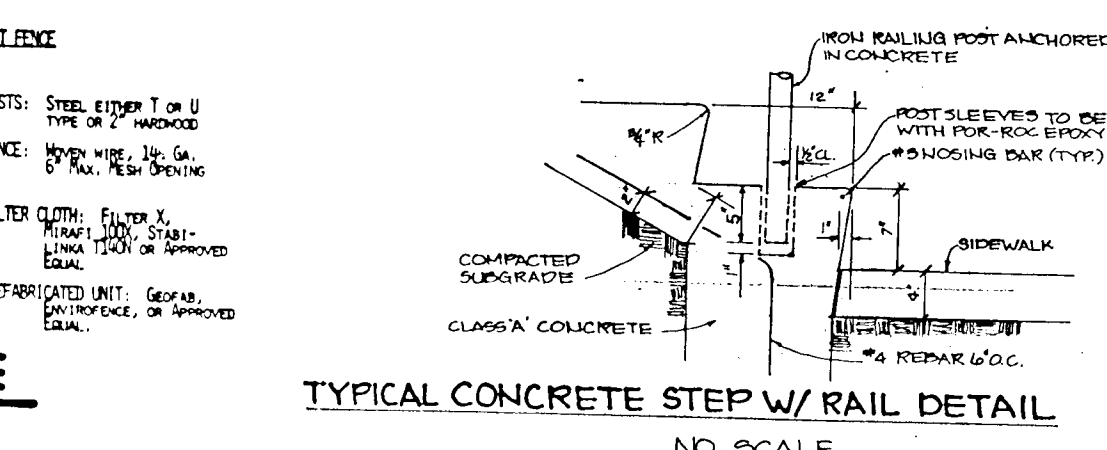
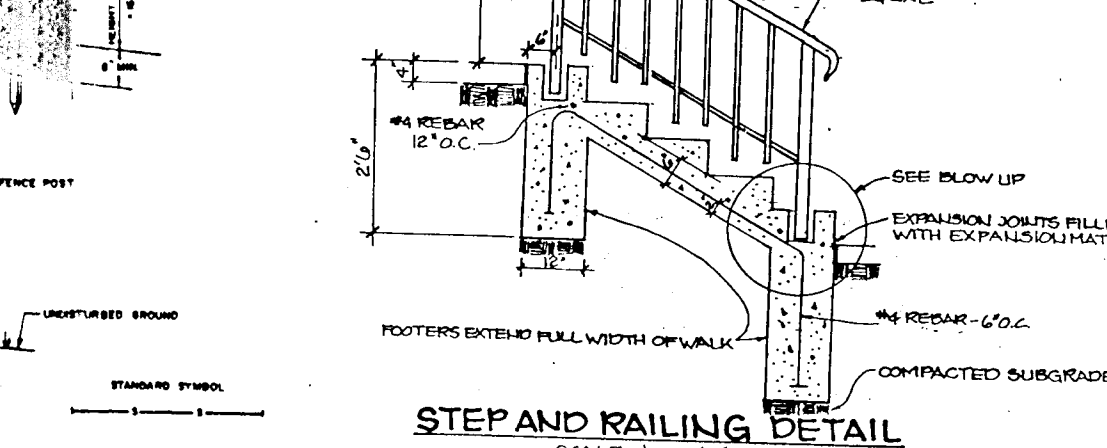
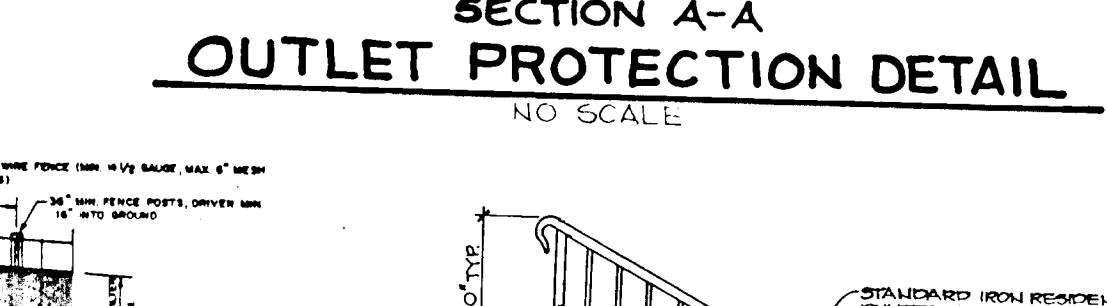
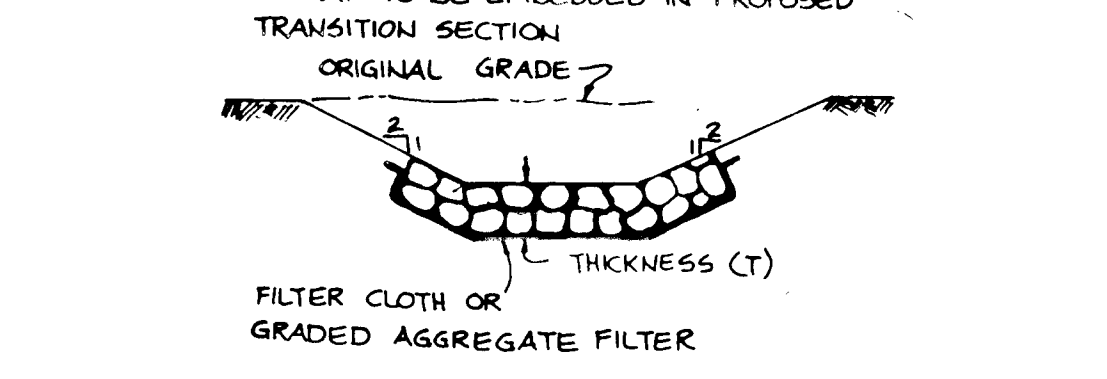
CORE TRENCH TYP. SECTION

NO SCALE

1589



STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	0.5	25	15	1.10
E-2	0.5	15	15	1.10
E-3	0.5	15	15	1.10
E-4	1.0	20	15	1.10
E-5	0.5	10	15	1.10
E-6	0.5	10	15	1.10



PERMANENT SEEDING NOTES
Apply to graded or cleared areas not subject to immediate further disturbance where a permanent 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.

TEMPORARY SEEDING NOTES
Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover 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.

SEEDING RECOMMENDATIONS
Soil Amendments: Apply 600 lbs. per acre dolomitic limestone (92 lbs./1000 sq. ft.) in lieu of soil test 10-10-10 fertilizer (14 lbs./1000 sq. ft.).
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AS BUILT CERTIFICATION
ENGINEER _____
DATE _____

BY THE DEVELOPER:
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

DEVELOPER
7-10-90
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."

ENGINEER
7-10-90
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.

U.S. SOIL CONSERVATION SERVICE
7/10/90
DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD S.C.D.
7/10/90
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
7/10/90
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF, LAND DEVELOPMENT DIVISION
7/10/90
DATE

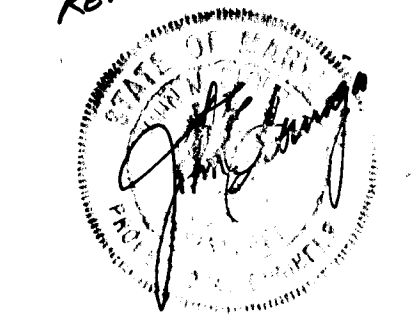
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

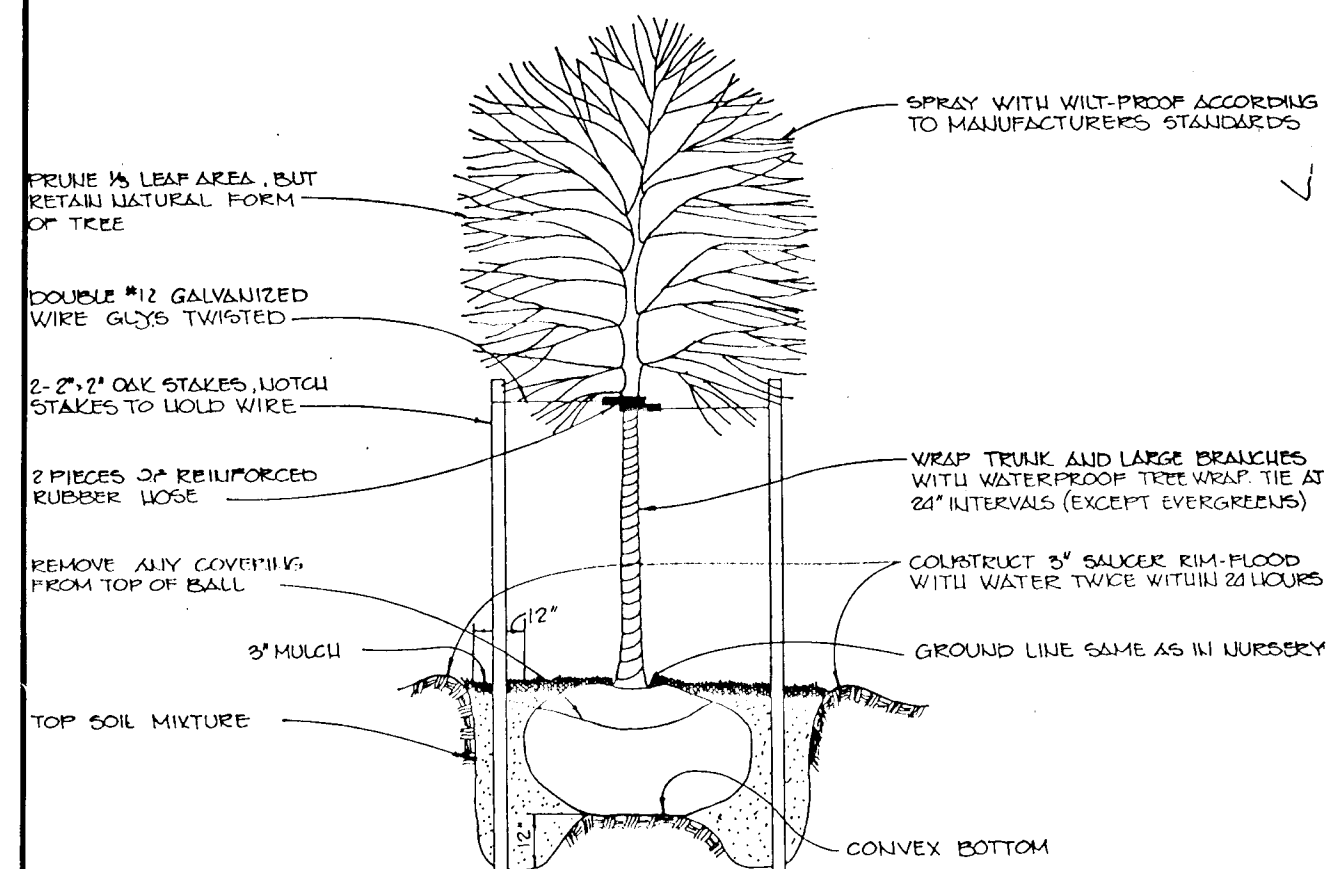
CHIEF, BUREAU OF HIGHWAYS
7/10/90
DATE

OWNER / DEVELOPER
J.J.M., INC.
5570 STERRETT PLACE SUITE 205
COLUMBIA, MARYLAND 21044
PROJECT
WYNDEMERE
SECTION ONE LOTS 1-118
A SINGLE FAMILY ATTACHED SUBDIVISION
AREA
TAX MAP NO. 47 ZONED R-3C
6TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
TITLE
DETAIL SHEET
RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176
7-10-90
DATE
S-88-42 P-88-13 GP-88-08
WP-88-05 WP-88-130
DESIGNED BY: C.J.R.
DRAWN BY: G.D.H.
PROJECT NO.: 48001
DATE: JULY 10, 1990
SCALE: AS SHOWN
DRAWING NO. 12 OF 13

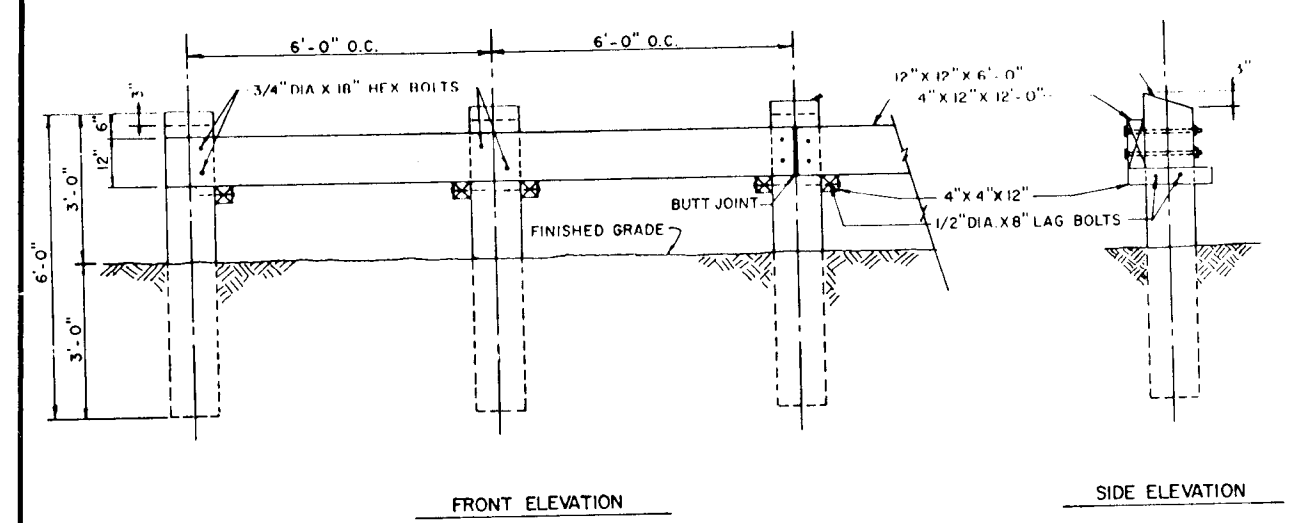
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SIDEWALK REVISION ONLY
REVISION #12 10/7/90

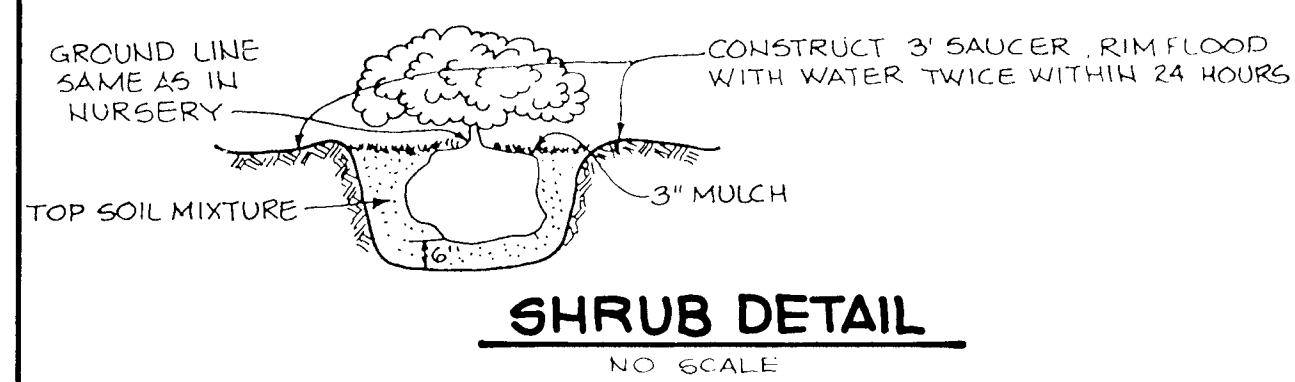




TREE PLANTING DETAIL
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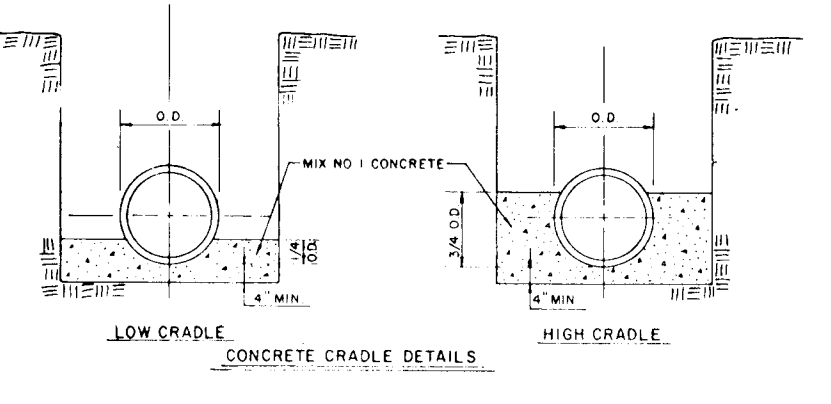
DEAD END BARRICADE TYPE-B
NO SCALE



SHRUB DETAIL
NO SCALE

- 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 are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, 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, Storm Drainage.
 - All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 54), temporary seedings (Sec. 53) 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	4.22 acres
Area Disturbed	2.71 acres
Area to be roofed or paved	0.11 acres
Area to be vegetatively stabilized	2.90 acres
Total Disturbance	2.82 acres
Total Fill	5450 cu. yds.
Topsoil	4258 cu. yds.
 - Any 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 Department of Public Works Sediment Control Inspector.
 - Site grading will begin only after all perimeter sediment control measures have been installed and are in a functioning condition.
 - Sediment will be removed from traps when its depth reaches the clean out elevation shown on the plans.
 - Cut and fill quantities provided under site analysis do not represent bid quantities. These quantities do not distinguish between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of unstable material. The contractor shall familiarize himself with site conditions which may affect the work.



CONCRETE CRADLE DETAIL
NO SCALE

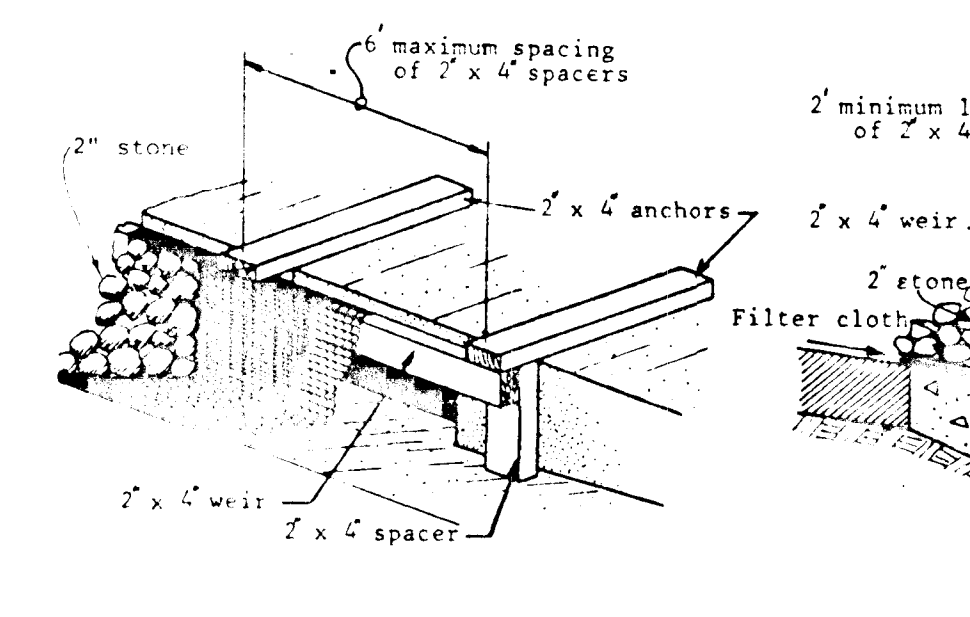
NOTE: FOR 24" BARREL, SEE HO. CO. STD. DETAIL G-2.2

- CONSTRUCTION NOTES:**
- Debris shall not be allowed to enter the structures until the existing drainage areas have been permanently stabilized.
 - All openings to structures shall be protected with the appropriate sediment control measures during construction.

- INSPECTION NOTES:**
- Prior to start of construction on water quality structures, the Howard County Department of Public Works Inspector must be called 48 hours in advance at 792-2430.
 - The Howard County Department of Public Works Inspector must be notified (792-2630) at each of the following stages:
 - Approval of subgrade for footing.
 - Footing formed and steel set prior to pouring.
 - Structure sides formed and steel set prior to pouring.
 - Prior to top slab and manholes being set. Howard County Department of Public Works Inspector must check structure and all debris and silt in structure removed.
 - When site is permanently stabilized and sediment control measures to protect inlet are to be removed.

- DESIGN AND GENERAL NOTES:**
- Use poured-in place concrete for the entire structure.
 - Refer to Maryland State Highway Administration for materials and methods of construction.
 - Wall thickness shall be as follows: Per Ho. Co. Std. Details W-26 and W-27.
 - f'c = 4000 psi at 28 days.
 - All reinforcing steel to be ASTM A615, GR. 60.
 - For details concerning throat openings, refer to Howard County Standard Detail SD-4.01.
 - For details not noted in this standard, refer to Howard County Standard Detail SD-4.01, W-26, W-27, and W-28.
 - The top 4 inches of walls may be brick masonry for leveling, if required. Brick masonry shall comply with the latest SHA specification.
 - When grate opening is used, refer to the appropriate SHA Standard for details. Details shall be shown on the plans.
 - When inside width of structure is greater than 4'-0", reinforcing shall be revised as needed.
 - When structure is subject to traffic loading, reinforcing shall be designed for the appropriate traffic loads. Design loads shall be indicated on the plan.
 - All inlets and incoming pipes shall be checked for possible backwater or tailwater problem.

- MAINTENANCE NOTES (WATER QUALITY STRUCTURE WASTE)**
- Water Quality Structures will require periodic cleaning. Owners of these facilities will have to clean them as needed or on a frequency that the County determines is appropriate. Owners of water quality structures will be notified by the County of the frequency of maintenance. The maintenance association will be responsible for maintenance of the OLV on the separator.
 - Maintenance of these facilities will consist of cleaning out the separator and disposal of the waste and the repair of the facility as needed. Periodic inspections of these facilities will be made by the Ho. Co. DPW.
 - The disposal of the liquid and solid matter should be as follows:
 - All liquid material in the separator inlet shall be pumped into a suitable tank truck and disposed of at an approved sanitary district discharge manifold or taken to an approved sewage treatment plant for discharge.
 - The solid material shall be landfilled in an approved sanitary landfill.



STONE FILTER INLET PROTECTION DETAIL
NO SCALE

- For Stone Filter Inlet Protection**
- Materials:
 - Wooden frame is to be constructed of 2" x 4" construction grade lumber.
 - Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
 - Filter cloth must be of a type approved for this purpose; resistant to sunlight with a pore size, 105, 200, 400, to allow sufficient passage of water and removal of sediment.
 - Stone is to be 2" in size and clean, since fines would clog the cloth.
 - Procedure:
 - A weevil, ditchline or yard inlet protection.
 - Excavate completely around inlet to a depth of 18" below notch elevation.
 - Drive 2 x 4 post 1' into ground at four corners of inlet. Place nail strips between posts on ends of inlet. Assemble top portion of 2 x 4 frame using overlap joint shown. Top of frame (weir) must be 6" below edge of roadway adjacent to inlet.
 - Stretch wire mesh tightly around frame and fasten securely. Ends must meet at post.
 - Stretch filter cloth tightly over wire mesh, the cloth must extend from top of frame to 18" below inlet notch elev. Fasten securely to frame. Ends must meet at post, be overlapped and folded, then fastened down.
 - Backfill around inlet in compacted 6" layers until layer of earth is even with notch elevation on ends and top elevation on sides.
 - If the inlet is not in a low point, construct a compacted earth dike to the ditchline below it. The top of this dike is to be at least 6" higher than the top of frame (weir).
 - This structure must be inspected frequently and the filter fabric replaced when clogged.
 - Curb Inlet Protection.
 - Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2" x 4" weir (seawall 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 8" 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" lengths 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 secure the 2" x 4" 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.
 - 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.

B-1

TOPSOIL	2"
GRAY MICACEOUS SANDY SILT AND GRAVEL (SM) 2'0"	
GRAY MICACEOUS SANDY SILT (SM) 18'0"	
GRAY MICACEOUS SANDY SILT AND GRAVEL (SM) 10'0"	
BOTTOM OF BORING @ 10'	

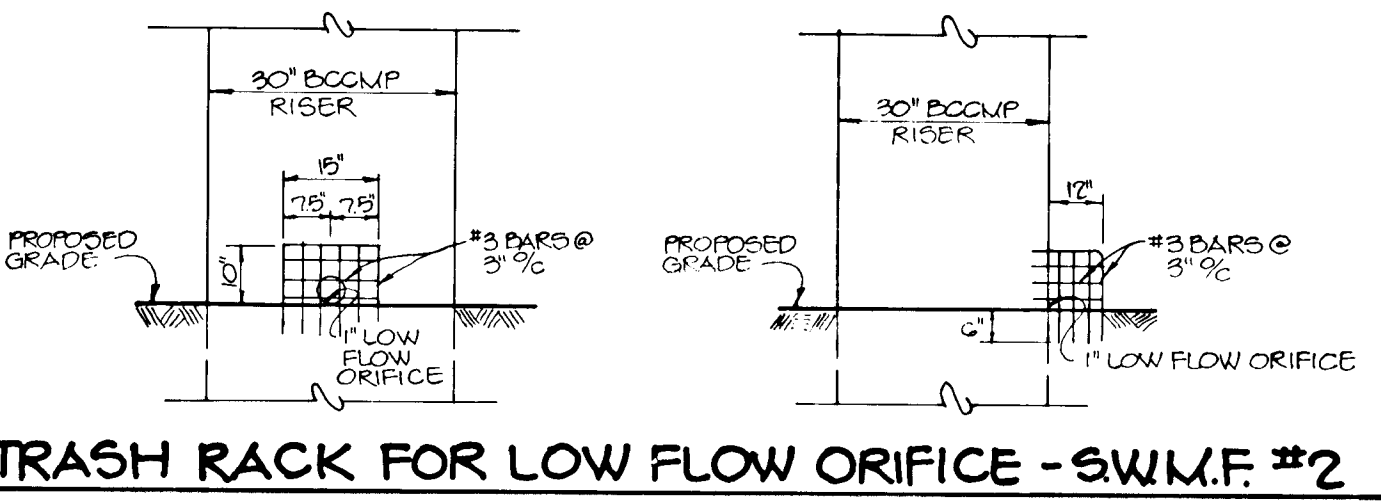
B-2

TOPSOIL	2"
BROWN SANDY SILT, TRACE OF CLAY (SC) 2'0"	
BROWN SANDY SILT (SM) 4'0"	
LIGHT TAN MICACEOUS SANDY SILT (SM) 10'0"	
BOTTOM OF BORING @ 10'	

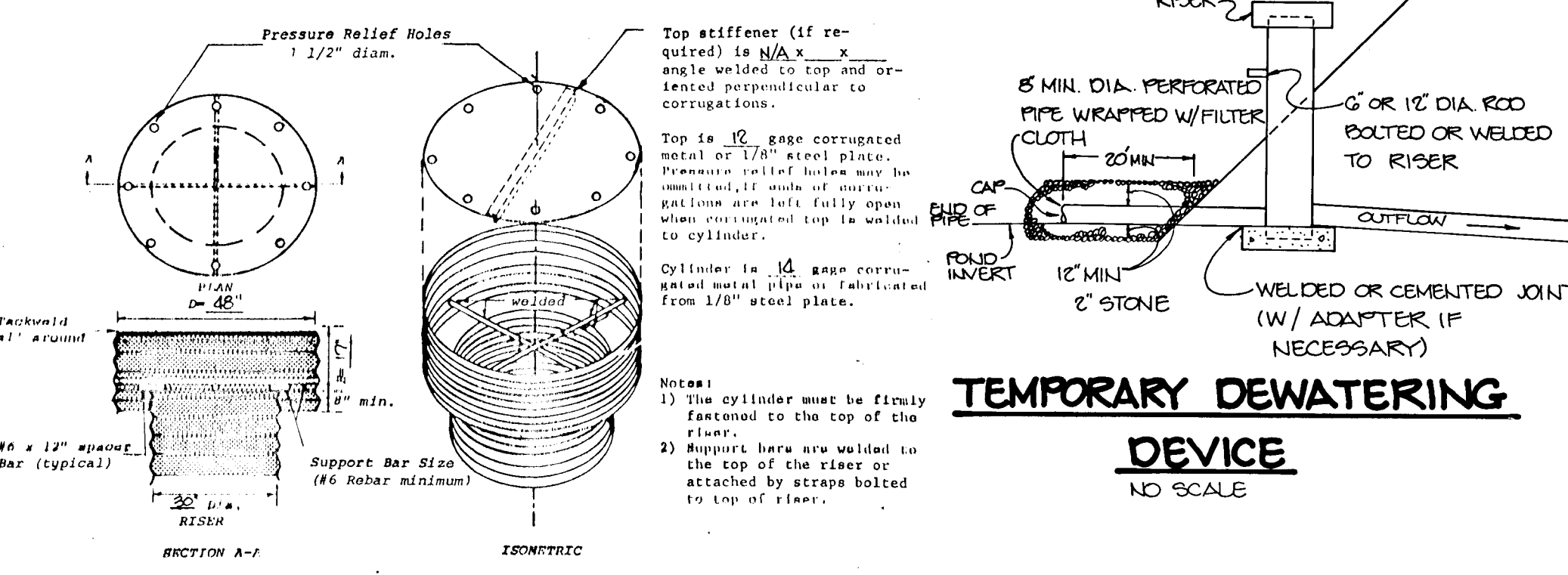
B-3

TOPSOIL	2"
BLACK MICACEOUS SANDY SILT WITH ORGANICS (SM) 2'0"	
NO RECOVERY (SM) 4'0"	
GRAY MICACEOUS SANDY SILT AND GRAVEL (SM) 4'0"	
BROWN MICACEOUS SANDY SILT (SM) 10'0"	
BOTTOM OF BORING @ 11'5"	

BORING LOGS
NO SCALE



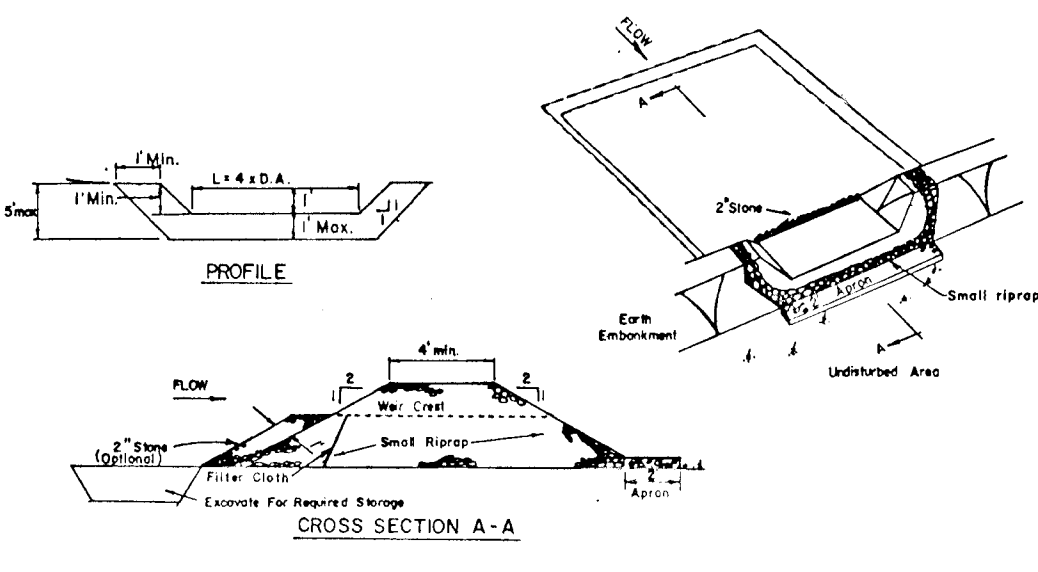
TRASH RACK FOR LOW FLOW ORIFICE - SW.M.F. #2
NO SCALE



TEMPORARY DEWATERING DEVICE
NO SCALE



CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE
NO SCALE



- OPTION:** A one foot layer of 2" stone may be placed on the upstream side of the riser in place of the embedded filter cloth.
- CONSTRUCTION SPECIFICATIONS FOR ST-V**
- Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The post area shall be cleared.
 - The fill material for the embankment shall be free of spots and other woody vegetation as well as oversized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being thickened.
 - All out and fill slopes shall be 2:1 or flatter.
 - The stone used in the outlet shall be small riprap 4"-8" along with a 1" thickness of 1/2" aggregate placed on the upstream side on the small riprap on embedded filter cloth in the riser.
 - Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap.
 - The structure shall be inspected after each rain and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
 - The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP
NO SCALE

AS BUILT CERTIFICATION

ENGINEER _____ DATE _____

FE # _____

BY THE DEVELOPER:

"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN 'AS-BUILT' PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

Arthur E. Muegge
DEVELOPER
7-10-90
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
ENGINEER
7-10-90
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.

James M. Adams
U.S. SOIL CONSERVATION SERVICE
7/23/90
DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED *Robert W. Helms*
HOWARD S.C.D.
7/23/90
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Mark S. Dwyer
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
7/23/90
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Clayton Tamm
CHIEF, LAND DEVELOPMENT DIVISION
9/16/90
DATE

Robert W. Helms
CHIEF, BUREAU OF HIGHWAYS
8-2-90
DATE

Francis W. Williams
CHIEF, BUREAU OF ENGINEERING
8/17/90
DATE

9-15-91	1	REMOVED OLV GRIT SEPARATOR NOTES & DETAILS
DATE	NO.	REVISION

OWNER/DEVELOPER
J.J.M., INC.
5570 STERRETT PLACE SUITE 205
COLUMBIA, MARYLAND 21044

PROJECT **WYNDEMERE**
SECTION ONE LOTS 1-118
A SINGLE FAMILY ATTACHED SUBDIVISION

AREA TAX MAP NO. 47 ELECTION DISTRICT ZONED R-6C
HOWARD COUNTY, MARYLAND

TITLE **DETAIL SHEET**

RIEMER MUEGGE & ASSOCIATES, INC.
A Land Planning, Engineering and Consulting Firm
3105 North Ridge Road Ellicott City, Maryland 21043
301-461-2690 FAX: 301-750-3176

DATE 7-10-90
S: 88-42 P: 89-13 WP: 89-05
DESIGNED BY: D.A.M.
DRAWN BY: G.D.H.
PROJECT NO: 49001
DATE: JULY 10, 1990
SCALE: AS SHOWN
DR. WING NO. 13 OF 33

Arthur E. Muegge
ARTHUR E. MUEGGE
F-30-41

1589