

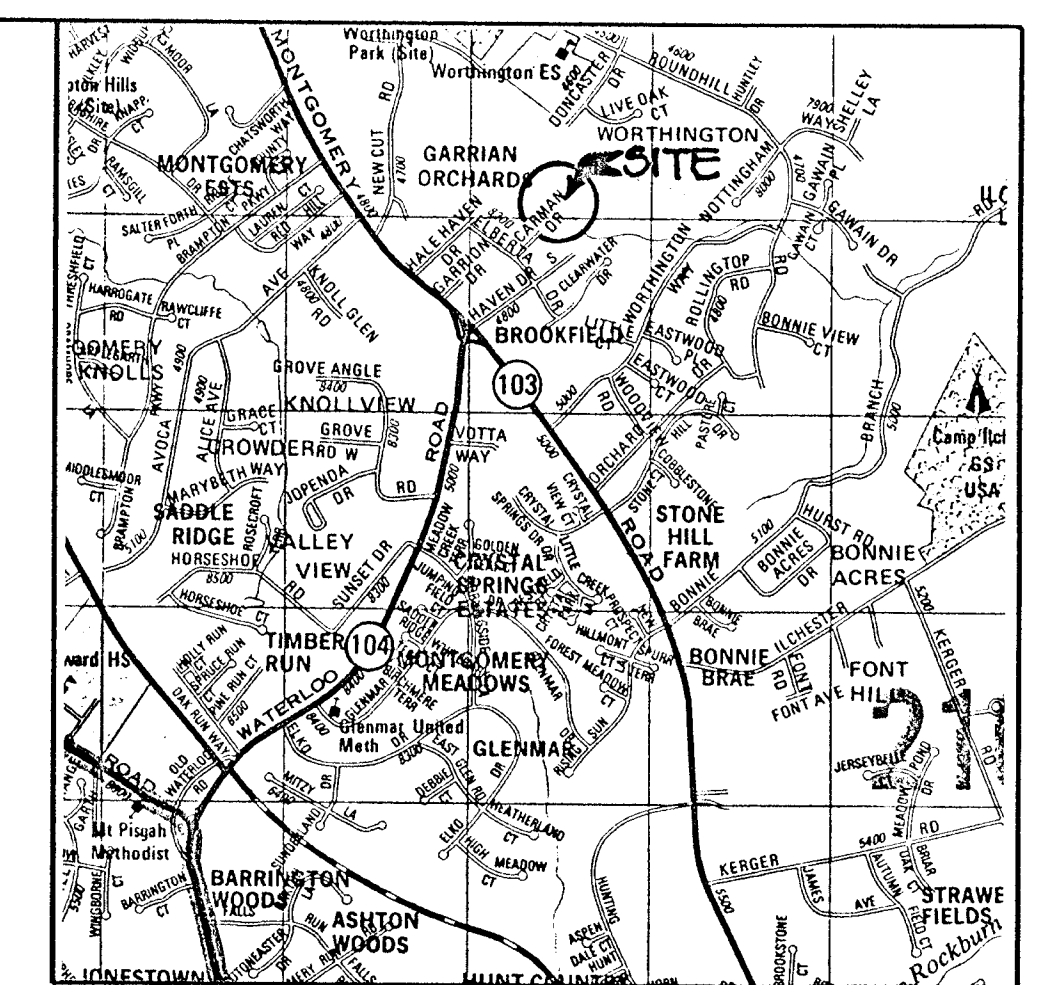
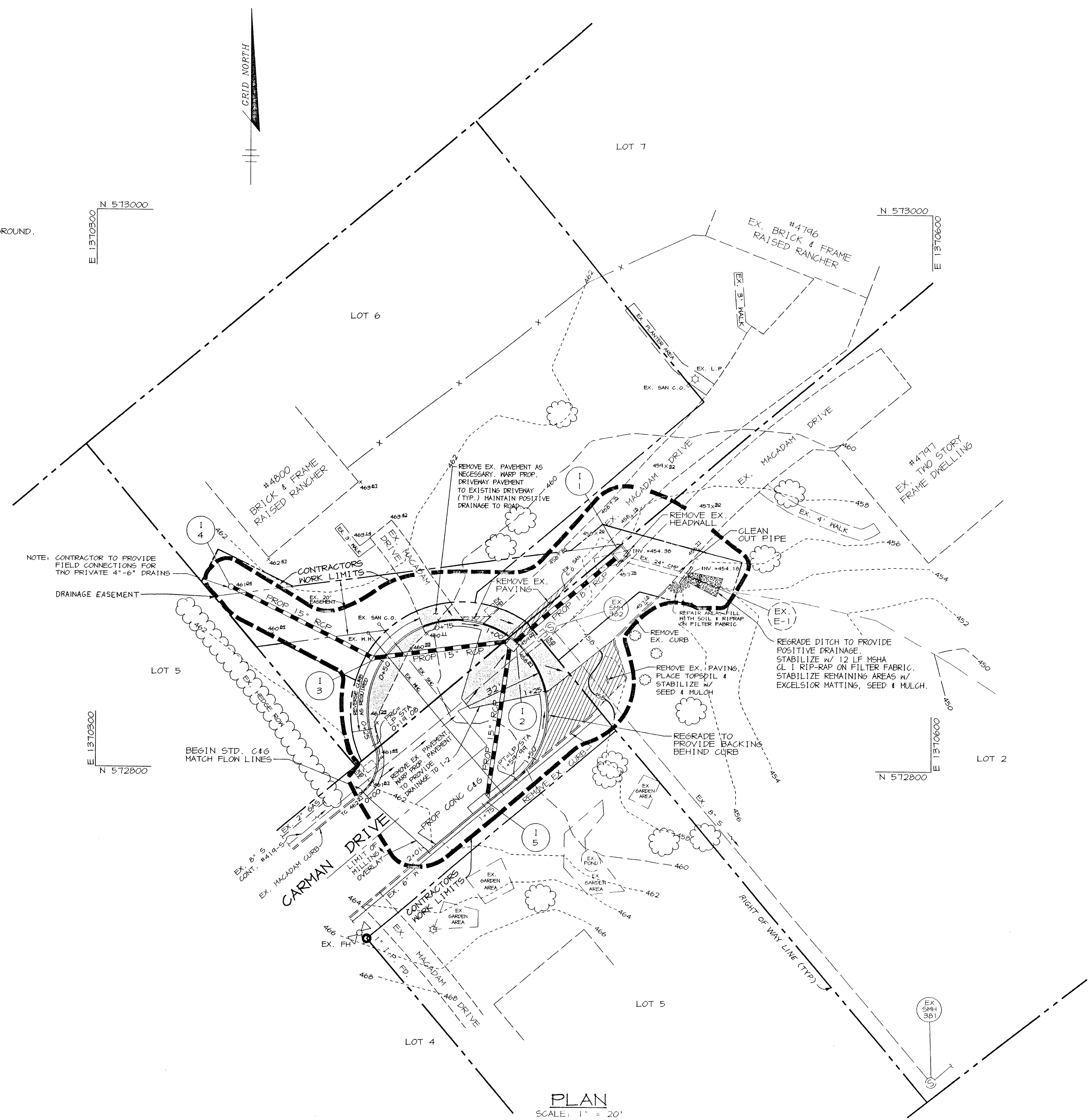
REP: 00 RE: P. 21 VPK UNIT 1-02/25/06/7300097

STRUCTURE	TC/TG	COORDINATES	STD DETAIL	
1-1	457.10	N 572877.98 E 1370428.18	SD-4.36*	PRECAST OPEN END GRATE
1-2***	454.60	N 572845.78 E 1370450.07	SD-4.32**	5" CORB. W/RET. GRATE
1-3	460.30	N 572834.53 E 1370348.99	SD-4.14	YARD INLET
1-4	460.70	N 572864.78 E 1370348.32	SD-4.14	YARD INLET
1-5	461.17	N 572786.48 E 1370438.23	SD-4.34	DOUBLE "5" CORB. W/ RET. GRATE

- * w/ 1 CONCRETE GUTTER ON SOUTHWEST SIDE (PER STD DETAIL)
- ** LOCATE CONCRETE HEAD PIECE IMMEDIATELY ADJACENT TO DRIVEWAY TO 4796 GARMAN DRIVE.
- *** 1-2 TO BE FILLED WITH CONCRETE (MIX 1 OR BETTER) FROM 451.50 UP TO 454.90.

- NOTES:
- COORDINATES LOCATE CENTER OF STRUCTURE AND AT FACE OF CURB WHERE APPLICABLE.
 - GRATE ELEVATIONS AT STRUCTURES 1-3 AND 1-4 SHALL BE ADJUSTED TO BE 3" BELOW EXISTING GROUND.

- PROP P-2 PAVEMENT, SEE SHEET 2 FOR DETAIL
- PAVEMENT OVERLAY, SEE NOTE #20



VICINITY MAP
SCALE: 1" = 200'

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING /CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NO.'S 3124 AND 3125 WERE USED FOR THIS PROJECT.
- EXISTING UTILITIES ARE BASED ON THE BEST AVAILABLE INFORMATION.
- THERE IS NO FLOODPLAIN ON THIS SITE.
- CONTRACTOR SHALL ONLY EXCAVATE THAT AMOUNT OF PIPE THAT CAN BE INSTALLED AND BACKFILLED THE SAME DAY.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN TRENCHES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME 1V, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-180.
- THE HOWARD SCD DOES NOT REQUIRE A SEDIMENT CONTROL PLAN FOR THIS PROJECT.
- MAINTAIN POSITIVE DRAINAGE IN ALL DRIVEWAY REPAVEMENT AREAS AS SHOWN BY FLOW ARROWS.
- THE CONTRACTOR SHALL TAKE EXTREME CAUTION TO NOT DAMAGE ANY PRIVATE PROPERTY. CONTRACTOR SHALL IMMEDIATELY REPAIR ANY DAMAGES TO YARDS, TREES OR BUSHES.
- ALL CURB IS STD HOWARD COUNTY 7" CURB EXCEPT FOR MODIFIED CURB AT DRIVEWAYS, SHOWN AS: OR AS OTHERWISE NOTED.
- MINIMUM TRENCH FOR STORM DRAIN CULVERTS SHALL BE 60" OR AS DIRECTED BY THE ENGINEER.
- FOR ALL EXISTING PAVEMENT NOT TO BE REMOVED, MILL AND OVERLAY REMAINING PAVEMENT TO A DEPTH OF 1 1/2" TO THE LIMITS SHOWN. OVERLAY TO BE 1 1/2" SF BAND.

PLAN
SCALE: 1" = 20'

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Jan J. ... 3/4/98
DIRECTOR OF PUBLIC WORKS DATE

Andrew M. ... 3-9-98
CHIEF, BUREAU OF ENGINEERING DATE

Andrew M. ... 3-9-98
CHIEF, BUREAU OF HIGHWAYS DATE

RIEMER MUEGGE & ASSOCIATES, INC.
Planners • Engineers • Surveyors
8818 Centre Park Drive • Suite 200 • Columbia, MD 21045
410-997-8900 FAX: 410-997-9282
96125 00-1.006

STATE OF MARYLAND
JAYKANT D. PAREKH # 19148
PROFESSIONAL ENGINEER

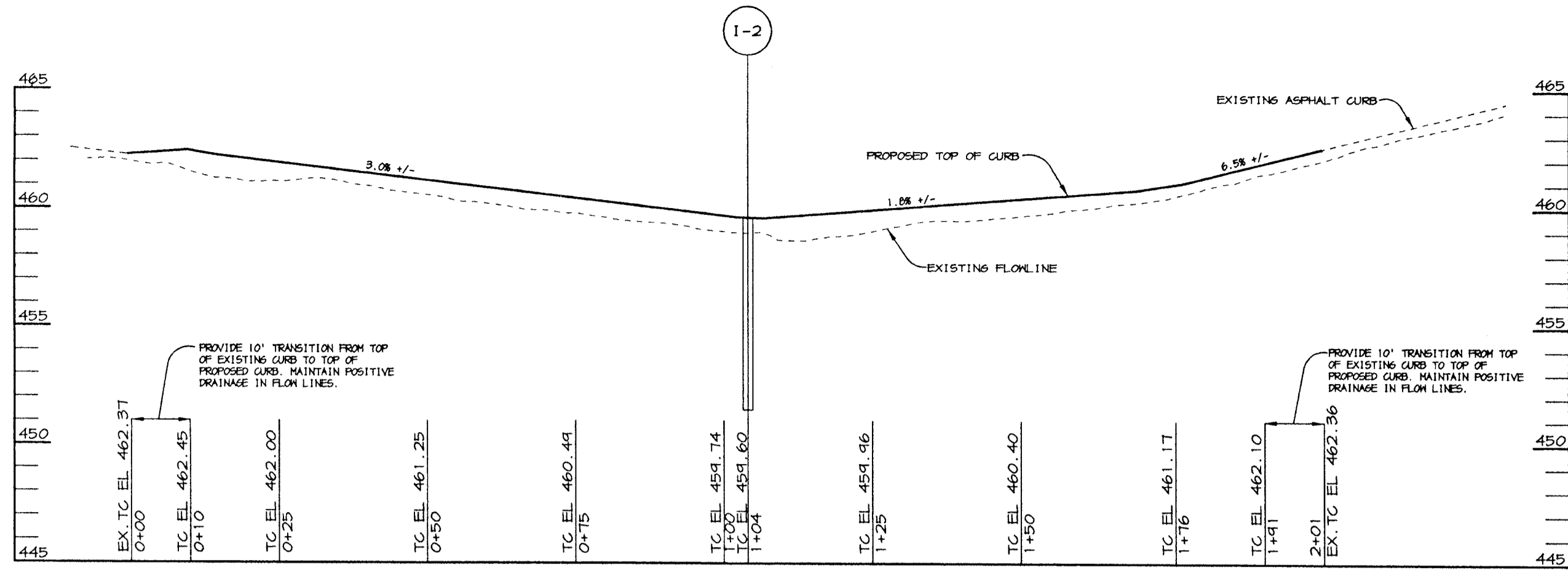
DES: AAP	DRN: DAM	CHK: JDP	DATE: 8/11/97
BY NO.	REVISION	DATE	

STORM DRAIN PLAN

60' SCALE MAP NO. 31 BLOCK NO.

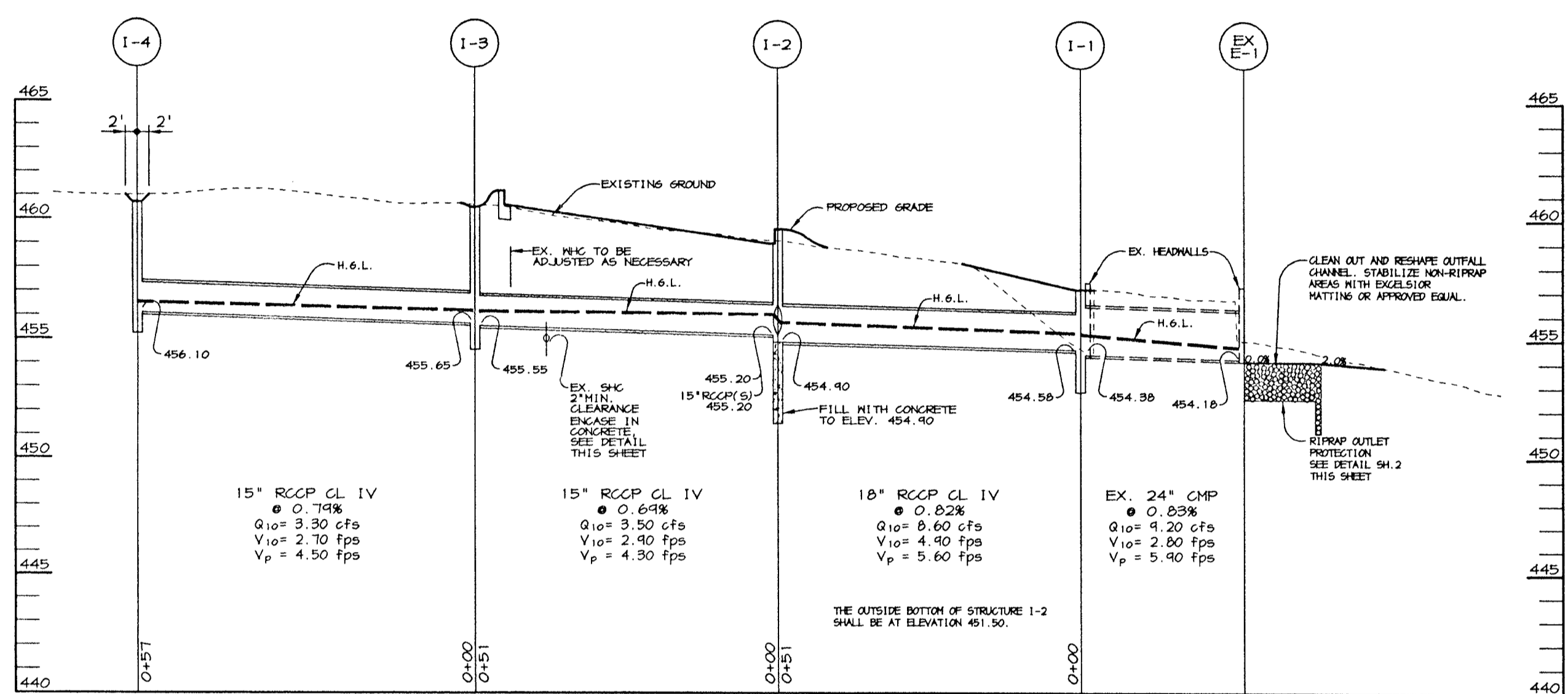
CARMAN DRIVE
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT No. D-1078

SCALE 1"=20'
SHEET 1 OF 2
PROJ. # 96125



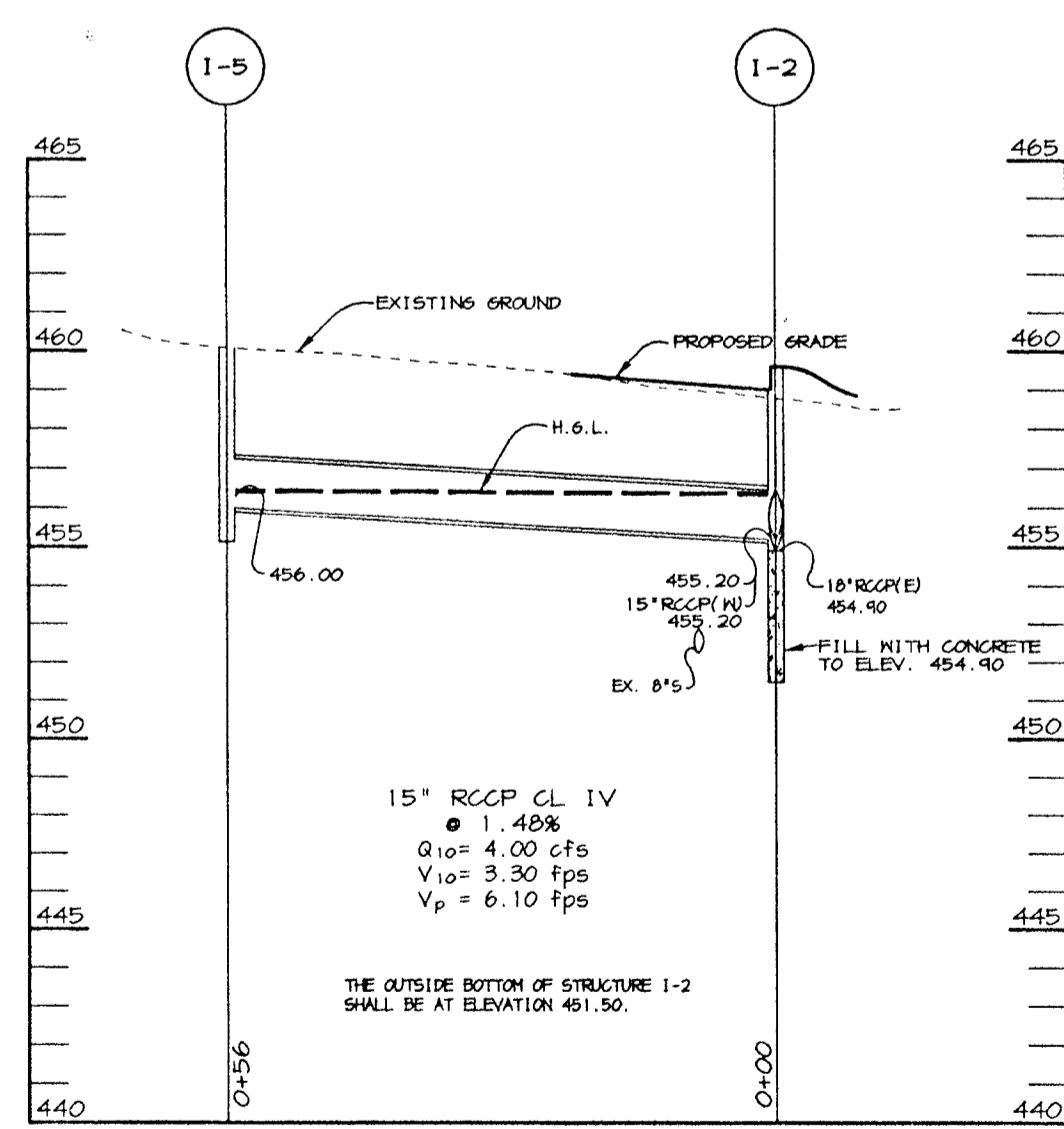
PROFILE ALONG CURB

SCALE:
HOR. - 1" = 20'
VERT. - 1" = 5'



STORM DRAIN PROFILE

SCALE:
HOR. - 1" = 20'
VERT. - 1" = 5'

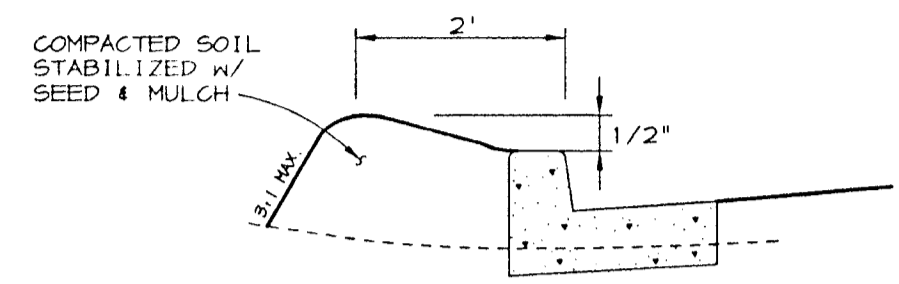


STORM DRAIN PROFILE

SCALE:
HOR. - 1" = 20'
VERT. - 1" = 5'

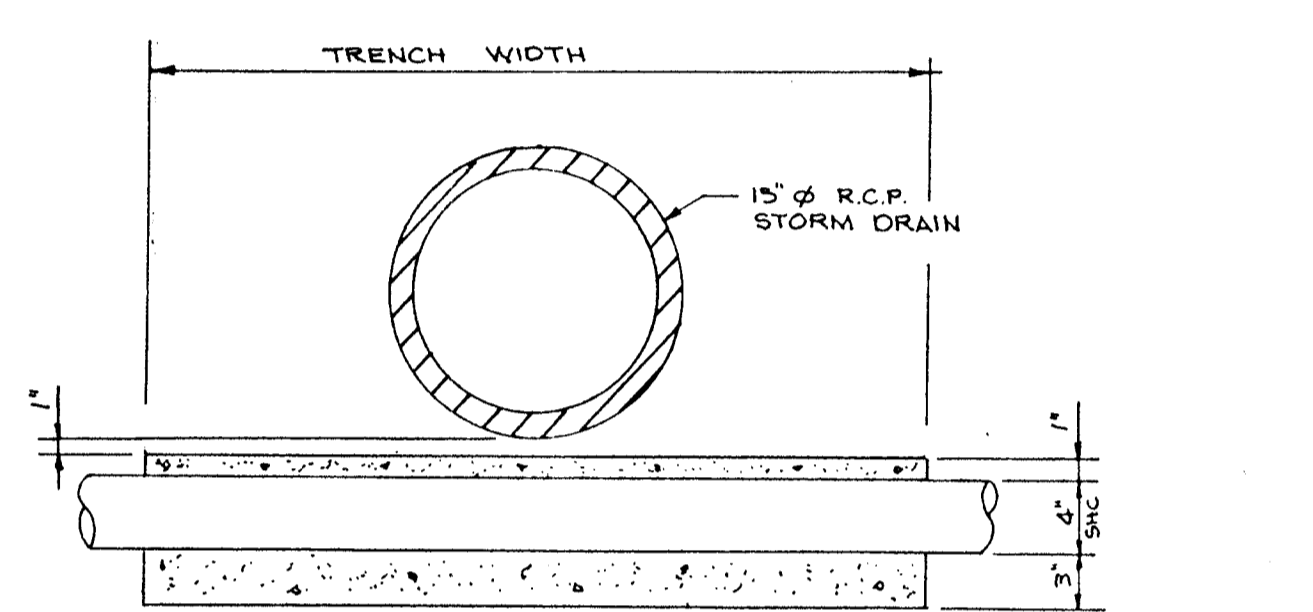
SEDIMENT AND EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL ONLY INSTALL AS MUCH PIPE THAT CAN BE BACKFILLED AND STABILIZED IN ONE DAY.
2. CONTRACTOR SHALL STOCKPILE TRENCH MATERIAL ON THE HIGH SIDE OF THE TRENCH.
3. CONSTRUCTION SHALL BE SCHEDULED TO BEGIN AT THE BEGINNING OF A FIVE(5) DAY DRY FORECAST.
4. THE CONTRACTOR SHALL MAKE EVERY REASONABLE EFFORT TO MINIMIZE SEDIMENT FROM LEAVING THE SITE. ANY SEDIMENT CONTROLS SHALL BE INCIDENTAL TO THE CONTRACT.



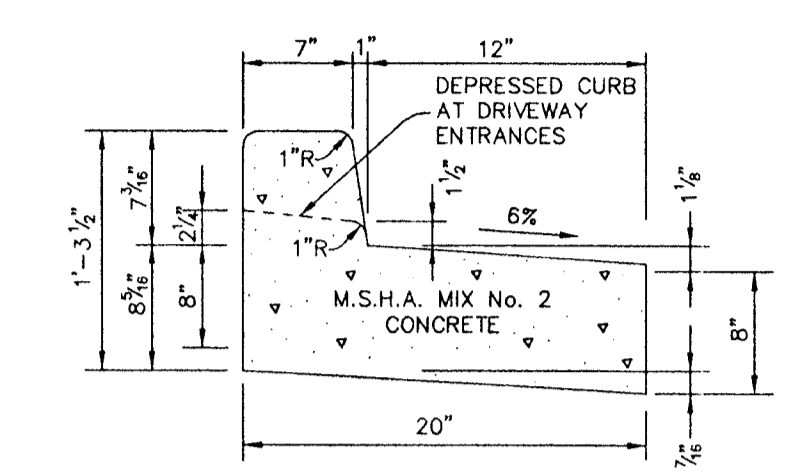
TYPICAL SECTION AT CURB

NO SCALE



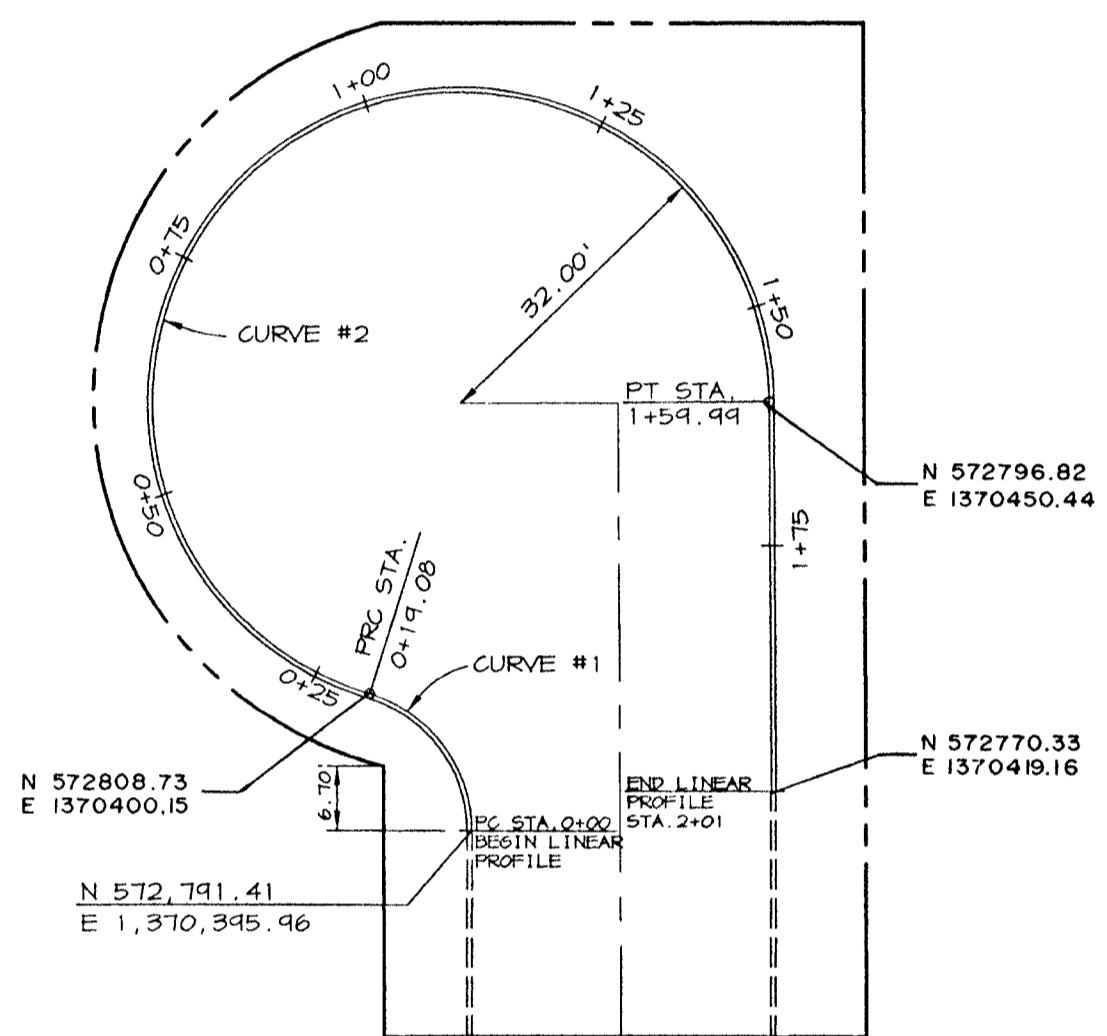
CONCRETE ENCASMENT DETAIL

N.T.S.



REVERSE 7" COMBINATION CURB AND GUTTER

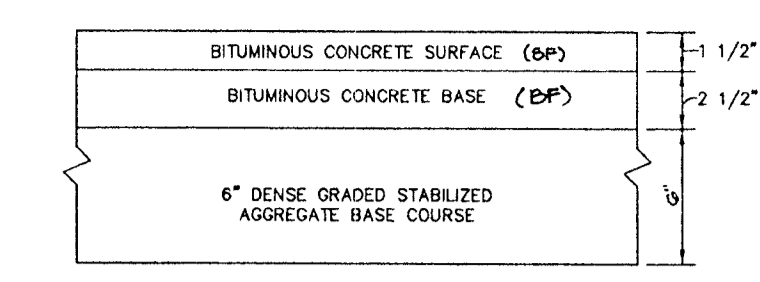
NO SCALE



CUL-DE-SAC DETAIL

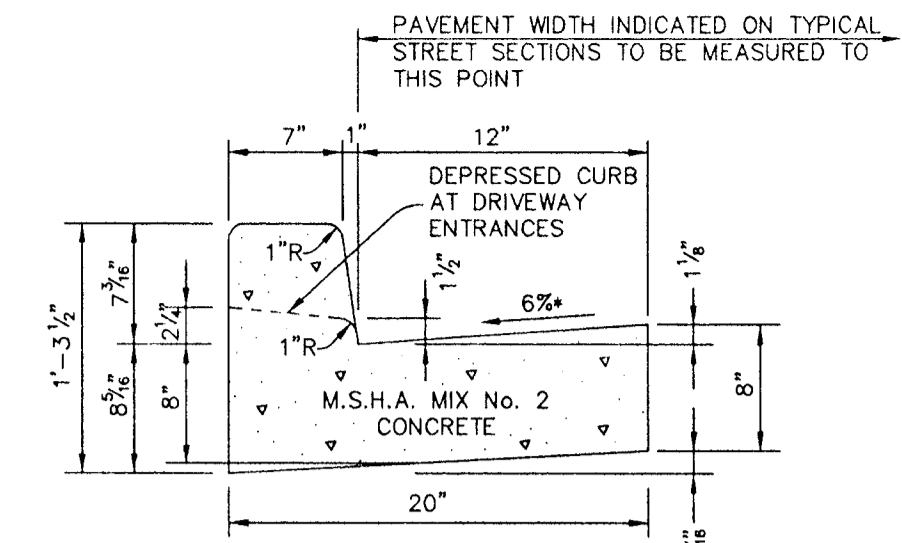
NO SCALE

CURVE DATA	
1	2
Δ	72°52'20" 252°17'49"
R	15.00' 32.00'
T	11.07' 43.80'
L	19.08' 140.91'
L.C.	17.82'



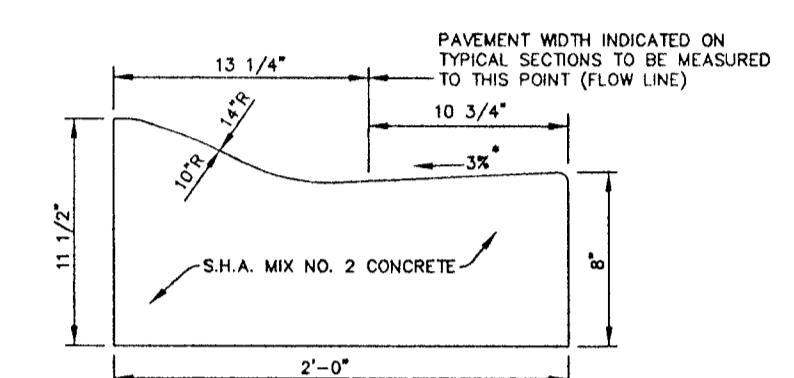
P-2 PAVING

NO SCALE



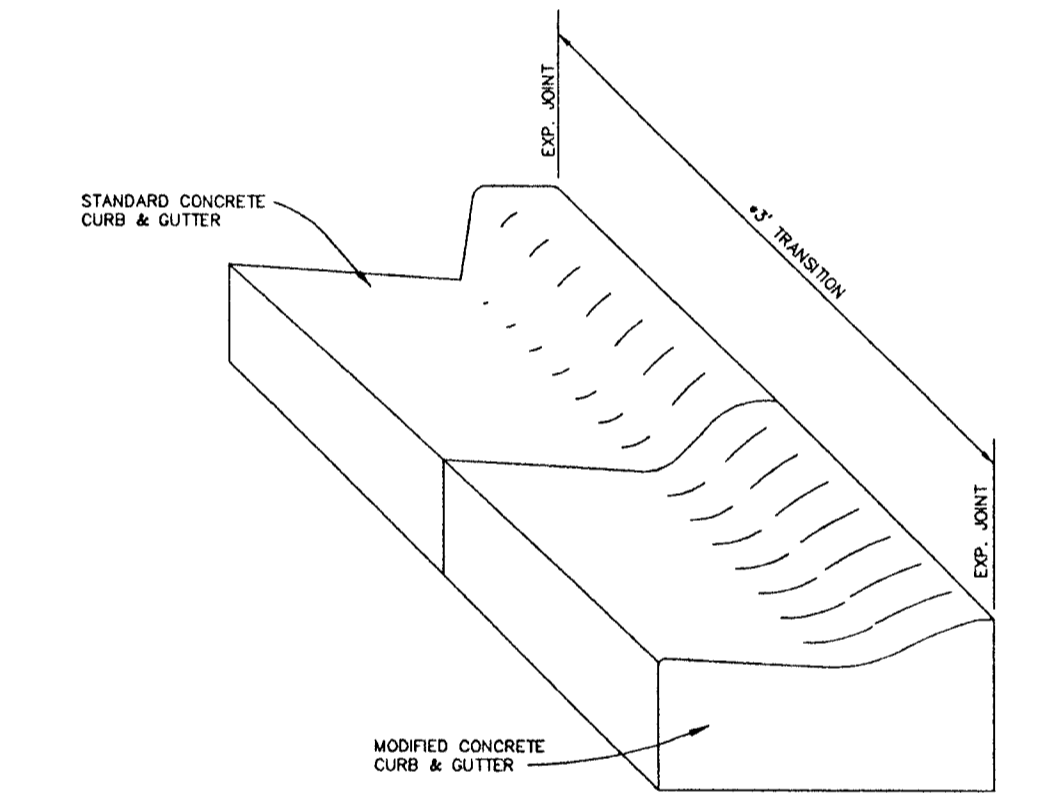
STANDARD 7" COMBINATION CURB AND GUTTER

NO SCALE



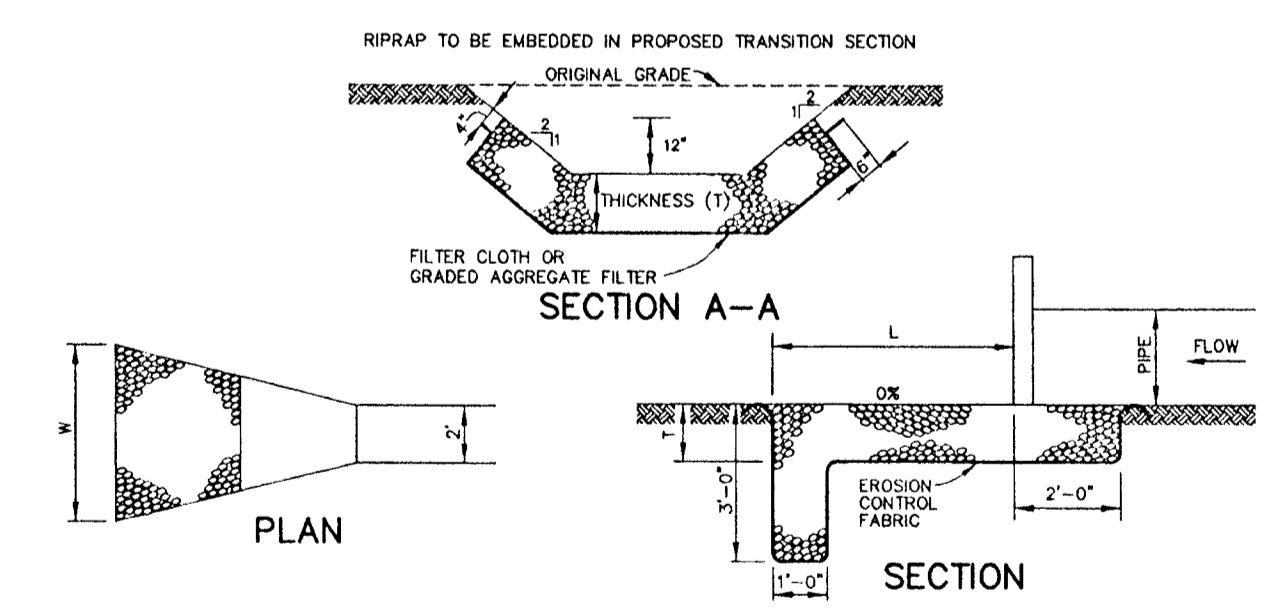
MODIFIED COMBINATION CURB AND GUTTER

- GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AND IN THE SAME DIRECTION AS THE PAVEMENT. MATCH PAVEMENT CROSS SLOPE WHEN CURB IS LOCATED ON THE LOW SIDE OF SUPERELEVATED SECTION AND THE RATE OF SUPERELEVATION IS GREATER THAN 3% FOR MODIFIED CURB AND GUTTER.



CONCRETE CURB AND GUTTER TRANSITION

NO SCALE



STRUCTURE	MEDIAN STONE DIA. (S)	LENGTH (L)	WIDTH (W)	THICKNESS (T)	V	DEPTH
EX. E-1	9.5"	12'	7'	19"	5.9 FPS	0.7'

RIPRAP OUTLET PROTECTION DETAIL

NO SCALE

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

James J. ... 3/4/98
DIRECTOR OF PUBLIC WORKS DATE

Robert J. ... 3/4/98
CHIEF, BUREAU OF ENGINEERING DATE

Quayle ... 3/9/98
CHIEF, DIVISION OF TRANSPORTATION DATE

Robert ... 3-4-98
CHIEF, BUREAU OF HIGHWAYS DATE

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JAYKANT D. PAREKH # 19148

DES: AAP			
DRN: DAM			
CHK: JDP			
DATE: 8/11/97			
BY NO.	REVISION	DATE	

STORM DRAIN PROFILES AND DETAILS

600' SCALE MAP NO. 31 BLOCK NO.

CARMAN DRIVE
2nd ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT No. D-1078

SCALE AS SHOWN

SHEET 2 OF 2

PROJ # 990125