

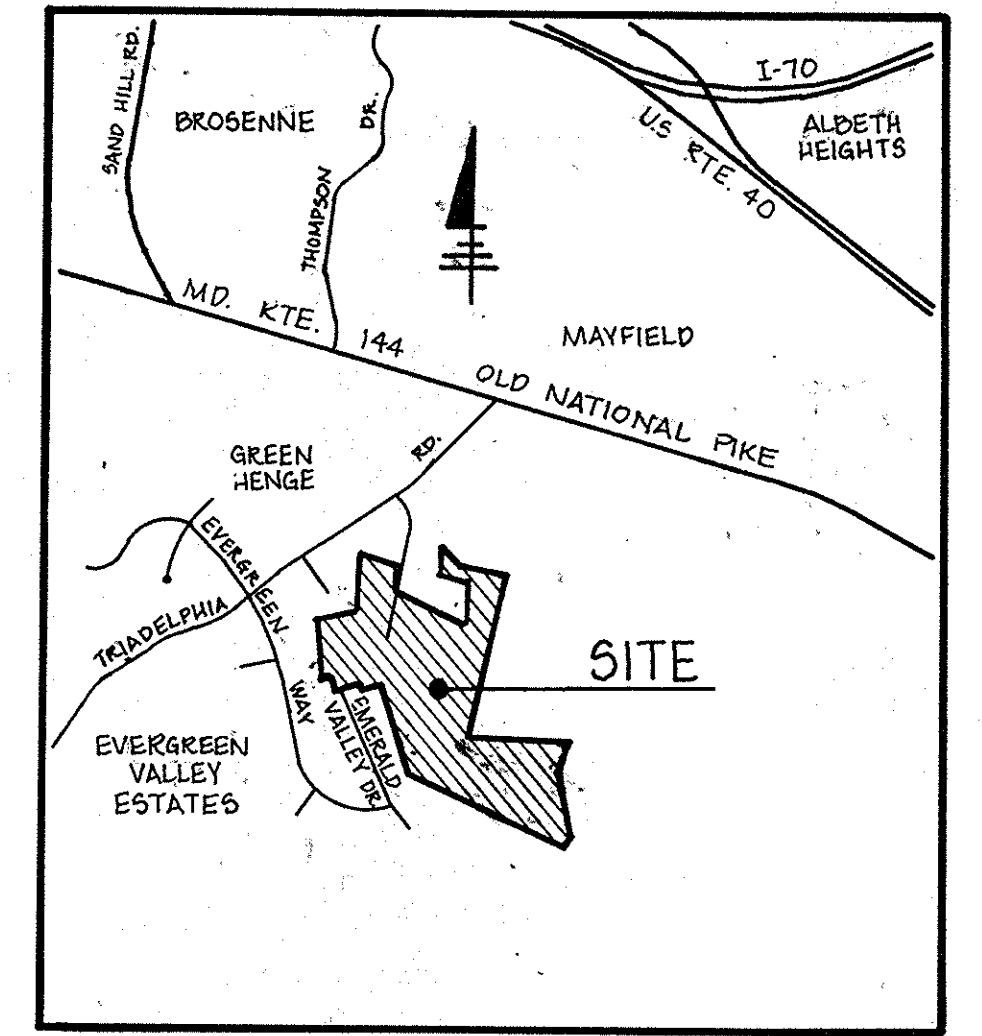
POINT	NORTHING	EASTING
100	530,572.04	821,777.27
101	530,521.76	822,022.61
103	529,959.27	821,873.85
115	528,428.97	823,852.87
116	528,424.61	823,821.56
117	528,276.35	822,727.16
118	530,019.07	823,256.54
119	530,135.12	822,822.82
126	530,134.75	821,379.63
161	530,246.22	822,610.14
162	530,141.36	822,602.31
192	529,617.00	821,665.79
164	529,555.83	822,851.02
165	530,041.56	822,971.04
166	528,178.12	823,685.30
167	527,501.83	823,700.27
168	527,374.02	823,667.22
183	527,893.24	822,030.47
840	528,798.02	821,612.77
841	528,625.51	821,329.06
842	528,707.68	821,309.27
843	528,572.11	821,020.34
844	528,629.14	820,995.92
846	529,220.07	820,873.30
847	529,467.29	821,443.04
197	530,211.96	821,779.05
200	530,870.29	821,846.98
201	530,902.29	821,879.46
202	530,790.29	821,962.93
203	530,520.45	822,072.32
204	530,574.20	822,076.49
205	530,627.11	822,061.85
801	530,667.87	822,074.22
802	530,279.56	822,021.31
845	528,689.69	820,946.82

ROADWAYS AND STORM DRAINS

HAWKSFIELD ESTATES

3RD ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
SCALE: 1"=200'

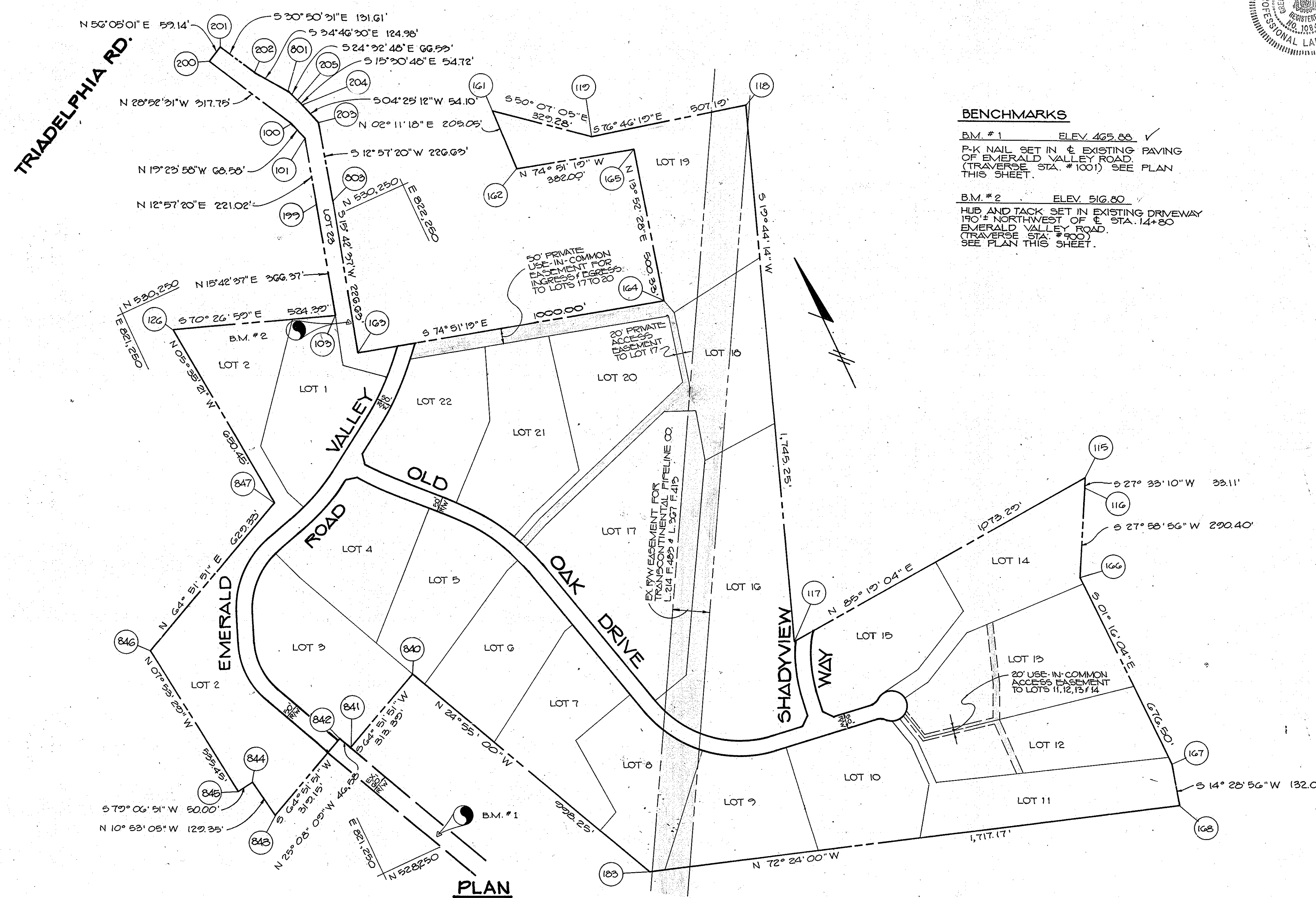
AS-BUILT
SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 104
ELlicOTT CITY, MARYLAND 21043



Arthur E. Muegge
ARTHUR E. MUEGGE
PROF. L.S. # 10849

SHEET NO.	DESCRIPTION
1.	TITLE SHEET
2.	PLAN AND PROFILE - EMERALD VALLEY RD. STA. 0+00 TO STA. 8+50
3.	PLAN AND PROFILE - EMERALD VALLEY RD. STA. 8+50 TO STA. 12+24.5
4.	PLAN AND PROFILE - OLD OAK DRIVE STA. 0+00 TO STA. 12+81.25
5.	PLAN AND PROFILE - OLD OAK DRIVE STA. 12+81.25 TO STA. 20+29.25
6.	PLAN AND PROFILE - SHADYVIEW WAY STA. 0+00 TO STA. 2+00.64
7.	GRADING AND SEDIMENT CONTROL PLAN & DETAILS
8.	GRADING AND SEDIMENT CONTROL PLAN & DETAILS
9.	STORM DRAIN PROFILES & DETAILS
10.	DRAINAGE AREA MAP, STORM DRAIN PROFILES AND DETAILS

- 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 OF ROADWAYS.
 - 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 TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
 - CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK IN THESE DRAWINGS:
 - MISS UTILITY 1-800-257-7777
 - G&P TELEPHONE COMPANY 725-9976
 - AT&T CABLE LOCATION DIVISION 393-3553
 - BALTIMORE GAS AND ELECTRIC COMPANY 685-3123
 - STATE HIGHWAY ADMINISTRATION 531-5533
 - HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK) 792-7272
 - TRANSCONTINENTAL GAS PIPE LINE CORP. 402-0760
 - ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS.
 - STORM DRAIN BACKFILL WITHIN ROADWAYS, UNDER STRUCTURES AND FOR STORM DRAIN TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM 1557.
 - NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
 - ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL C2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
 - ALL STREET CURB RETURNS SHALL HAVE 35.0' RADII UNLESS OTHERWISE NOTED.
 - ALL ELEVATIONS SHOWN ARE BASED ON U.S.C.S. MEAN SEA LEVEL DATUM, 1929.
 - ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
 - TOPO TAKEN FROM FIELD RUN SURVEY DATED SEPTEMBER, 1986.
 - SUBJECT PROPERTY ZONED R PER 8/2/85 COMPREHENSIVE ZONING PLAN.
 - INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1980 REVISED EDITION.
 - DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:
 - ALL 50' RIGHT OF WAYS 30 M.P.H.
 - PROVIDE DRIVEWAY CULVERTS AS FOLLOWS:
 - LOT 6 15' BCCMP 14 GA.
 - LOT 7 18' BCCMP 14 GA.
 - LOT 8 22' BCCMP 14 GA.
 - LOT 9 22' BCCMP 14 GA.
 - LOT 10 22' BCCMP 14 GA.
 - LOT 11 22' BCCMP 14 GA.
 - LOT 12 22' BCCMP 14 GA.
 - LOT 13 22' BCCMP 14 GA.
 - LOT 14 22' BCCMP 14 GA.
 - LOT 15 22' BCCMP 14 GA.
 - LOT 16 22' BCCMP 14 GA.
 - LOT 17 22' BCCMP 14 GA.
 - LOT 18 22' BCCMP 14 GA.
 - LOT 19 22' BCCMP 14 GA.
 - LOT 20 22' BCCMP 14 GA.
 - LOT 21 22' BCCMP 14 GA.
 - LOT 22 22' BCCMP 14 GA.

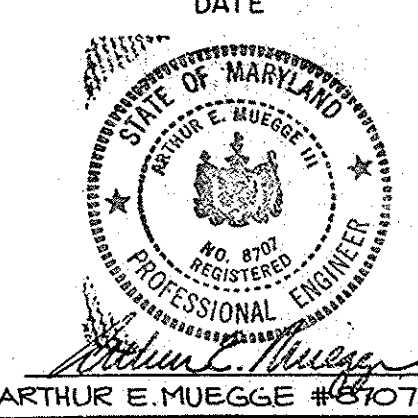


BENCHMARKS

B.M. #1 ELEV. 465.88 ✓
P-K NAIL SET IN EXISTING PAVING OF EMERALD VALLEY ROAD (TRAVERSE STA. #100) SEE PLAN THIS SHEET.

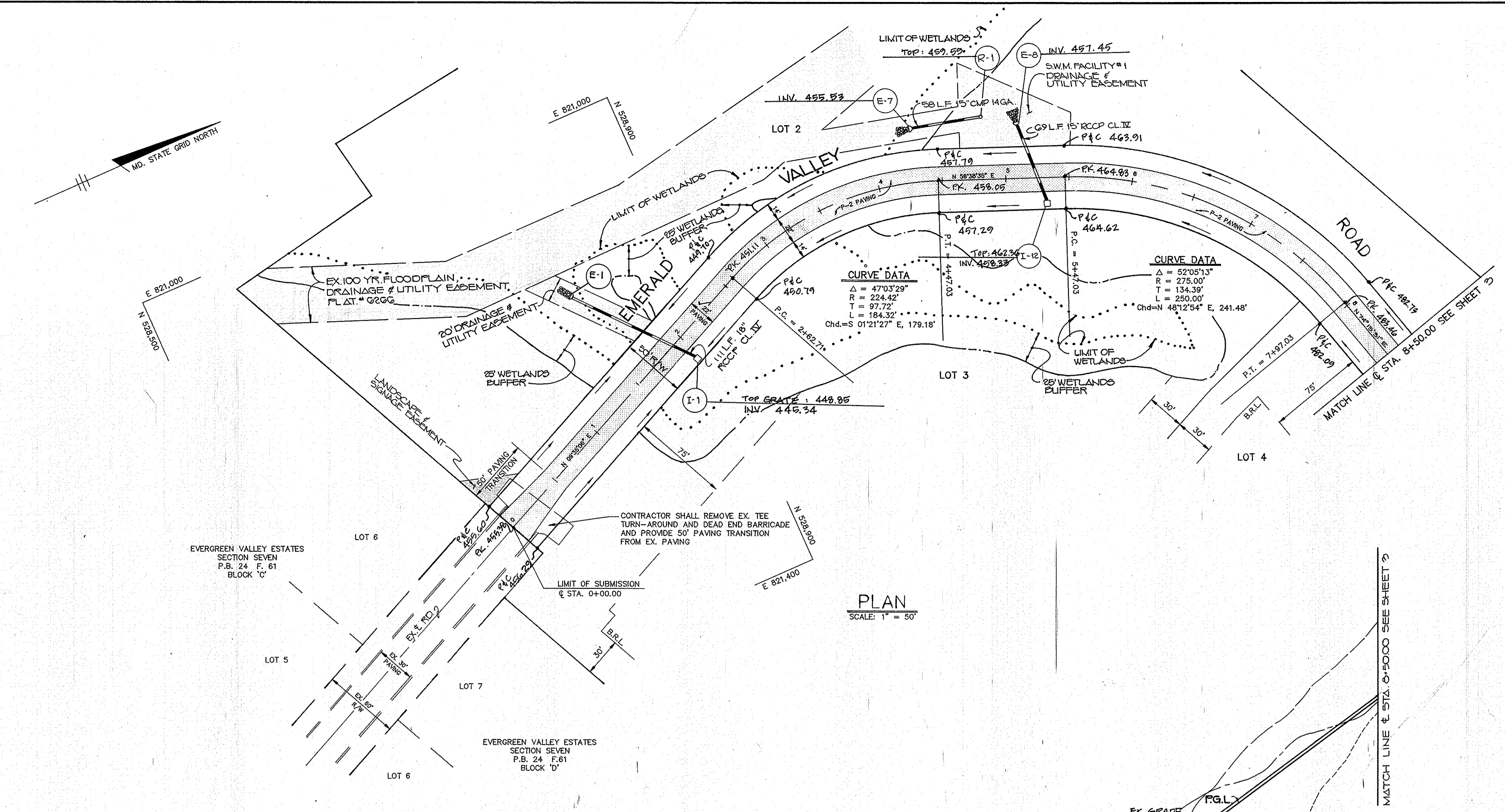
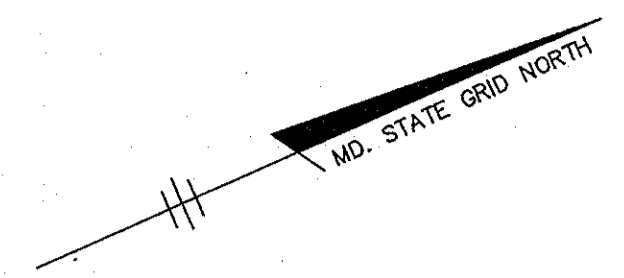
B.M. #2 ELEV. 516.80 ✓
HUB AND TACK SET IN EXISTING DRIVEWAY 190'± NORTHWEST OF E. STA. 14+80 EMERALD VALLEY ROAD (TRAVERSE STA. #100) SEE PLAN THIS SHEET.

AS BUILT CERTIFICATE	
ARTHUR E. MUEGGE #8707	DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	DATE
<i>Mark J. Langlois</i> 12/13/90 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	DATE
<i>William W. Wehland</i> 12/11/90 CHIEF, BUREAU OF HIGHWAYS	DATE
<i>William W. Wehland</i> 12-13-90 CHIEF, BUREAU OF ENGINEERING	DATE
DATE NO.	REVISION
OWNER/DEVELOPER	
DIGI-DATA CORPORATION 8750 DORSEY RIN ROAD JESSUP, MARYLAND 20794	
PROJECT: F84-128 & 88-52 & WP 88-72 P 88-82 HAWKSFIELD ESTATES LOTS 1 - 22	
AREA TAX MAP 16 & 23 LOT 1 OF PARCEL 40 & 3RD ELECTION DISTRICT LOT 1 OF PARCEL 228 HOWARD COUNTY, MARYLAND ZONED-R	
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	
DATE 5.30.90	DESIGNED BY: D.B.S.
	DRAWN BY: D.O.S.
	PROJECT NO: 47910
	DATE: FEBRUARY 21, 1990
	SCALE: AS SHOWN
	DRAWING NO. 1 OF 10

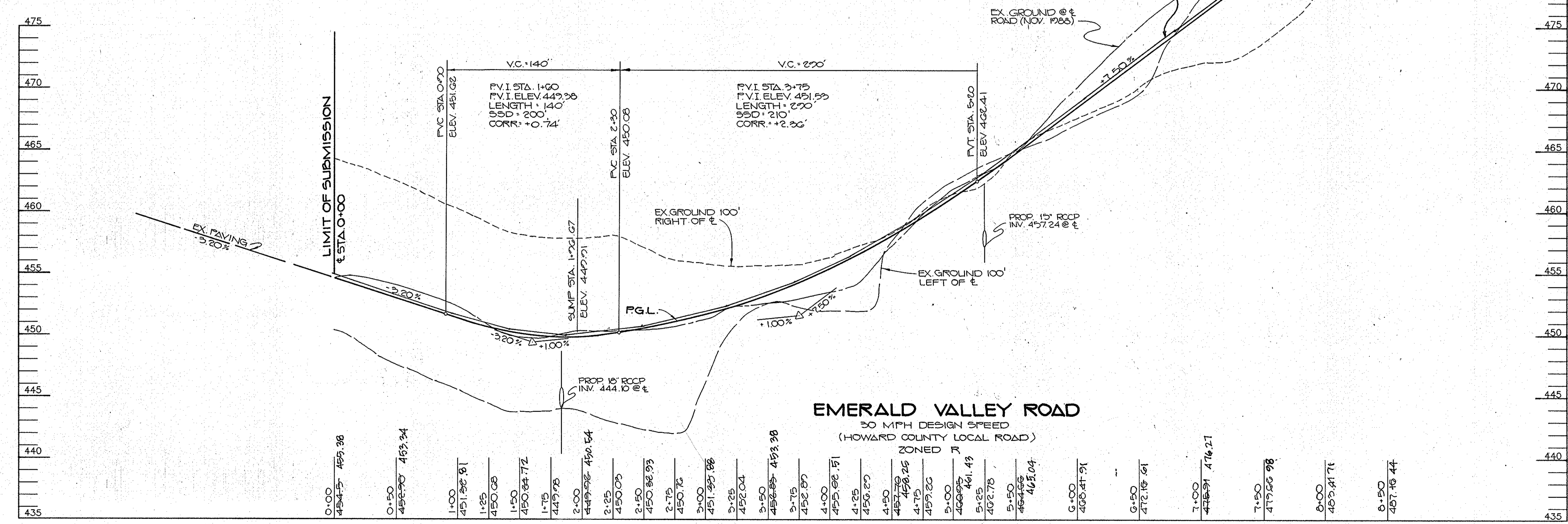


F-90-05

1612



PLAN
SCALE: 1" = 50'



EMERALD VALLEY ROAD
30 MPH DESIGN SPEED
(HOWARD COUNTY LOCAL ROAD)
ZONED R

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

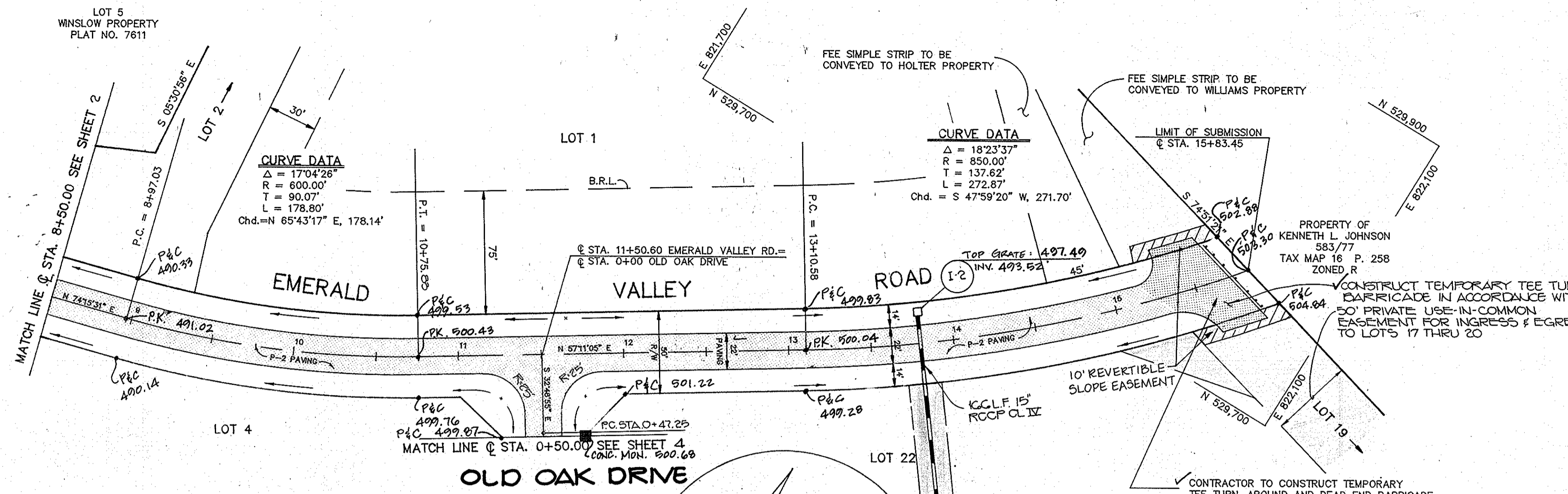
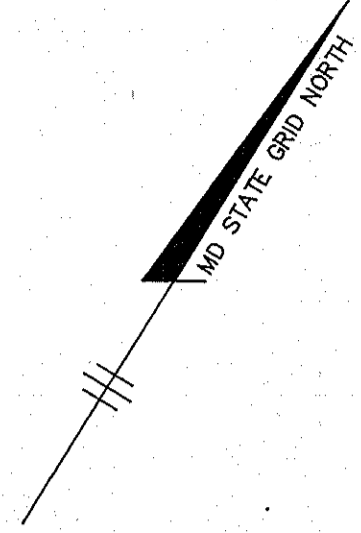


AS-BUILT
SHANABERGER & ASSOCIATES, INC.
8720 TOWN & COUNTRY BLVD., SUITE 104
ELlicOTT CITY, MARYLAND 21043

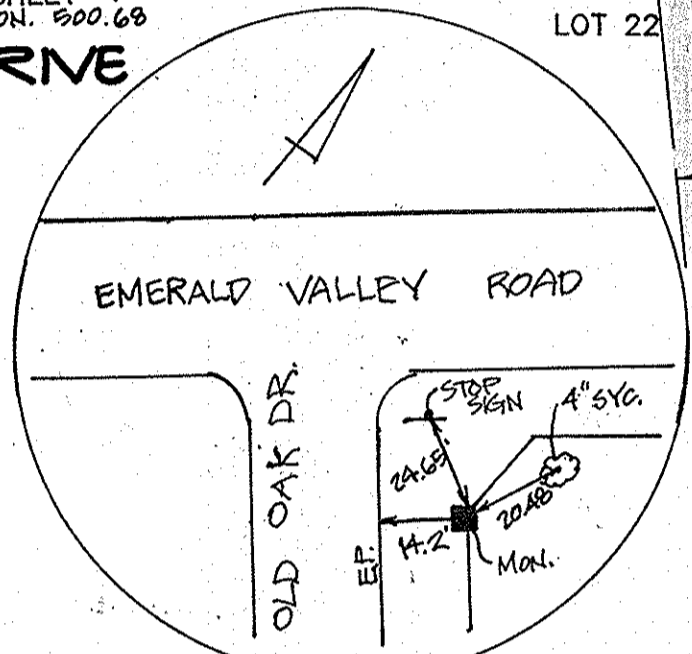
Arthur E. Muegge
ARTHUR E. MUEGGE
PROF. L.S. #10849

AS BUILT CERTIFICATE	
ARTHUR E. MUEGGE #8707	DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING <i>David J. Langley</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE 2/13/90
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>William D. Weiland</i> CHIEF, BUREAU OF HIGHWAYS	DATE 12/14/90
<i>William D. Weiland</i> CHIEF, BUREAU OF HIGHWAYS	DATE 12/13/90
DATE NO.	REVISION
OWNER/DEVELOPER DIGI - DATA CORPORATION 8580 DORSEY RUN ROAD JESSUP, MARYLAND 20794	
PROJECT: F 84-128 588-52 WP 88-72 P 88-82 HAWKSFIELD ESTATES LOTS 1-22	
AREA: TAX MAPS 16 & 23 PARCEL 40 & LOT 1 3 RD ELECTION DISTRICT OF PARCEL 228 HOWARD COUNTY, MARYLAND ZONED R	
TITLE: PLAN & PROFILE EMERALD VALLEY ROAD STA. 0+00.00 TO STA. 8+50.00	
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 5-30-90	DESIGNED BY: D.B.S.
DRAWN BY: CAD	PROJECT NO: 47310
DATE: FEBRUARY 21, 1990	SCALE: AS SHOWN
DRAWING NO. 2 OF 10	

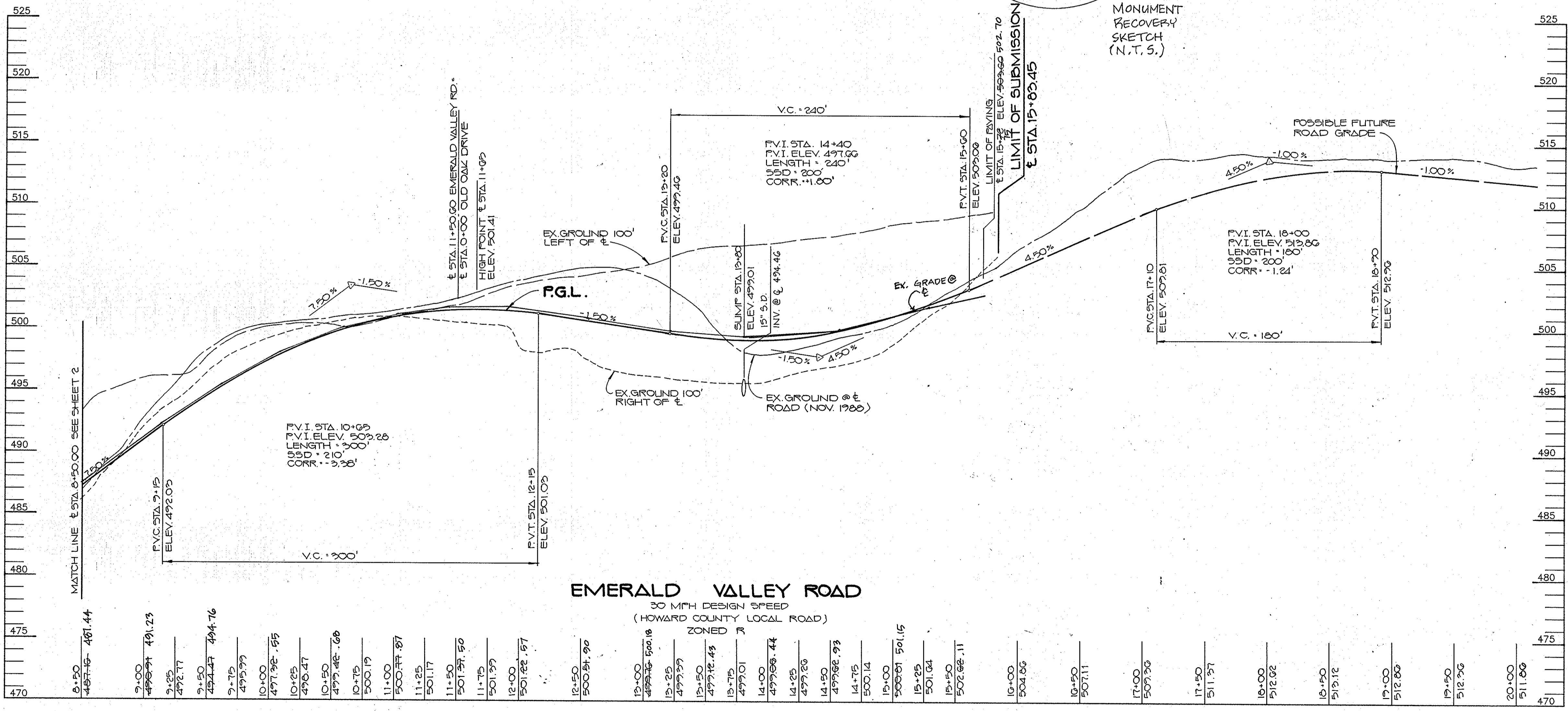
1612



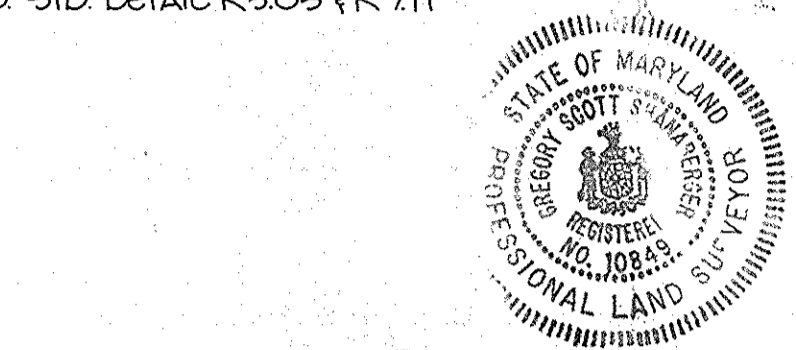
PLAN
SCALE: 1" = 50'



MONUMENT RECOVERY SKETCH (N.T.S.)



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



AS-BUILT

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 104
ELLICOTT CITY, MARYLAND 21043

Arthur E. Muegge
DATE: 1/19/90

AS BUILT CERTIFICATE	
ARTHUR E. MUEGGE #8707	DATE
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING	
<i>Frank J. Dwyer</i>	1/19/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	DATE
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William W. Wesland</i>	12/11/90
CHIEF, BUREAU OF HIGHWAYS	DATE
<i>Richard J. Reed</i>	12-13-90
CHIEF, BUREAU OF ENGINEERING	DATE

DATE	NO.	REVISION

OWNER/DEVELOPER
DIGI - DATA CORPORATION
8500 DORSEY RUN ROAD
JESSUP, MARYLAND 20794

PROJECT: F&A-125 505-52 W/F&S-72 F&S-82
HAWKSFIELD ESTATES
LOTS 1-23

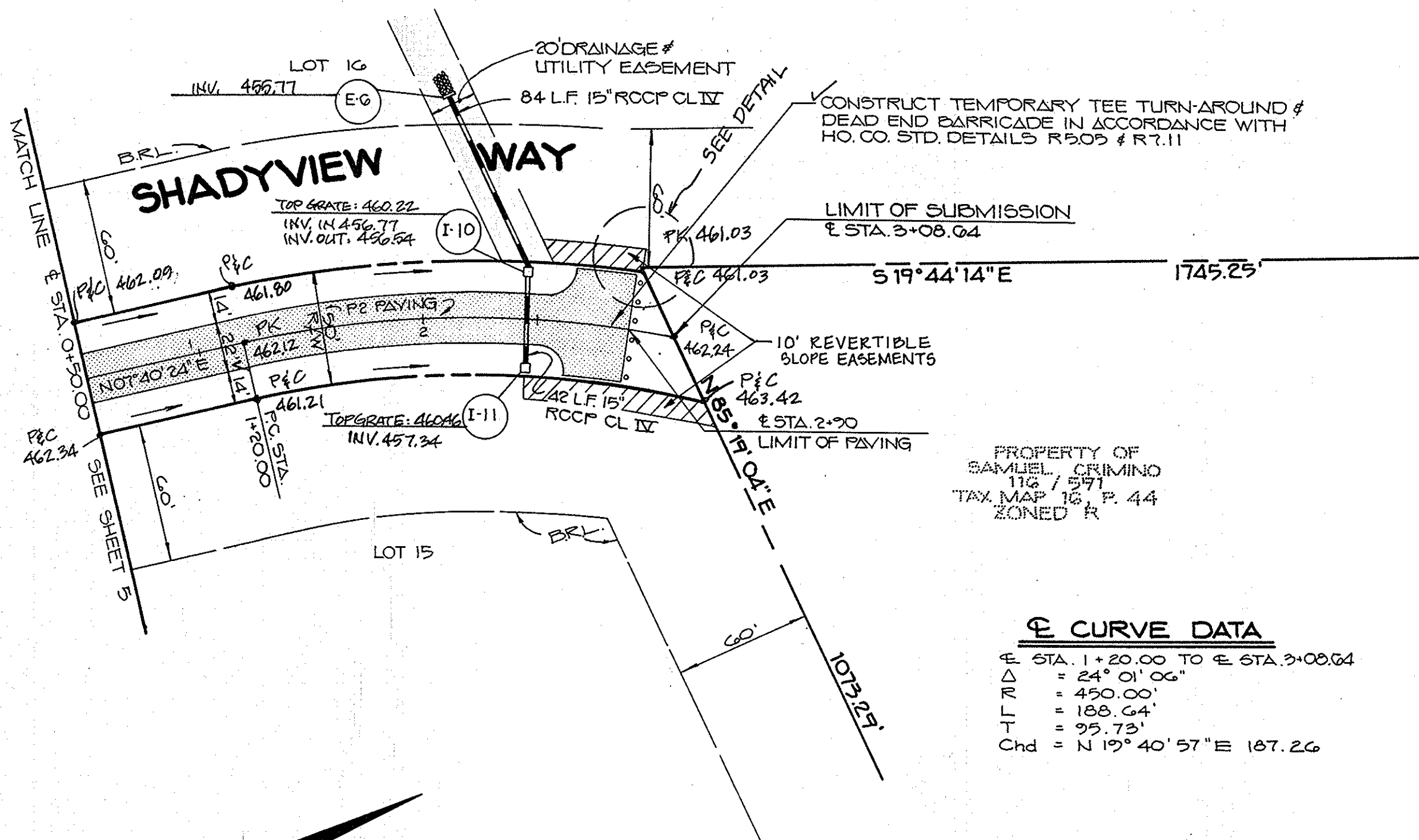
TITLE: PLAN & PROFILE
EMERALD VALLEY ROAD
STA. 8+50.00 TO STA. 15+83.45

DATE: 2-20-90	DESIGNED BY: D.B.S.
	DRAWN BY: CAD
	PROJECT NO: 47510
	DATE: FEBRUARY 21, 1990
	SCALE: AS SHOWN
	DRAWING NO. 2 OF 10



1612

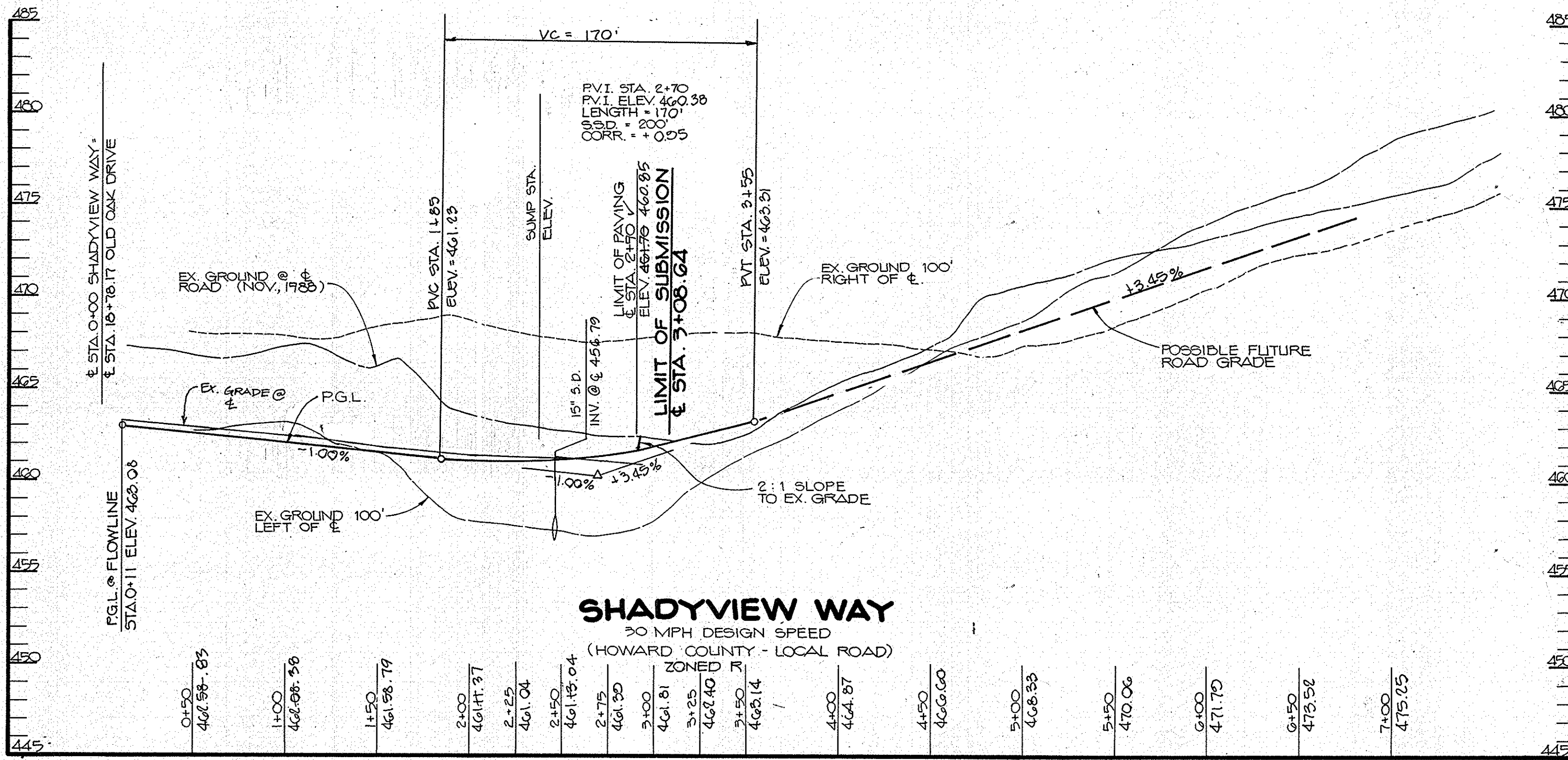
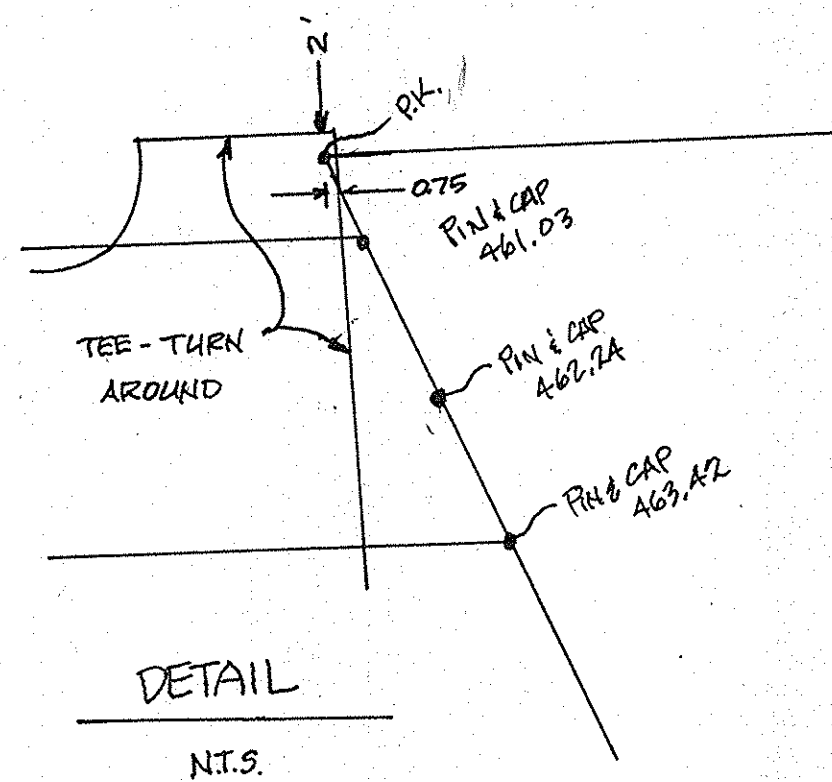
MARYLAND BLUEPRINT CO., INC.



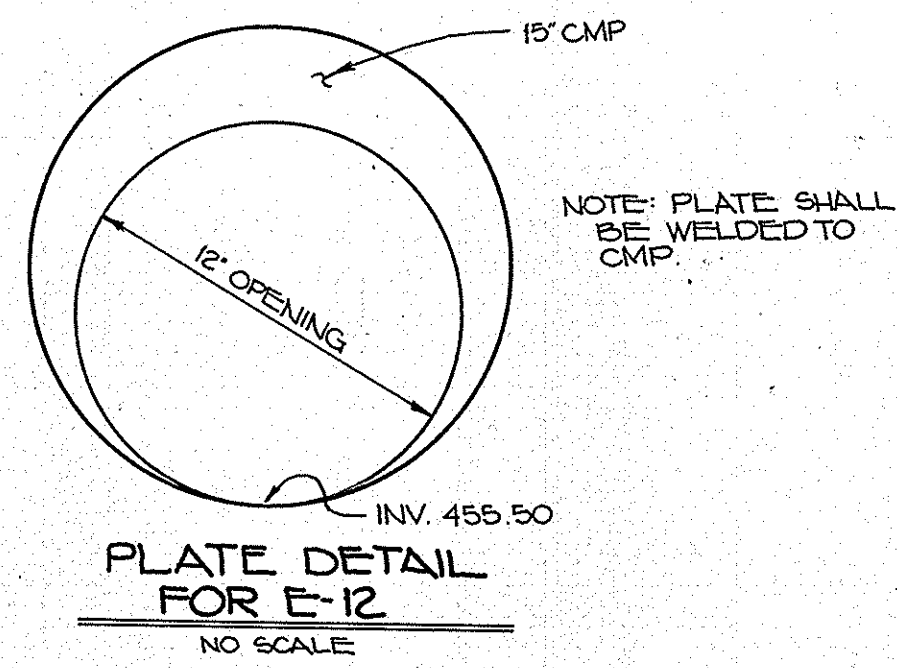
☉ CURVE DATA

E STA. 1+20.00 TO E STA. 3+08.64
 Δ = 24° 01' 06"
 R = 450.00'
 L = 188.64'
 T = 95.73'
 Chd = N 19° 40' 57" E 167.26

PLAN
SCALE: 1" = 50'



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



SHANBERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 104
ELLCOTT CITY, MARYLAND 21043

AS-BUILT

Arthur E. Muegge
ARTHUR E. MUEGGE
PROF. L.S. # 10849
DATE: 1/13/90

AS BUILT CERTIFICATE	
APPROVED: ARTHUR E. MUEGGE #8707	DATE: 1/13/90
APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING <i>David J. Tangle</i> CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Michael Summers</i> CHIEF, Land Development Division	
<i>James W. Weisand</i> CHIEF, Bureau of Highways	
<i>William B. Ray</i> CHIEF, Bureau of Engineering	
1-6-94	1 REVISE ROAD PROFILE
DATE NO.	REVISION
OWNER/DEVELOPER DIGI - DATA CORPORATION 8580 DORSEY RUN ROAD JESSUP, MARYLAND 20794	
PROJECT: F84-128 S88-52 & WP 88-72 F88-82 HAWKSFIELD ESTATES LOTS 1-23	
AREA: TAX MAPS 16 & 23 PARCEL 40 & LOT 1 OF PARCEL 223 3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND ZONE R	
TITLE: PLAN & PROFILE SHADYVIEW WAY STA. 0+50.00 TO STA. 3+08.64	
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: 1-30-90	DESIGNED BY: D.B.S.
	DRAWN BY: C.B.
	PROJECT NO: 47310
	DATE: FEBRUARY 21, 1990
	SCALE: AS SHOWN
	DRAWING NO. 6 OF 10

ARTHUR E. MUEGGE #8707

DATE

510
30' PRIVATE USE-IN-COMMON
EASEMENT FOR INGRESS &
EGRESS TO LOTS 17 THRU 20.

BY THE DEVELOPER:

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT."

R. Van Lusen
DEVELOPER
5/25/90
DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Arthur E. Muegge
ENGINEER
5/20/90
DATE

REVIEWED FOR *Howard* S.C.D.

AND MEETS TECHNICAL REQUIREMENTS

James M. Hester
S.O.I.L. CONSERVATION SERVICE
6/20/90
DATE

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

John J. Kelly
HOWARD S.C.D.
6/20/90
DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Janet C. Taylor
CHIEF, DIVISION OF
COMMUNITY PLANNING AND
LAND DEVELOPMENT
6/13/90
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John J. Kelly
CHIEF, LAND DEVELOPMENT DIVISION
12/2/90
DATE

William W. Williams
CHIEF, BUREAU OF HIGHWAYS
12/11/90
DATE

W. Edwin R. Ray
CHIEF, BUREAU OF ENGINEERING
12/13/90
DATE

DATE NO. REVISION

OWNER/DEVELOPER

DIGI - DATA CORPORATION
8580 DORSEY RUN ROAD
JESSUP, MARYLAND 20794

PROJECT: 1" 84-123 588-52 WP 88-72 P 08-82

HAWKSFIELD ESTATES

AREA TAX MAPS 16 & 23 PARCEL 40 & LOT 1 OF
5 RD ELECTION DISTRICT PARCEL 226
HOWARD COUNTY, MARYLAND ZONE-R

TITLE: **GRADING, SEDIMENT
CONTROL PLAN & 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

3/20/90
DATE

DESIGNED BY: D.B.S.

DRAWN BY: CADD

PROJECT NO: 4730

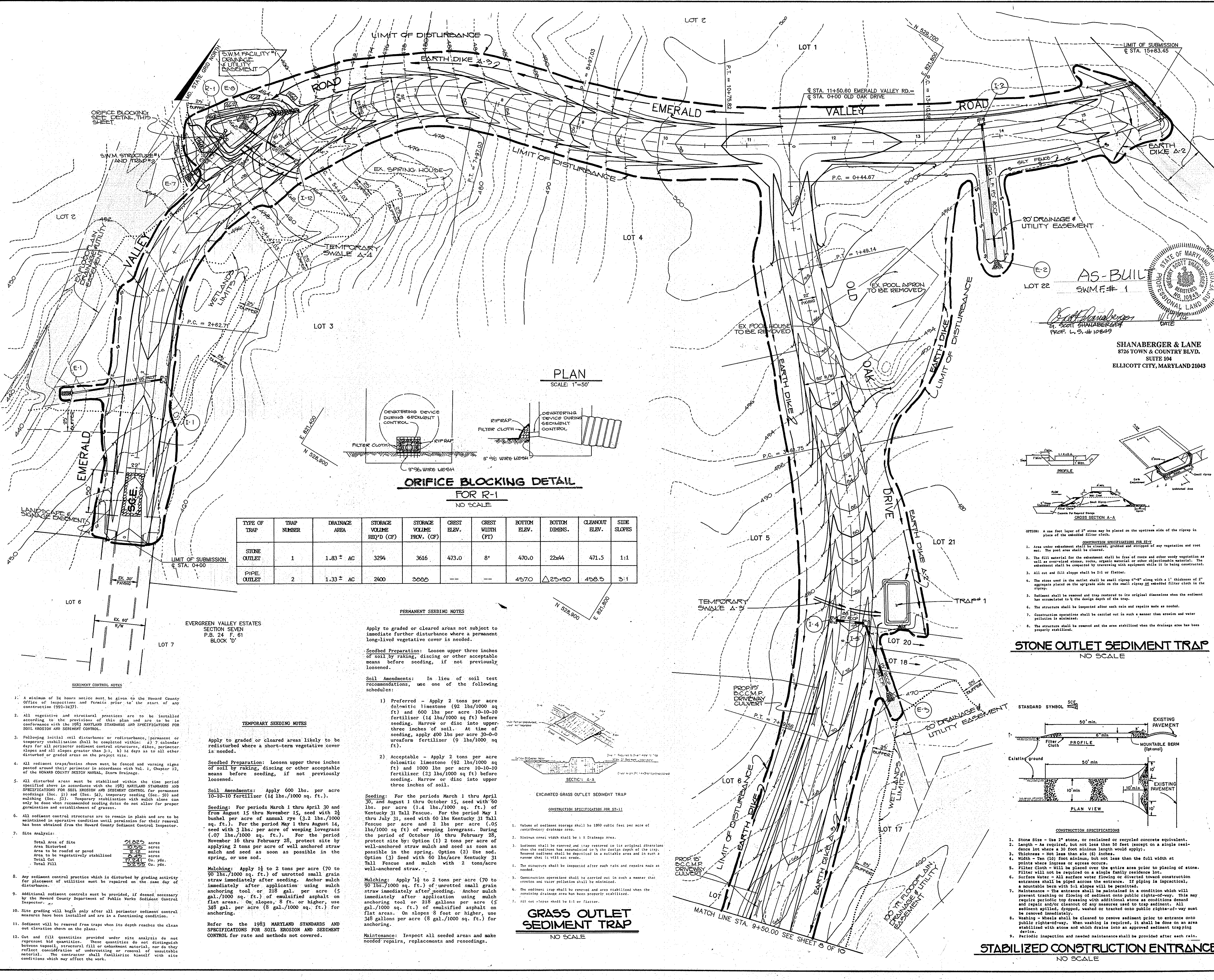
DATE: FEBRUARY 21, 1990

SCALE: AS SHOWN

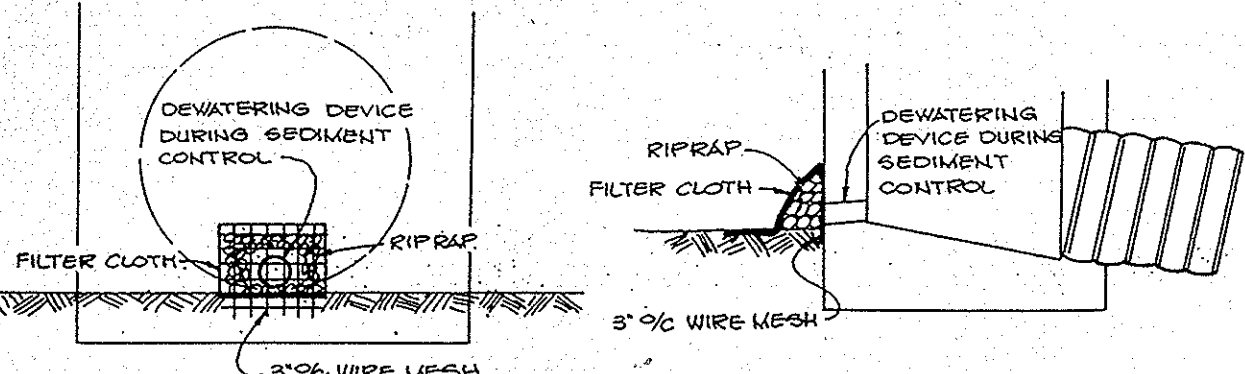
DRAWING NO. 7 OF 10

ARTHUR E. MUEGGE #8707

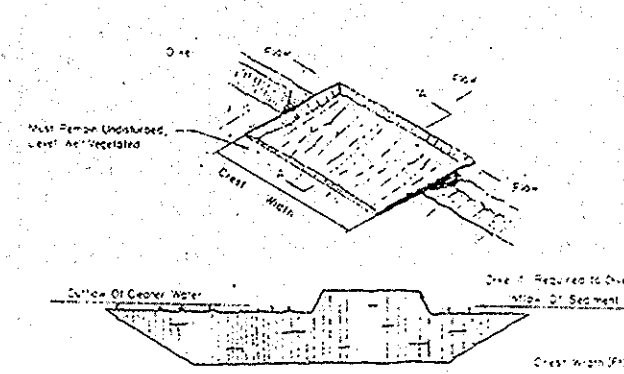
F-20-05



TYPE OF TRAP	TRAP NUMBER	DRAINAGE AREA	STORAGE VOLUME REQ'D (CF)	STORAGE VOLUME PRVN. (CF)	CREST ELEV.	CREST WIDTH (FT)	BOTTOM ELEV.	BOTTOM DIMS.	CLEANOUT ELEV.	SIDE SLOPES
STONE OUTLET	1	1.83 ± AC	3294	3616	473.0	8'	470.0	22x44	471.5	1:1
PIPE OUTLET	2	1.33 ± AC	2400	3000	---	---	457.0	25x50	458.5	3:1

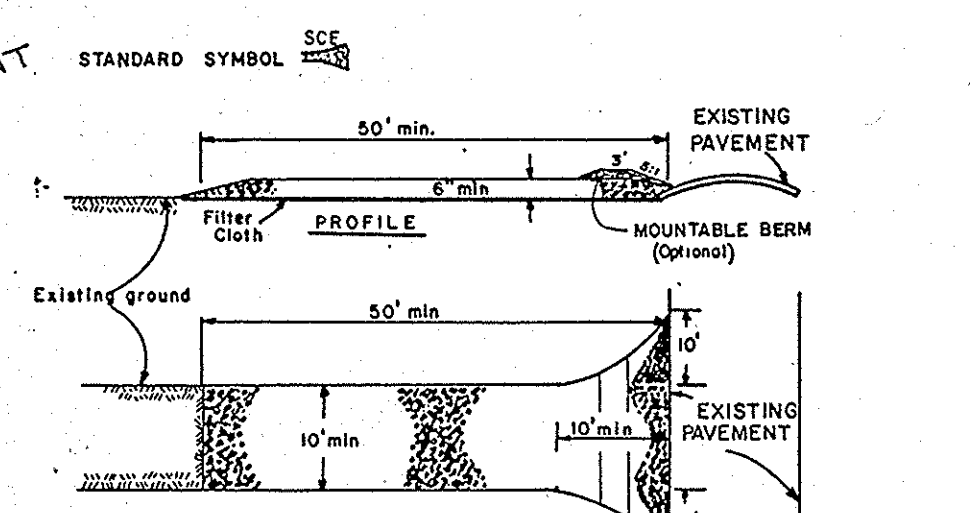


PERMANENT SEEDING NOTES
Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
Soil Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.
Soil Amendments: In lieu of soil test recommendations, use one of the following schedules:
1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.
Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 50 lbs. per acre (14 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre of well-anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well-anchored straw.
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 ft. or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.
Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.
Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.



GRASS OUTLET SEDIMENT TRAP
NO SCALE

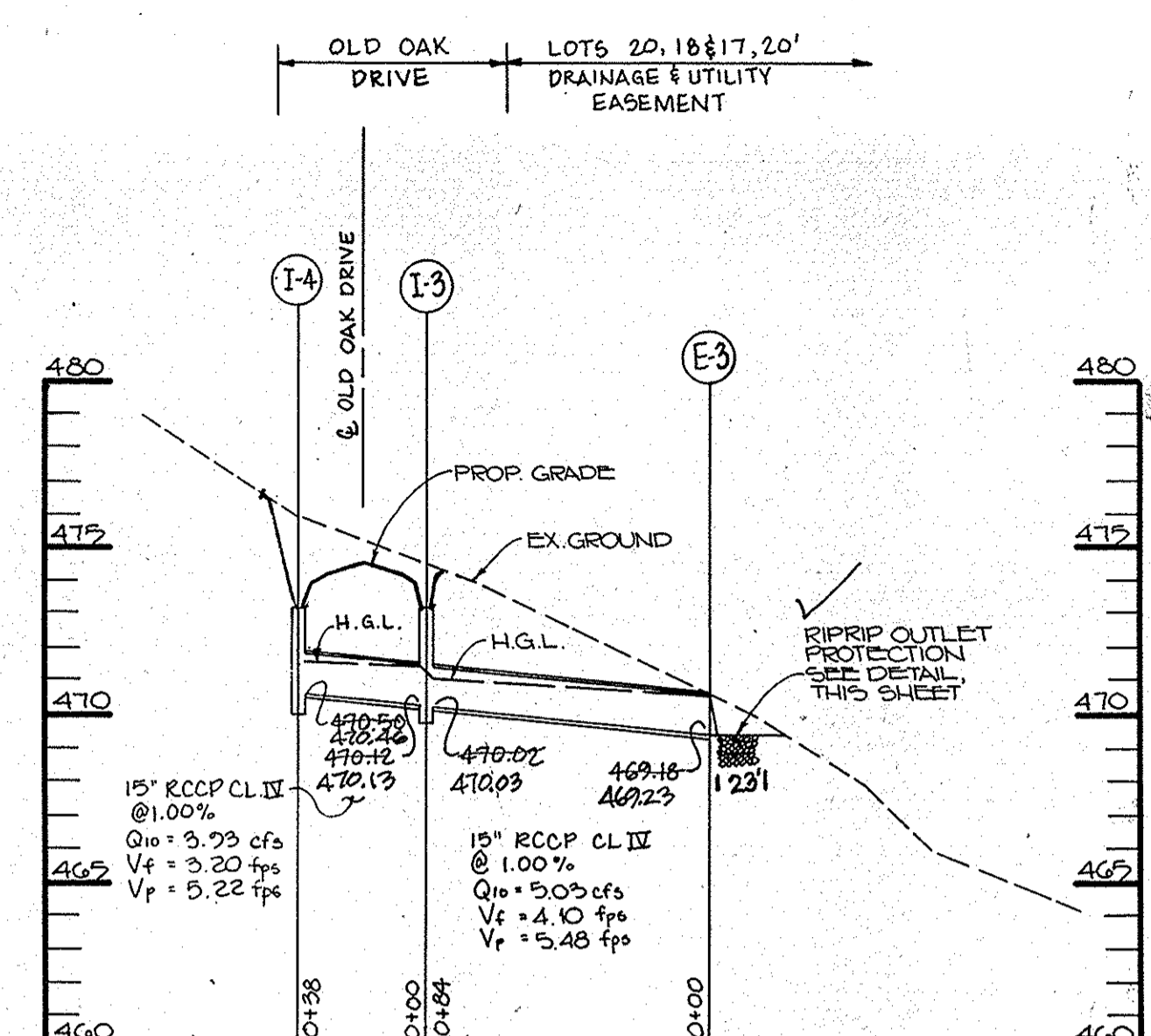
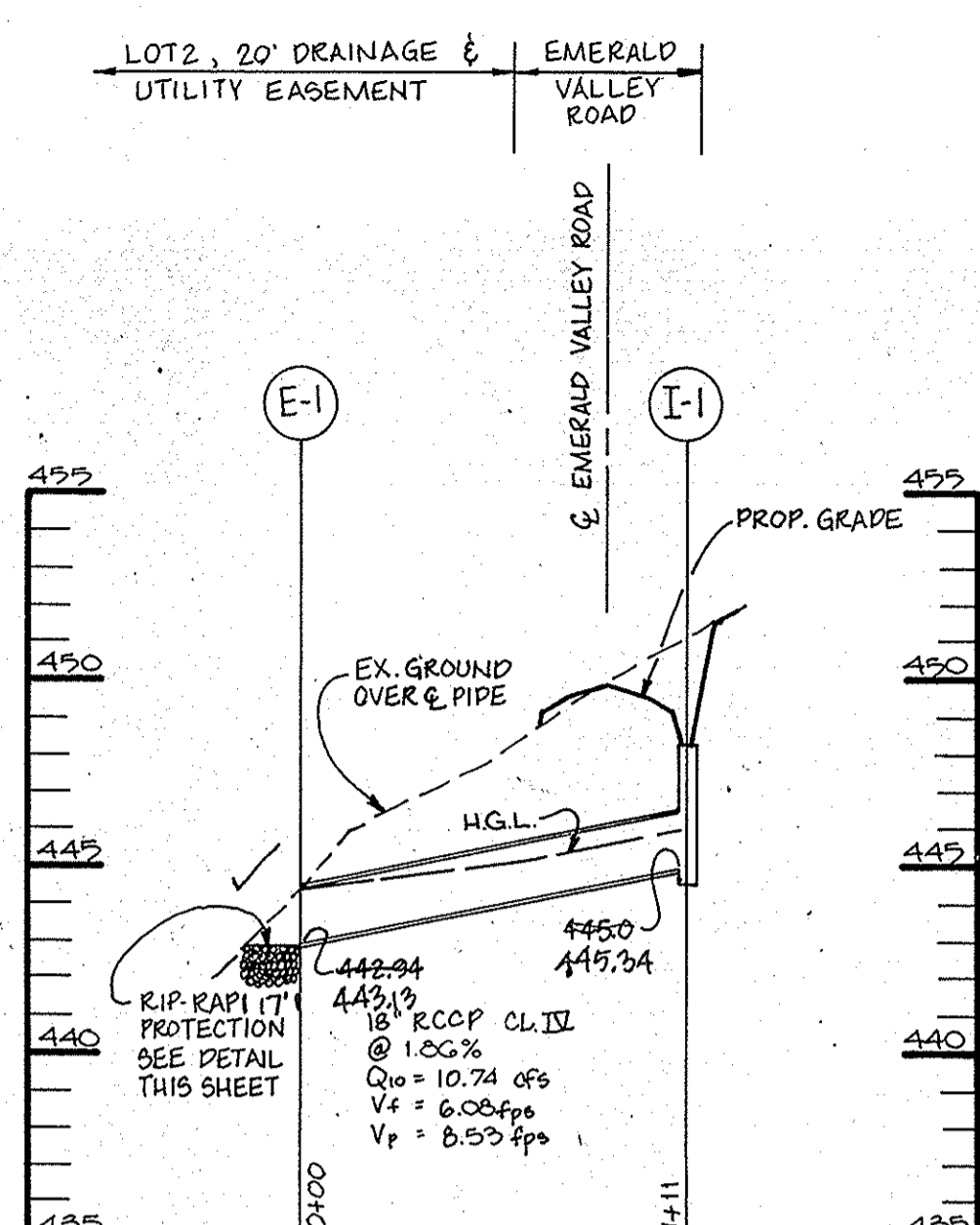
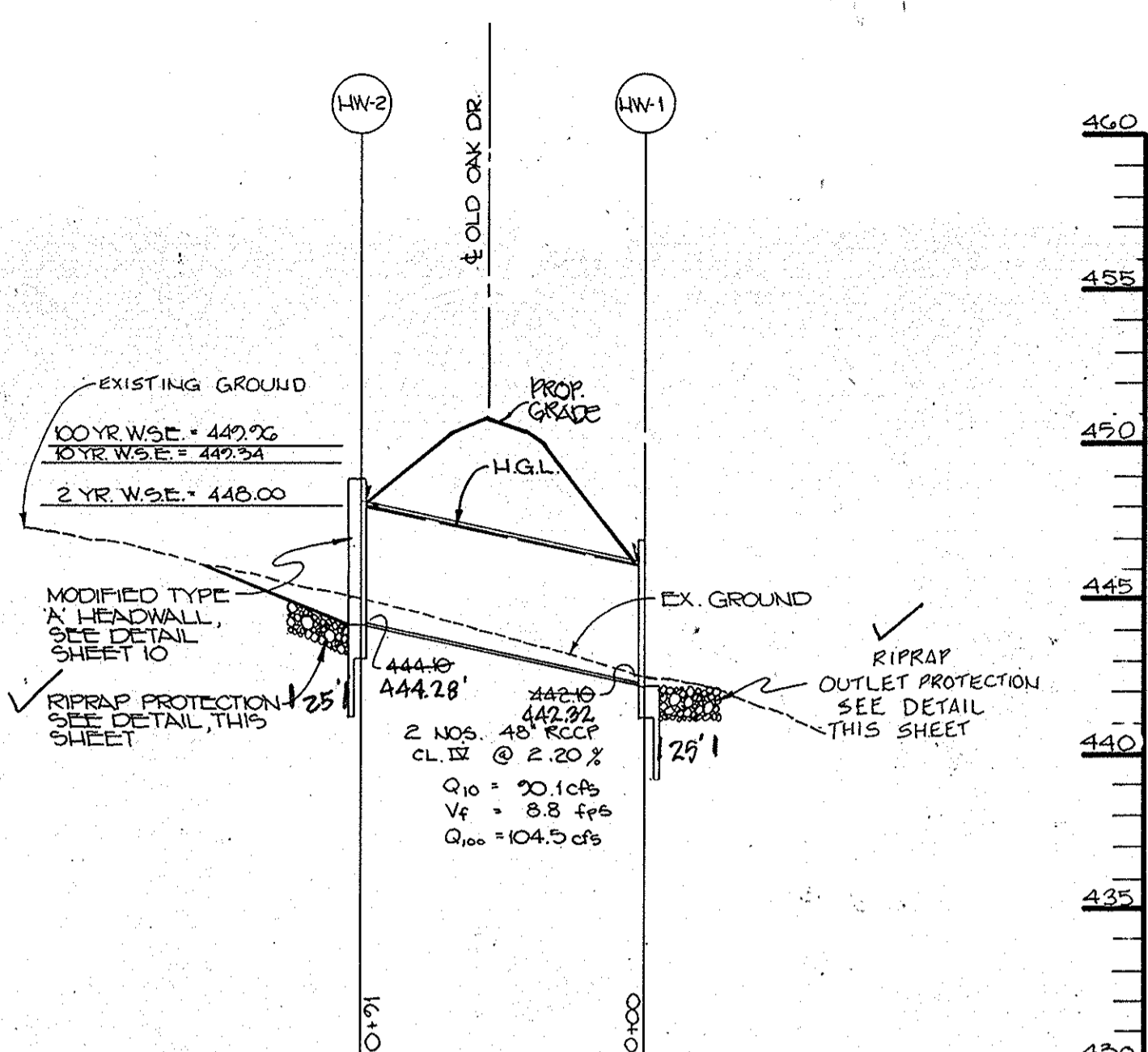
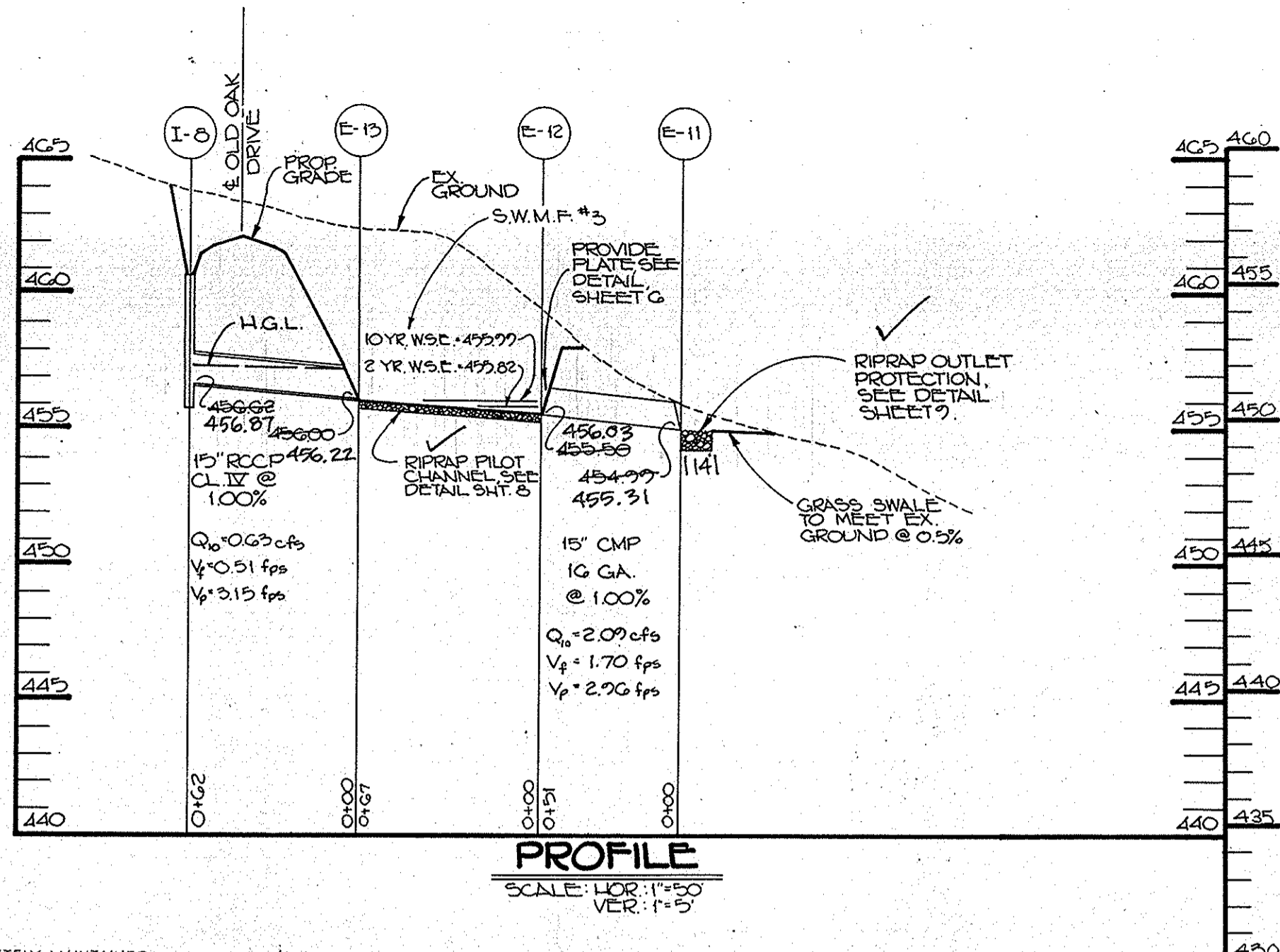
STONE OUTLET SEDIMENT TRAP
NO SCALE



STABILIZED CONSTRUCTION ENTRANCE
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 redisturbance, 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 17, 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. 31) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 23). 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: 10.825 acres
Area Disturbed: 10.56 acres
Area to be roofed or paved: 2.12 acres
Area to be vegetatively stabilized: 8.44 acres
Total Cut: 17.64 cu. yds.
Total Fill: 22.92 cu. yds.
 - Any sediment control practice which is disturbed by grading activity or 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 include material between topsoil, structural fill or embankment material, nor do they reflect consideration of undercutting or removal of nonstable material. The contractor shall familiarize himself with site conditions which may affect the work.

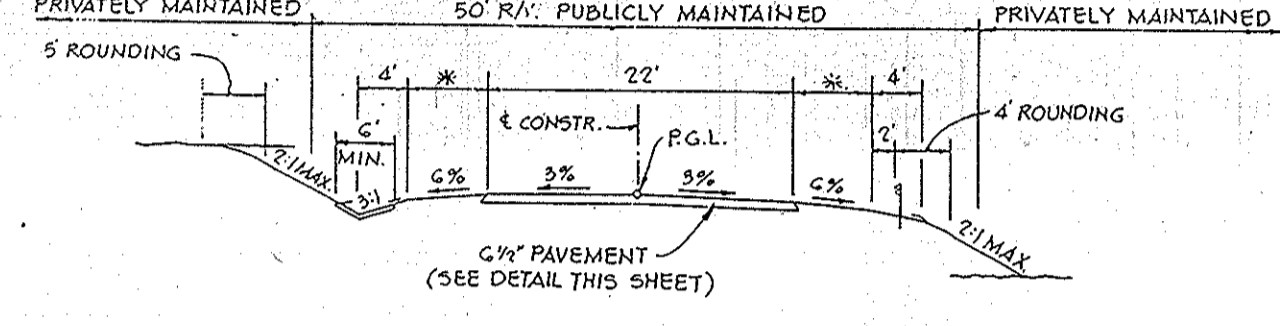
1612



STORM DRAIN PROFILE @ STA. 14+37
SCALE: HOR. 1"=50' VERT. 1"=5'

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

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

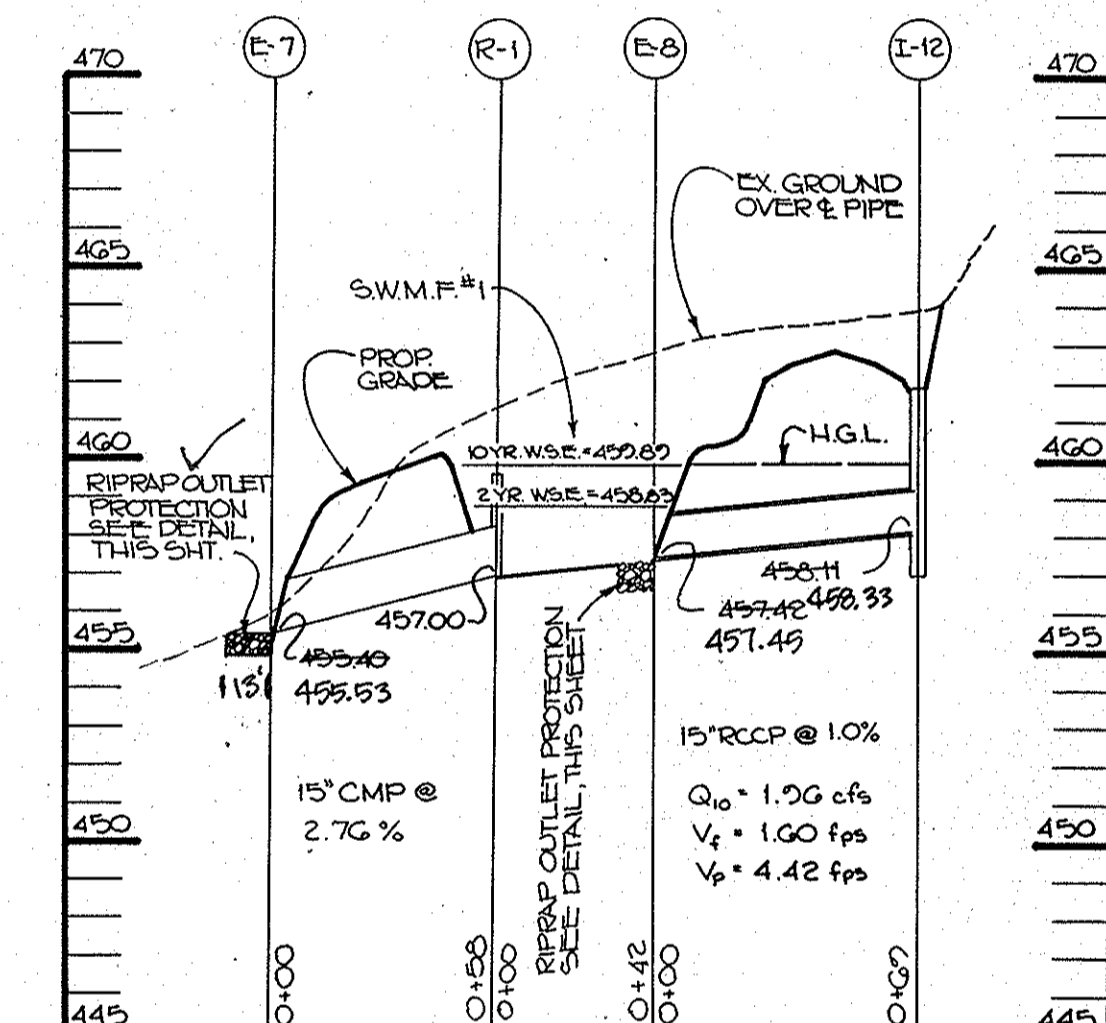
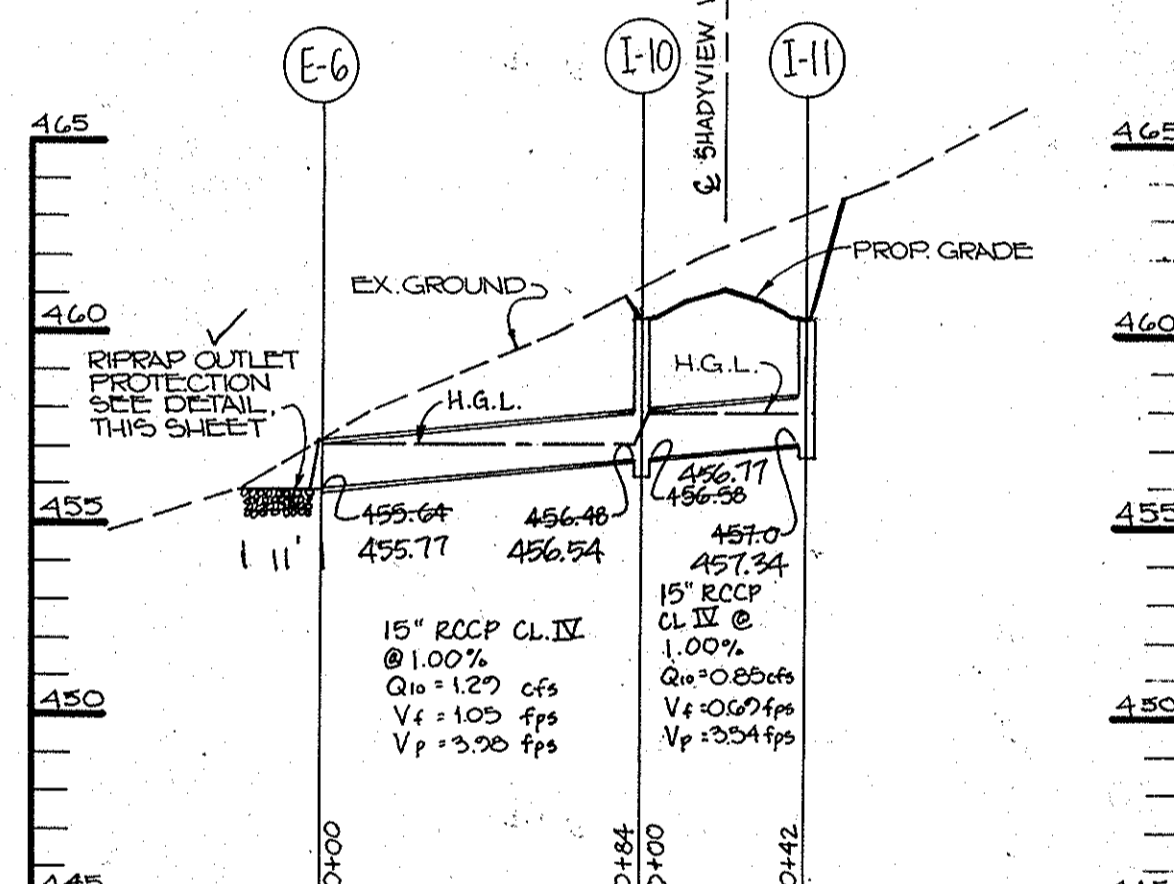
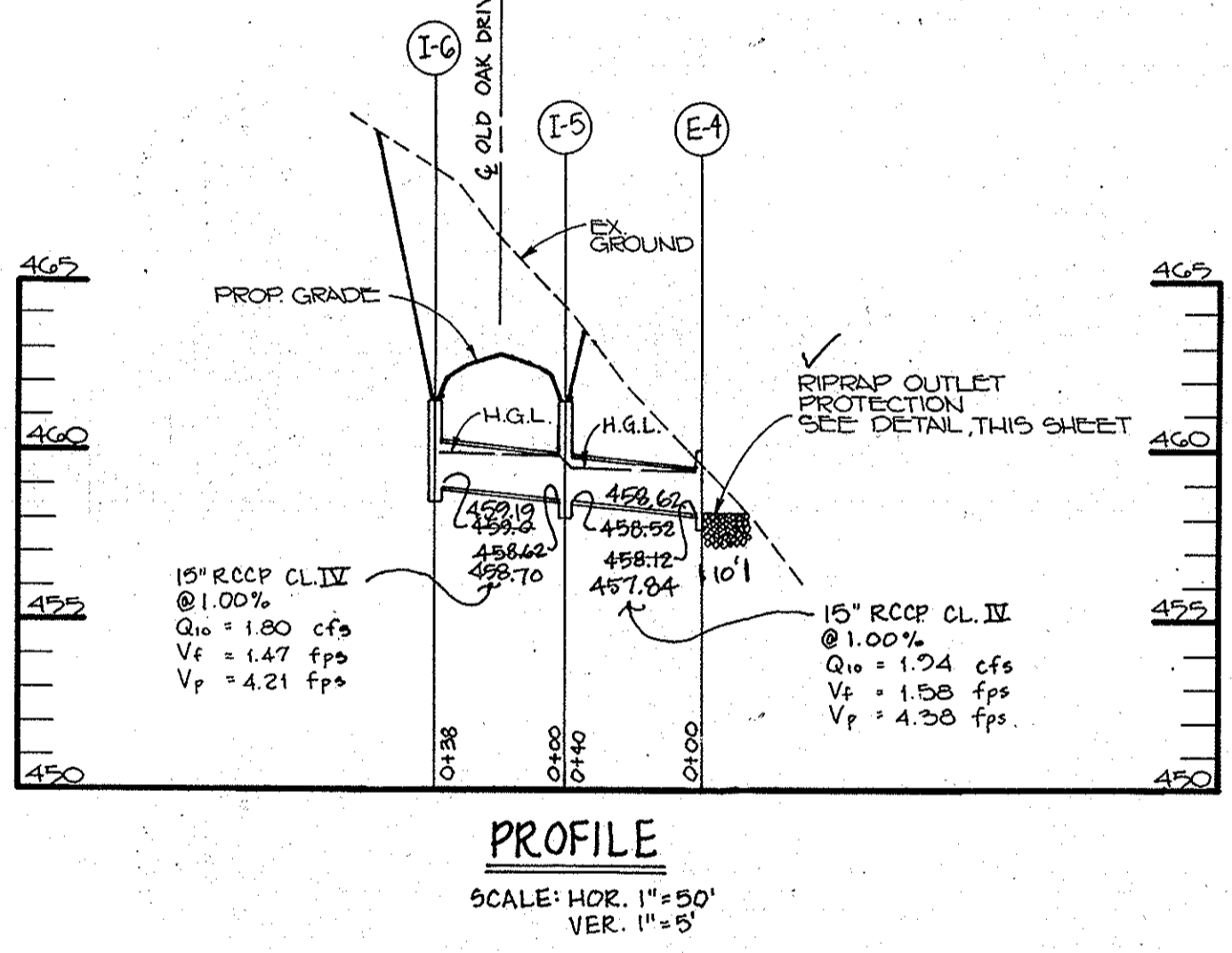


TYPICAL ROAD SECTION
NO SCALE

DESIGN SPEED 50 MPH ZONED R LOCAL ROAD
EMERALD VALLEY ROAD - STA. 0+00 TO STA. 15+85.45
OLD OAK DRIVE - STA. 0+00 TO STA. 20+50.00
SHADYVIEW WAY - STA. 0+00 TO STA. 3+00.04
* EMERALD VALLEY ROAD - G
* OLD OAK DRIVE - G
* SHADYVIEW WAY - G

LOT 20, 20' DRAINAGE & UTILITY EASEMENT
SCALE: HOR. 1"=50' VERT. 1"=5'

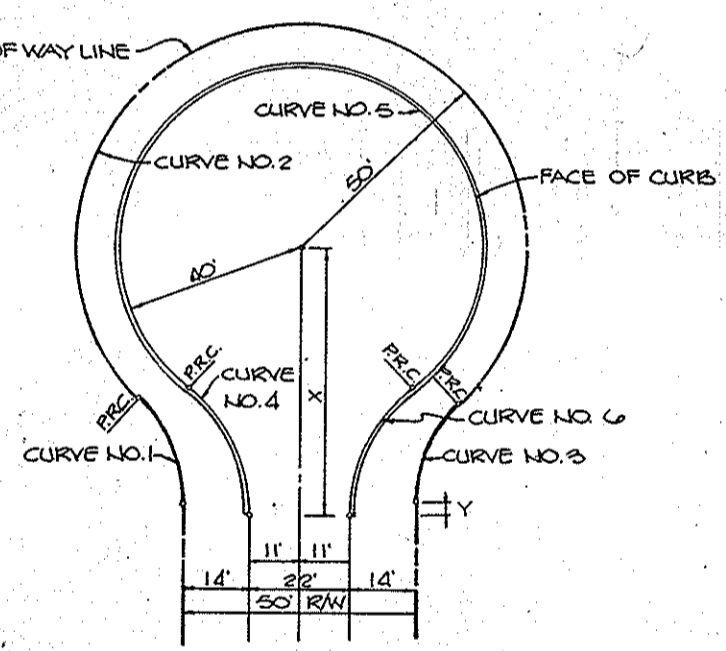
LOT 10, 20' DRAINAGE & UTILITY EASEMENT
SCALE: HOR. 1"=50' VERT. 1"=5'



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

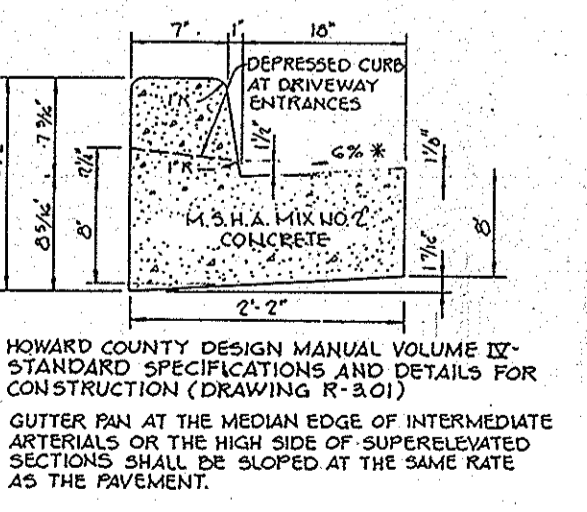
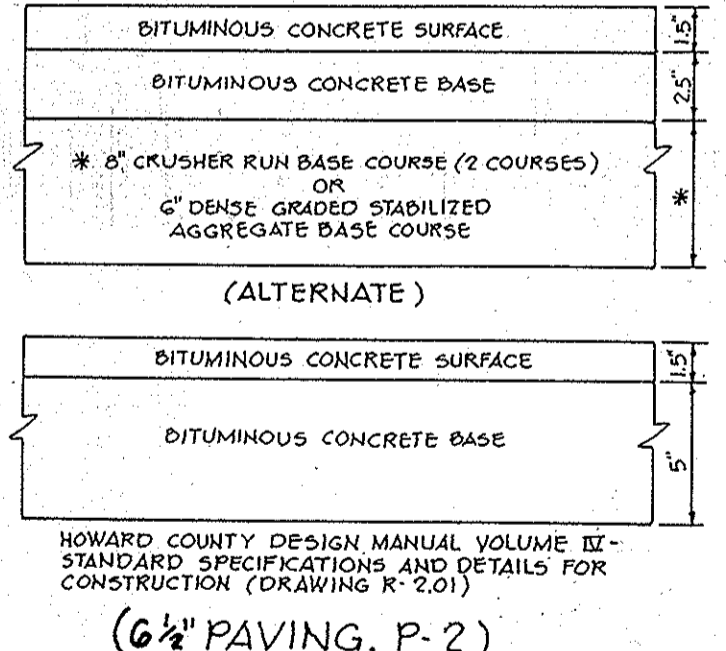
PROFILE
SCALE: HOR. 1"=50' VERT. 1"=5'

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

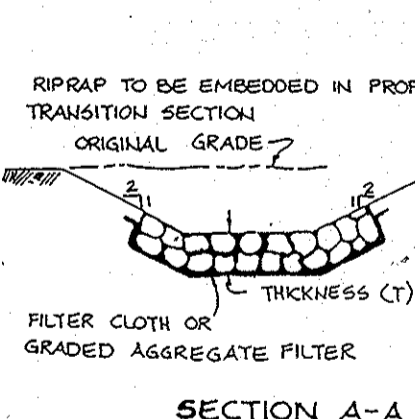


CUL-DE-SAC DETAIL
NO SCALE

CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5
11.25	20.00	20.00	20.00	20.00
11.25	20.00	20.00	20.00	20.00
11.25	20.00	20.00	20.00	20.00
11.25	20.00	20.00	20.00	20.00
11.25	20.00	20.00	20.00	20.00



STANDARD 7th COMBINATION CURB AND GUTTER
(CUL-DE-SAC ONLY)
NO SCALE

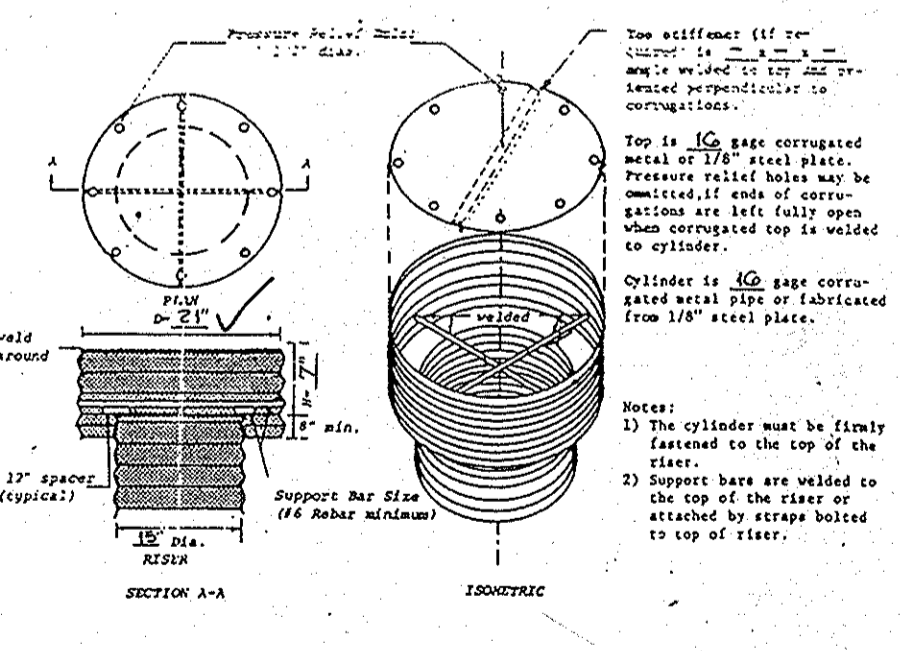


SECTION A-A

STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)	PIPE DIA. (D)
E-1	6"	40'	15'	9"	18"
E-2	6"	40'	15'	9"	18"
E-3	6"	40'	15'	9"	18"
E-4	6"	40'	15'	9"	18"
E-5	6"	40'	15'	9"	18"
E-6	6"	40'	15'	9"	18"
E-7	6"	40'	15'	9"	18"
E-8	6"	40'	15'	9"	18"
LHW-1	12"	25'	20'	10"	2-40"
LHW-2	12"	25'	20'	10"	2-40"
E-11	6"	40'	15'	9"	18"

RIP RAP OUTLET PROTECTION DETAIL
NO SCALE

NO.	TYPE	LOCATION	TOP. ELEV.	INV. IN.	INV. OUT.	REMARKS
1-1	TYPE 'K'	C/L STA. 1497.00 EMERALD VALLEY RD. 21' RT.	448.85	448.85	448.85	HO. CO. STD. DETAIL SD. 4-15
1-2	TYPE 'K'	C/L STA. 1330.00 EMERALD VALLEY RD. 21' RT.	473.15	473.15	473.15	HO. CO. STD. DETAIL SD. 4-15
1-3	TYPE 'K'	C/L STA. 525.00 OLD OAK DR. 21' RT.	473.25	473.25	473.25	HO. CO. STD. DETAIL SD. 4-15
1-4	TYPE 'K'	C/L STA. 575.00 OLD OAK DR. 21' RT.	468.70	468.70	468.70	HO. CO. STD. DETAIL SD. 4-15
1-5	TYPE 'K'	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 4-15
1-6	TYPE 'K'	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 4-15
1-7	A-5	L.P. STA. 1431.70 OLD OAK DR.	460.97	460.97	460.97	HO. CO. STD. DETAIL SD. 4-01
1-8	TYPE 'K'	C/L STA. 2053.00 OLD OAK DR. 21' RT.	460.95	460.95	460.95	HO. CO. STD. DETAIL SD. 4-15
1-10	TYPE 'K'	C/L STA. 2457.24.5' SHADYVIEW WAY 21' RT.	460.22	460.22	460.22	HO. CO. STD. DETAIL SD. 4-15
1-11	TYPE 'K'	C/L STA. 2449.50 SHADYVIEW WAY 21' RT.	460.46	460.46	460.46	HO. CO. STD. DETAIL SD. 4-15
1-12	TYPE 'K'	C/L STA. 5.33 EMERALD VALLEY RD. 21' RT.	462.36	462.36	462.36	HO. CO. STD. DETAIL SD. 4-15
14-23	HO. CO. STD. DETAIL SD. 4-15	C/L STA. 1468.00 EMERALD VALLEY RD. 80' LT.	444.28	444.28	444.28	SEE DETAIL SHEET 10
15-1	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1330.00 EMERALD VALLEY RD. 21' RT.	440.30	440.30	440.30	HO. CO. STD. DETAIL SD. 5-51
15-2	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 615.00 OLD OAK DR. 21' RT.	469.23	469.23	469.23	HO. CO. STD. DETAIL SD. 5-51
15-3	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-4	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-5	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-6	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-7	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-8	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-9	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-10	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-11	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51
15-12	HO. CO. STD. DETAIL SD. 5-51	C/L STA. 1065.00 OLD OAK DR. 21' RT.	461.64	461.64	461.64	HO. CO. STD. DETAIL SD. 5-51



RISER R-1 DETAIL
NO SCALE

SHANBERGER & LAMBERT
8726 TOWN & COUNTRY BLVD., SUITE 104
ELICOTT CITY, MARYLAND 21043

AS-BUILT CERTIFICATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DATE: 12/15/10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 12/12/10

APPROVED: CHIEF, BUREAU OF HIGHWAYS
DATE: 12-13-10

ARTHUR E. MUEGGE #8707

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
DATE: 12/15/10

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 12/12/10

APPROVED: CHIEF, BUREAU OF HIGHWAYS
DATE: 12-13-10

1-G-04 1 REVISE GRADES ON PROFILE

OWNER/DEVELOPER
DIGI - DATA CORPORATION
8500 DORSEY RILL ROAD
JESSUP, MARYLAND 20794

PROJECT: F 04-124 558-52 WP 88-72 PDB-82
HAWKFIELD ESTATES
LOTS 1-23

AREA TAX MAP 10 1 23 PARCEL 40 LOT 1 OF PARCEL 2.2B ZONED R
3 RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

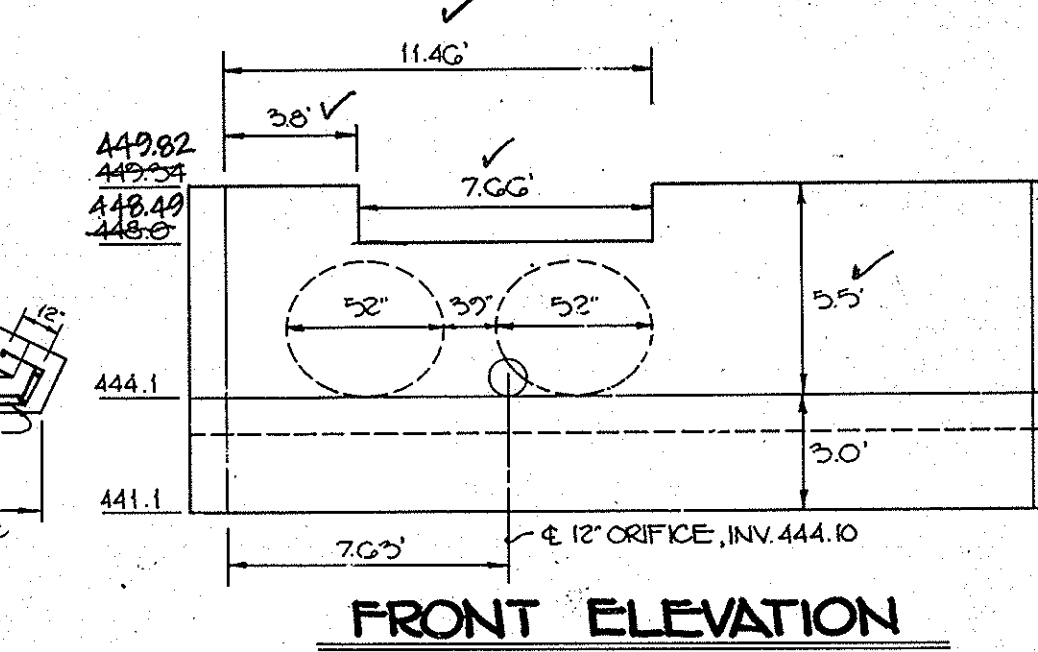
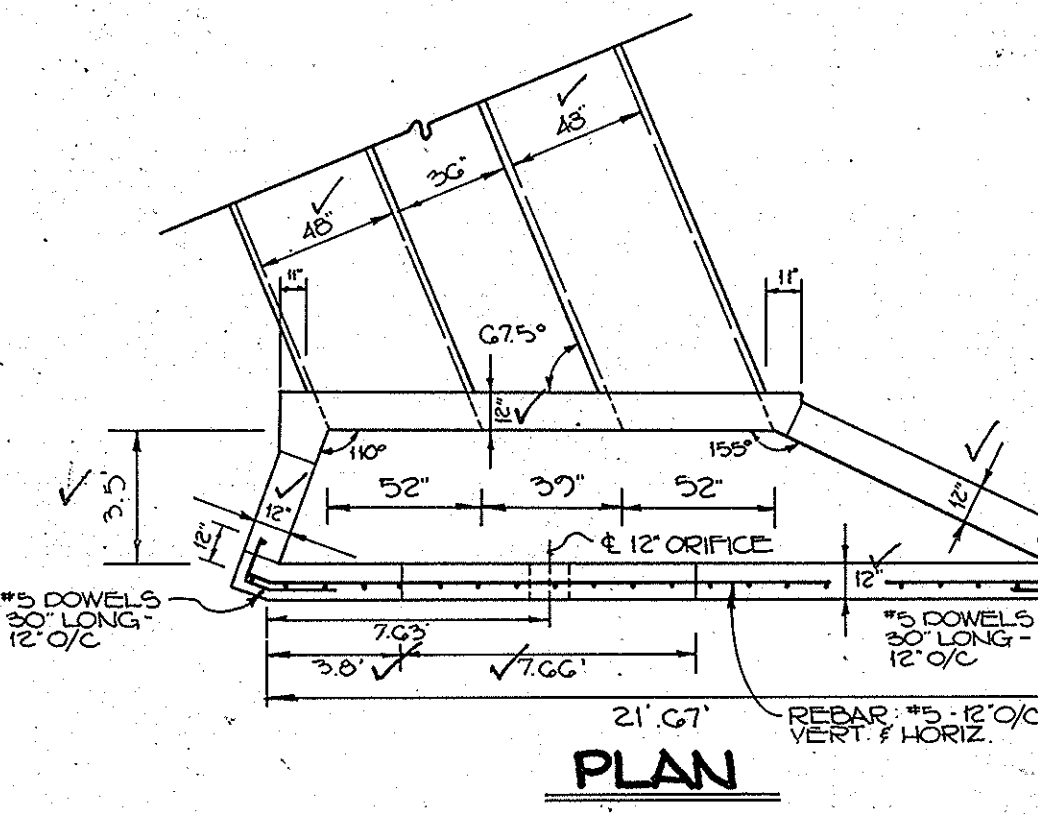
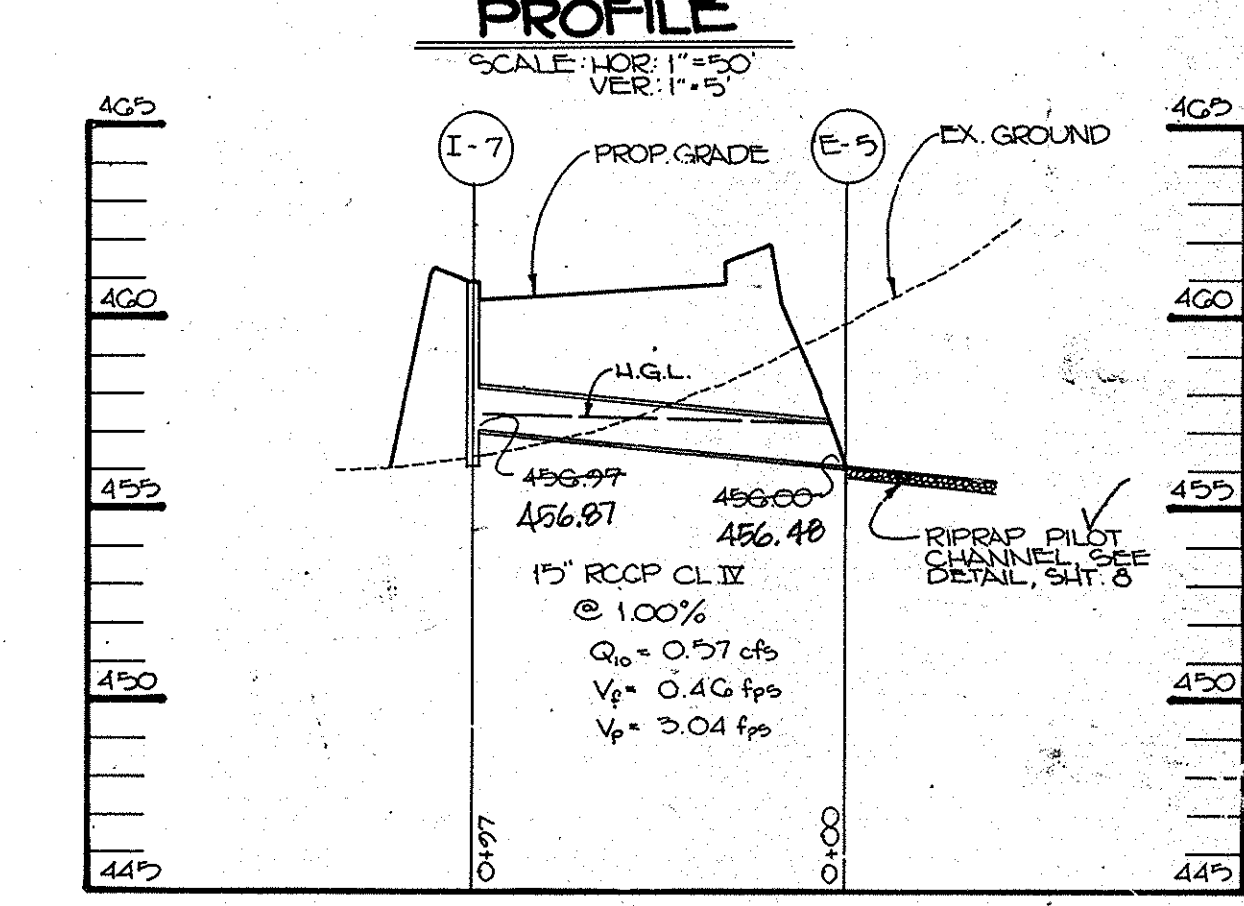
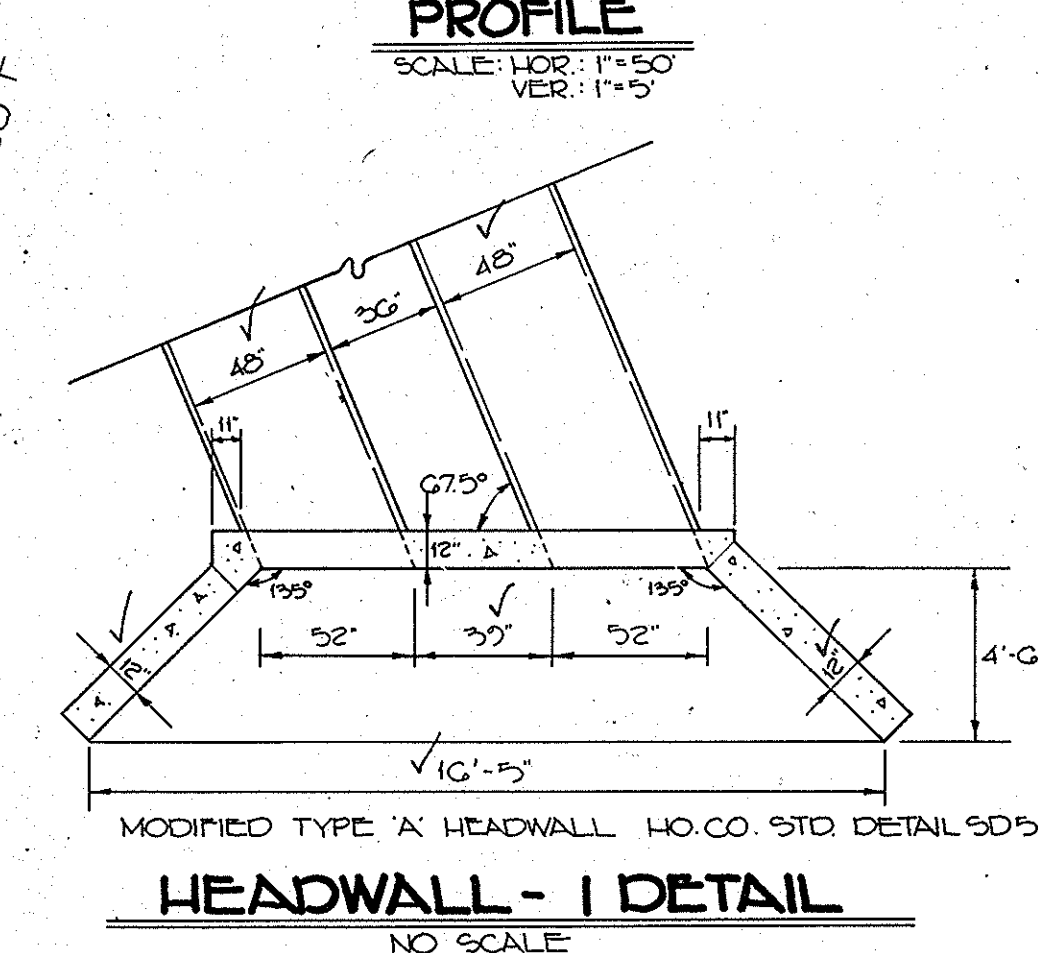
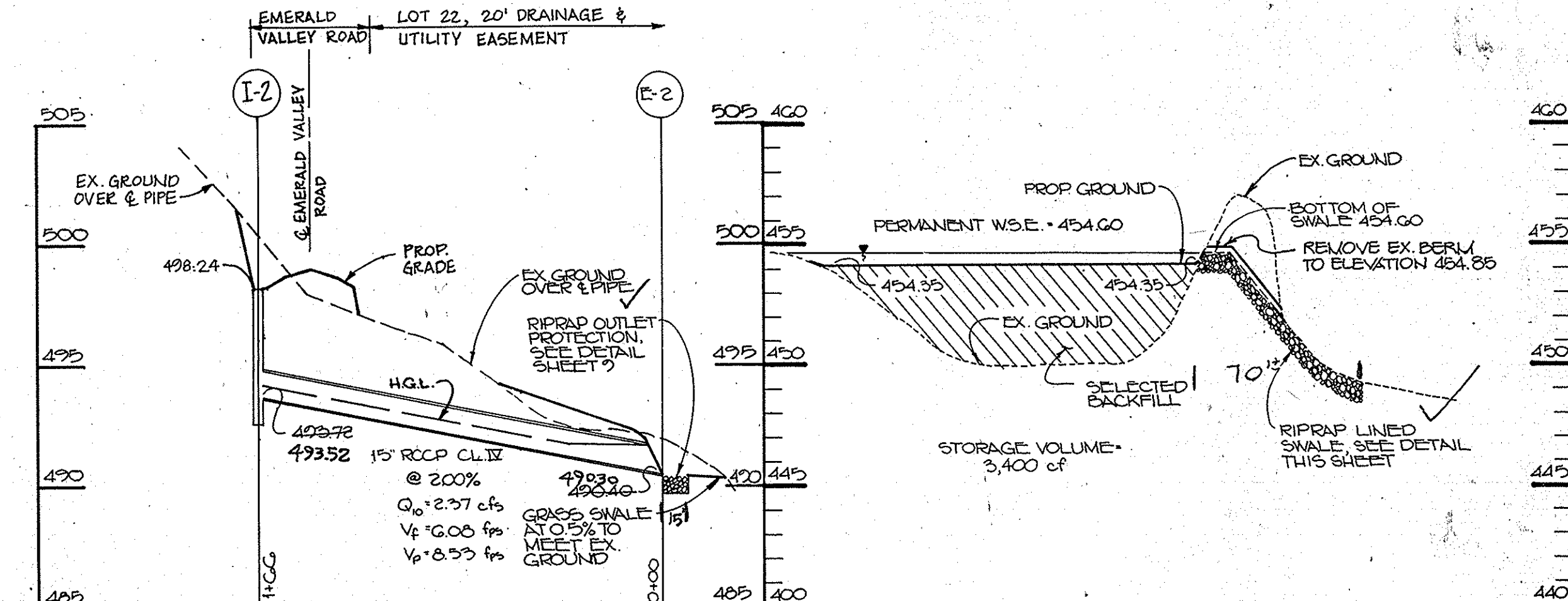
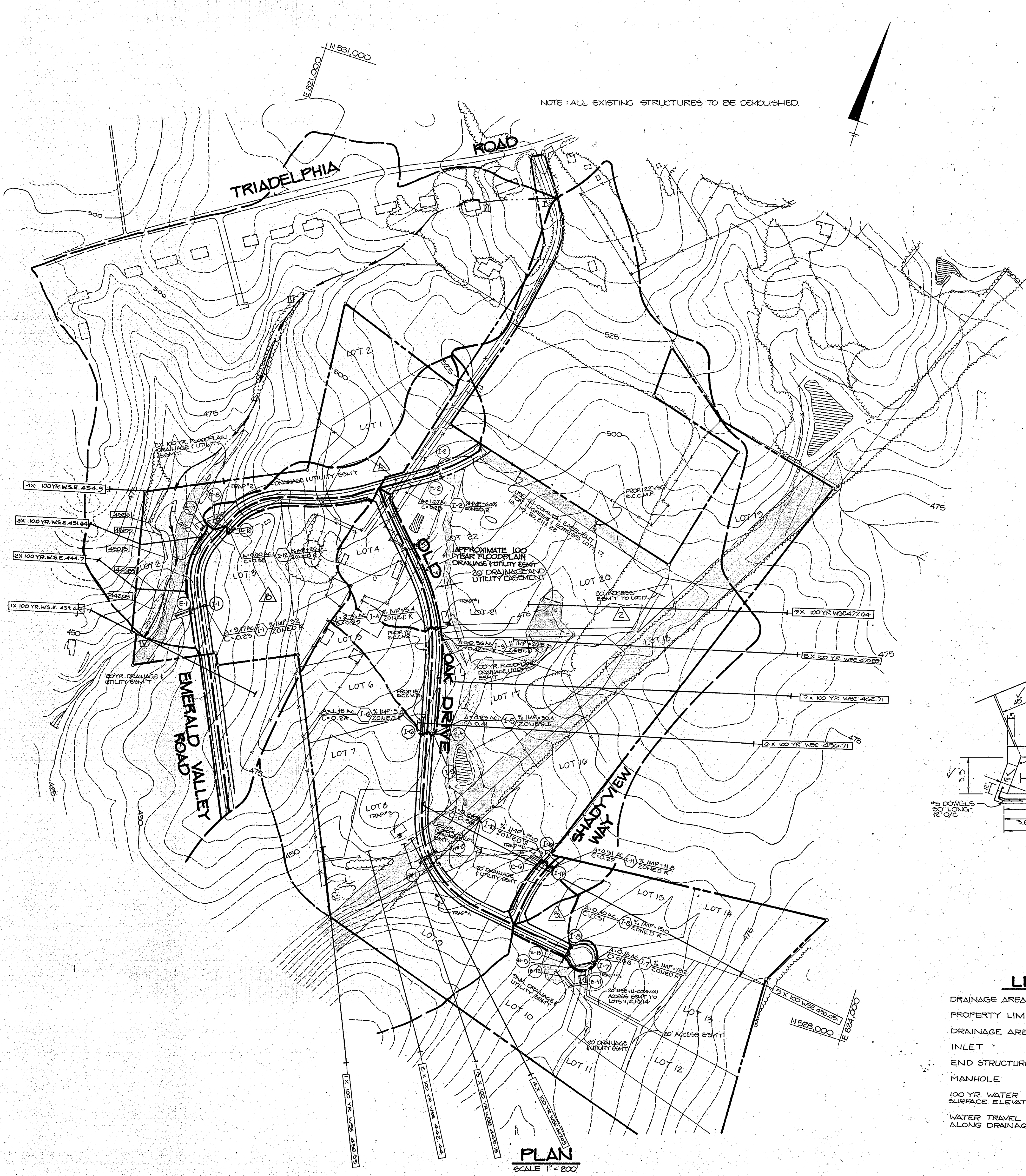
TITLE: STORM DRAIN PROFILES & DETAILS

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

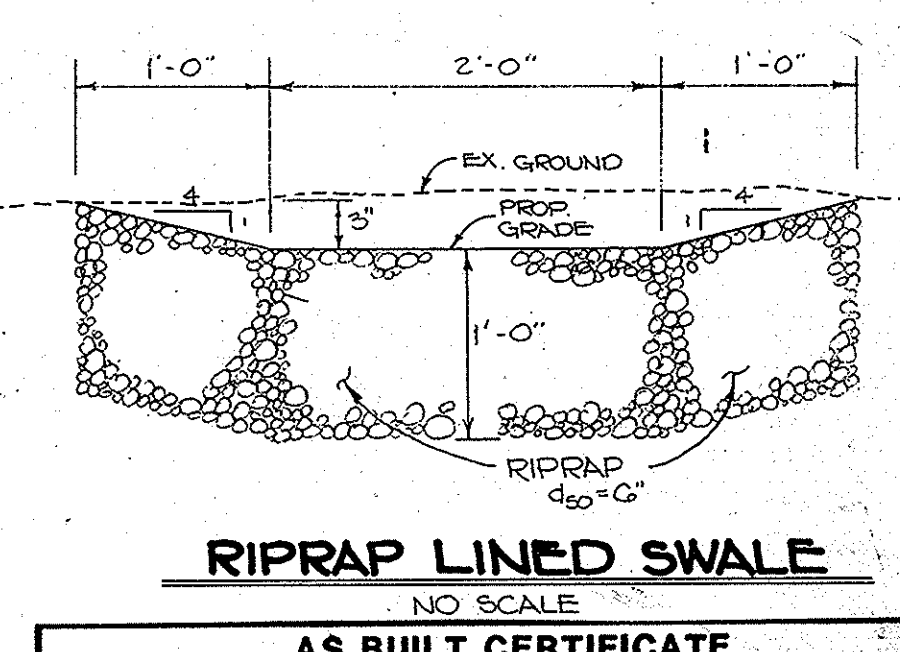
DATE: 5-30-90

DESIGNED BY: D.S.S.
DRAWN BY: D.O.S.
PROJECT NO: 47310
DATE: FEBRUARY 21, 1990
SCALE: AS SHOWN
DRAWING NO. 9 OF 10

NOTE: ALL EXISTING STRUCTURES TO BE DEMOLISHED.



- LEGEND**
- DRAINAGE AREA LIMITS
 - - - PROPERTY LIMITS
 - DRAINAGE AREA
 - INLET
 - END STRUCTURE
 - MANHOLE
 - 100 YR. WATER SURFACE ELEVATION
 - WATER TRAVEL PATH, SECTIONS I, II, III, IV



AS-BUILT
STATE OF MARYLAND
PROFESSIONAL LAND SURVEYOR
SCOTT BLANDEBERG
PROF. L. S. #10049

BERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 104
ELlicott CITY, MARYLAND 21043

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING
Mark J. Langley 12/18/90
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
W. J. Williams 12/18/90
CHIEF, LAND DEVELOPMENT DIVISION
DATE

W. J. Williams 12/11/90
CHIEF, BUREAU OF HIGHWAYS
DATE

W. J. Williams 12-13-90
CHIEF, BUREAU OF ENGINEERING
DATE

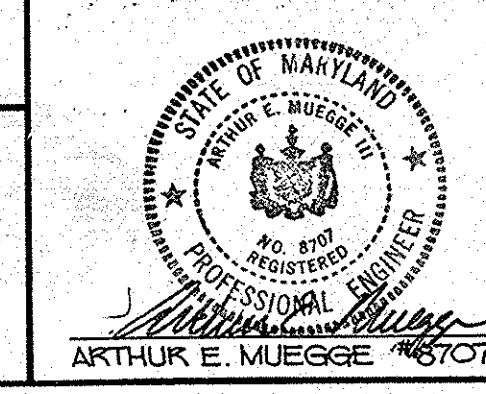
OWNER / DEVELOPER
DIGI - DATA CORPORATION
8880 DORSEY RUN ROAD
JESSUP, MARYLAND 20794

PROJECT: F-84-128 5 88-52 + WIP 88-721F-88-82
HAWKSFIELD ESTATES
LOTS 1-23
AREA TAX MAP 16 & 23 ZONE-R PARCELS 40 & 83D ELECTION DISTRICT LOT 1 OF PARCEL 228 HOWARD COUNTY, MARYLAND

TITLE: **DRAINAGE AREA MAP, STORM DRAIN PROFILES & 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

DATE: 3-30-90
DESIGNED BY: R.M.A.
DRAWN BY: R.M.A.
PROJECT NO: 4TSD10
DATE: FEBRUARY 21, 1990
SCALE: AS SHOWN
DRAWING NO. 10 OF 10



1612

