

COLUMBIA

HOWARD COUNTY, MARYLAND
 6th ELECTION DISTRICT

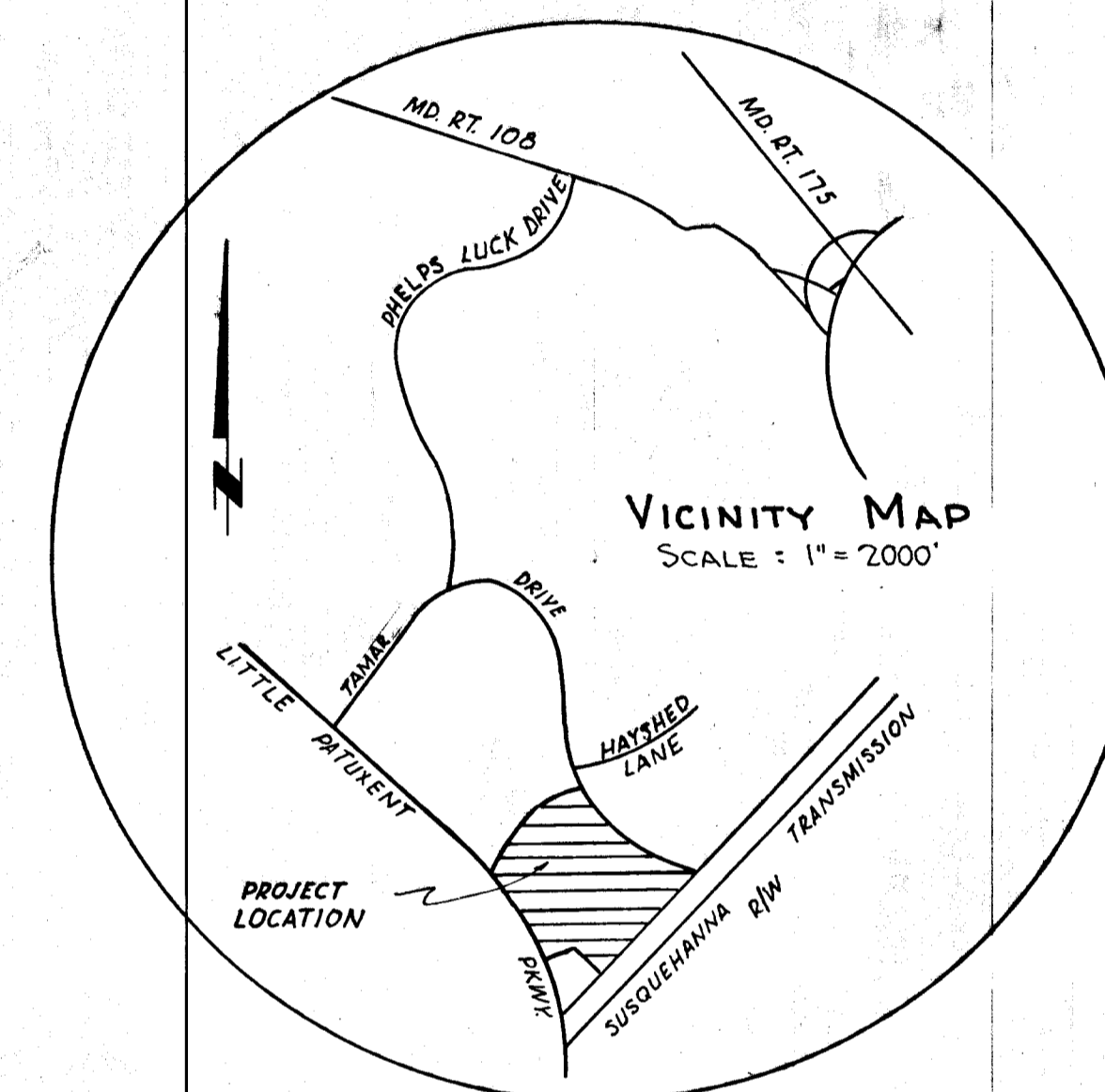
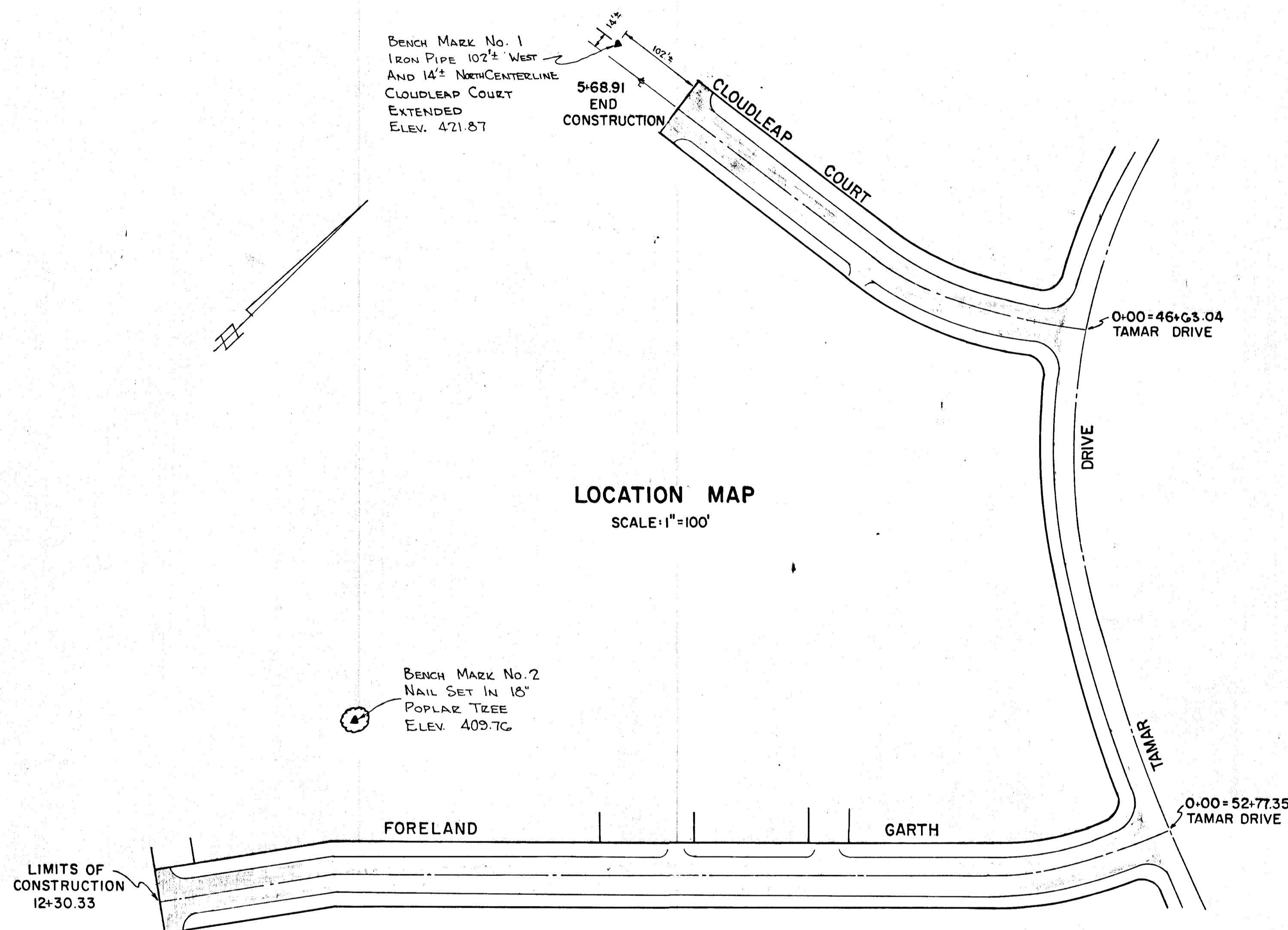
VILLAGE OF LONGREACH SECT. 1 AREA 5

CLOUDLEAP COURT STA. 0+00 TO 5+68.91
 FORELAND GARTH STA. 0+00 TO 12+30.33

NOTES:

- ALL DETAILS ARE FROM THE "ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS" ISSUED OR APPROVED BY THE COUNTY COMMISSIONERS AND THE HOWARD COUNTY ROAD DEPARTMENT.
- CLOUDLEAP COURT AND FORELAND GARTH ARE DESIGNED FOR 35 MPH. TRAFFIC SPEED. TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIALS STANDARDS.
- TIE DOWN OF SEEDING AND MULCHING SHOULD BE DONE AS SOON AS ROADS AND LOTS ARE DEVELOPED.
- TOP SLOPES OF ALL FILL AREAS ON THE ROADS SHOULD BE BERMED DURING THE CONSTRUCTION TO PREVENT EXCESSIVE EROSION OF THESE FILL SLOPES. THESE BERMS SHOULD HAVE AN OUTLET ONTO UNDISTURBED GROUND. IF THIS IS NOT POSSIBLE, THEN TEMPORARY CONSTRUCTED DROP STRUCTURES (FLUMES OR CHUTES) SHOULD BE DESIGNED ON A 10 YEAR FREQUENCY STORM. BERMS SHALL BE 18" HIGH WITH 2:1 SIDE SLOPES.
- CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES 48 HRS AND HOWARD SOIL CONSERVATION DISTRICT 24 HRS PRIOR TO THE BEGINNING OF ANY CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE SEEDDED WITH A MIXTURE OF ANNUAL RYE GRASS (20%), KENTUCKY BLUE GRASS (20%) & KENTUCKY 31 FESCUE (60%) TO BE SOWN AT THE RATE OF 200 LBS./ACRE WITH A MECHANICAL SPREADER, RAKE. A MINIMUM OF TWO PASSES WITH A YORK RAKE. PREPARE SURFACE WITH GRADE LIMESTONE OVER TOPSOIL SURFACE AREA AT THE RATE OF 1.5 TON/ACRE (60LBS/1000SQ.FT.), COMMERCIAL FERTILIZER AT THE RATE OF 3/4 TON/ACRE (35LBS/1000SQ.FT.) & SUPER PHOSPHATE AT THE RATE OF 600LBS/ACRE (15LBS/1000 SQ.FT.).
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY ROAD CONSTRUCTION CODE.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST THREE DAYS BEFORE STARTING CONSTRUCTION:

BELL TELEPHONE SYSTEMS 363-3649
 LONG DISTANCE CABLE-DIVISION OF BELL 393-3553 OR 3554
 BALTIMORE GAS & ELECTRIC CO. 234-5691
 COLONIAL PIPE LINE (WHERE APPLICABLE) 781-4641
 HOWARD SOIL CONSERVATION DISTRICT 465-3180
 HOWARD COUNTY BUREAU OF SEWER & WATER 465-5000
 C & P TELEPHONE CO. 393-3648



SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	DRAINAGE AREA MAP
3	CLOUDLEAP COURT STA. 0+00 TO 5+68.91
4	FORELAND GARTH STA. 0+00 TO 12+30.33
5	STORM DRAIN PROFILES AND DETAILS

APPROVED:
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 ENGINEERING & LAND DEVELOPMENT

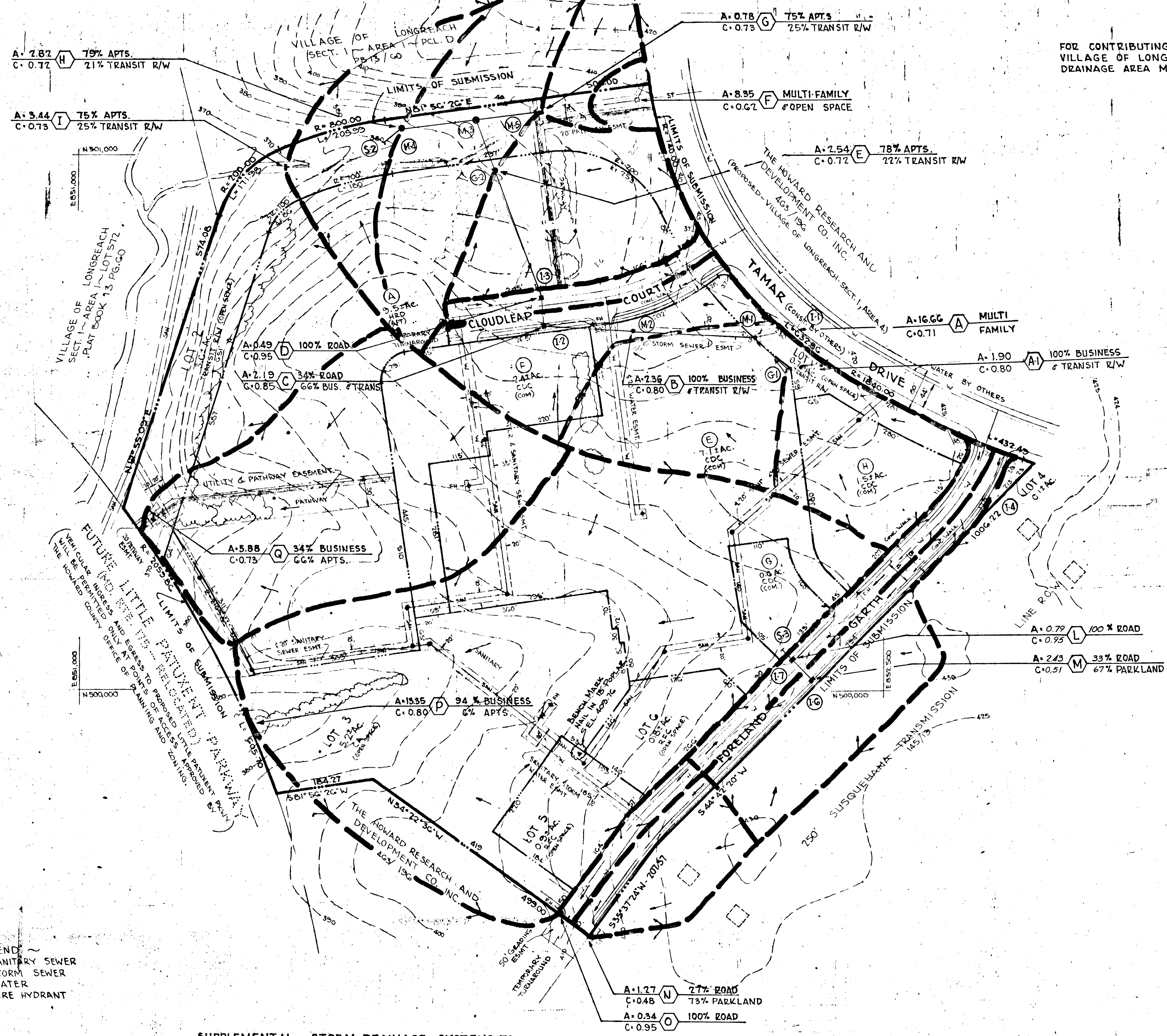
OWNER & DEVELOPER
 THE HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND

WALTER L. PHILLIPS
 CERTIFIED CIVIL ENGINEER & LAND SURVEYOR
 901 WEST BROAD STREET, FALLS CHURCH, VIRGINIA

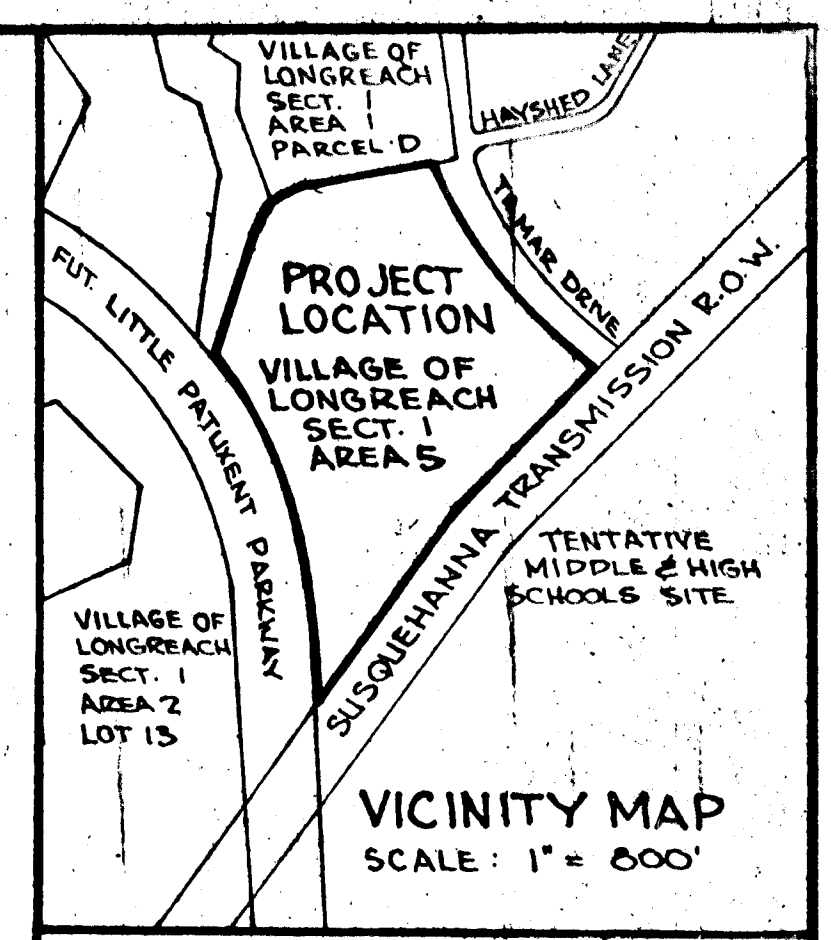


REVISIONS

AID #100



FOR CONTRIBUTING AREA TO A AND F SEE VILLAGE OF LONG REACH SECTION 1, AREA 4 DRAINAGE AREA MAP



OPEN SPACE (NON-CREDITED)	114.2 AC.
APARTMENTS	25.5 AC.
COMMERCIAL	14.8 AC.
TOTAL	35.7 AC.

TOTAL: 35.7 AC. SUMMARY:

PROPOSED 21.8 AC.	
A HRD	9.5 AC.
E CDC	7.1 AC.
LOT 3 CA	5.2 AC.
FUTURE 10.6 AC.	
LOTS 1, 2 & 4-R/W	4.4 AC.
LOTS 5 & 6-RFC	1.8 AC.
F G H CDC	4.5 AC.
NOTE: COUNTY ROAD R.O.W.	
CLOUDLEAP CT. & FORELAND GARTH (HRD)	3.7 AC.

- GENERAL NOTES**
- TOPOGRAPHY SHOWN BASED ON MAPS PREPARED FEBRUARY 1965 BY MAPS, INC. BALTIMORE, MD.
 - PUBLIC WATER AND SEWAGE TO BE UTILIZED. STORM WATER SYSTEM TO DISCHARGE INTO NATURAL DRAINAGE CHANNEL.
 - VILLAGE OF LONGREACH, SECTION ONE, AREA 5 SITE BOUNDARIES BASED ON DRAWING PREPARED NOVEMBER 1970 BY GREEN ASSOCIATES, INC., BALTIMORE, MD., SUBJECT TO REVISION AS MORE DATA IS AVAILABLE.
 - ZONING - NEW TOWN EXCEPT WHERE SHOWN AS OPEN SPACE RESTRICTION (CDC & MULTI-FAMILY HOUSING EXCLUDED).
 - SEDIMENT CONTROL IS REQUIRED DURING CONSTRUCTION BY MEANS OF SUMPS, BERMS OR DITCHES TO PROVIDE SURFACE RETENTION. SEEDING, SODDING, PLANTING OR OTHER APPROVED SURFACE TREATMENT MUST BE COMPLETED AS SOON AS POSSIBLE DURING THE CONSTRUCTION CYCLE.
 - STORM WATER SYSTEM FOR THIS AREA TO BE DETERMINED BY FUTURE SITE GRADING PLAN AND WILL PROVIDE FOR DISCHARGE INTO A NATURAL DRAINAGE CHANNEL.

RUNOFF COEFFICIENTS (C)

BUSINESS	- 0.80
APARTMENTS	- 0.70
TRANSIT R/W	- 0.80
ROADS	- 0.95
PARKLAND	- 0.50

APPROVED
OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY
DATE: MAY 1971

Walter L. Phillips
WALTER L. PHILLIPS
#7634

DEPARTMENT OF PUBLIC WORKS	
APPROVED: CHIEF BUREAU OF HIGHWAYS	DATE:
OFFICE OF PLANNING & ZONING	
APPROVED: CHIEF, DIVISION OF LAND DEVELOPMENT & TRANSPORTATION PLANNING	DATE:
WALTER L. PHILLIPS 901 W. BROAD STREET FALLS CHURCH, VIRGINIA	
4-13-71	HRD COMMENTS
REV. DATE	REV. NO. REVISION DESCRIPTION
COLUMBIA MARYLAND GTH ELECTION DIST. HOWARD COUNTY, MD. OWNER AND DEVELOPER HOWARD RESEARCH AND DEVELOPMENT CORP. COLUMBIA, MARYLAND	
PROJECT AREA VILLAGE OF LONGREACH SECTION 1 AREA 5	
PROJECT TITLE PLAN & PROFILE DRAINAGE AREA MAP	
DES BY	SCALE 1" = 100'
REVISED 3-7-72	DATE 3-30-71
CHK BY	APPROVED
	DWG. No. 2 OF 5 C.C.F. No. G-1-5-71167

LEGEND
SAN SANITARY SEWER
ST STORM SEWER
W WATER
FH FIRE HYDRANT

SUPPLEMENTAL STORM DRAINAGE SYSTEMS TO BE PROVIDED AT TIME OF SITE DEVELOPMENT IN AREAS P AND Q

DEPARTMENT OF PUBLIC WORKS
 APPROVED: *B. M. McLeod* 4/13/72
 CHIEF BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING & ZONING
 APPROVED: _____
 CHIEF - DIVISION OF LAND DEVELOPMENT (TRANSPORTATION) PLANNING DATE



Walter L. Phillips 4/30/71
 WALTER L. PHILLIPS REG. PROF. ENGR. # 7654 DATE

WALTER L. PHILLIPS
 901 W. BROAD STREET
 FALLS CHURCH, VIRGINIA

5-19-80	AS BUILT INFORMATION	
4-13-71	H.R.D. COMMENTS	
REV. DATE	REV. NO.	REVISION DESCRIPTION

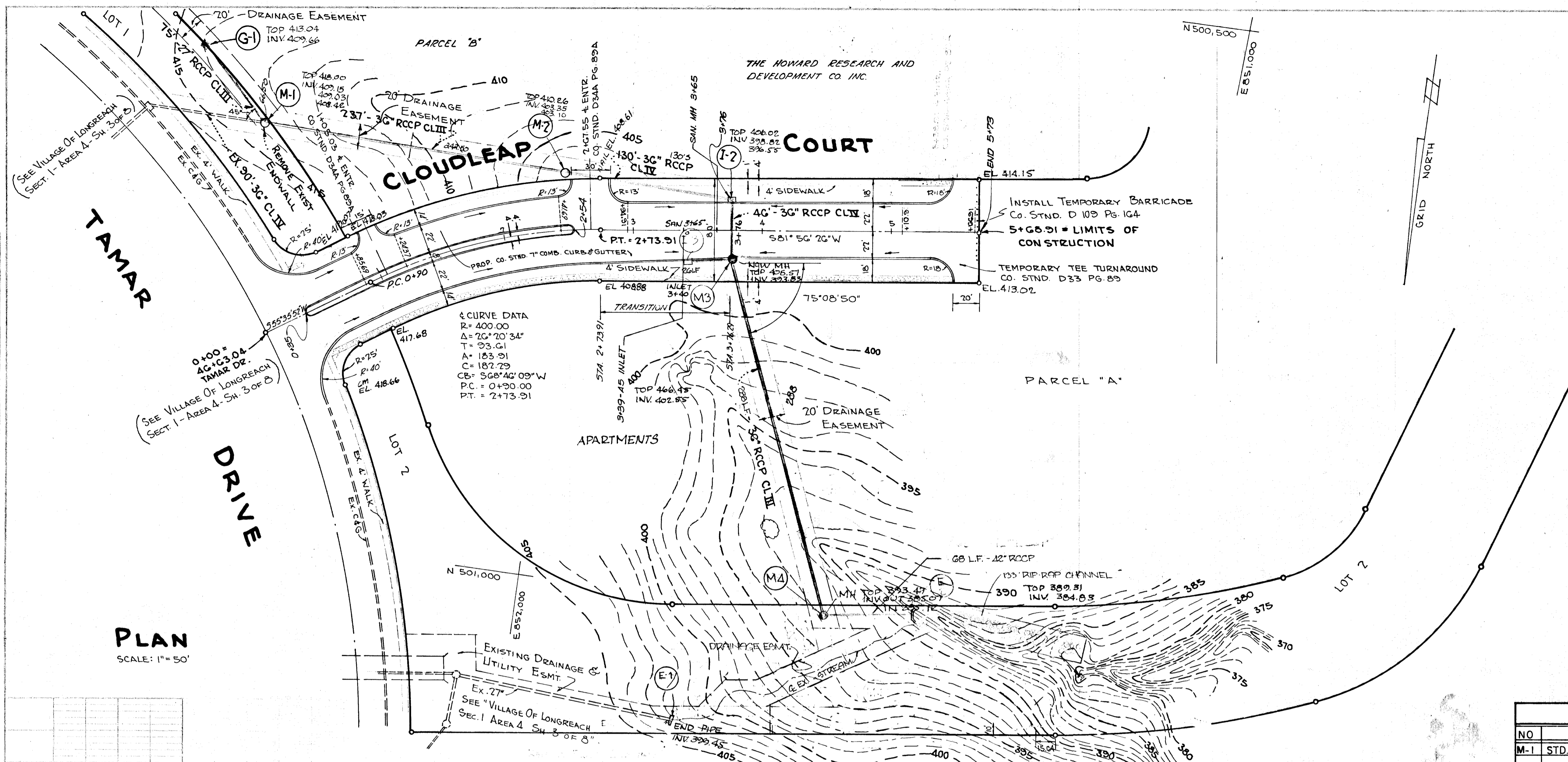
COLUMBIA
 MARYLAND
 6TH ELECTION DIST. HOWARD COUNTY, MD.
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND

PROJECT AREA
 VILLAGE OF LONGREACH
 SECTION 1 AREA 5

PROJECT TITLE
 PLAN & PROFILE
CLOUDLEAP COURT

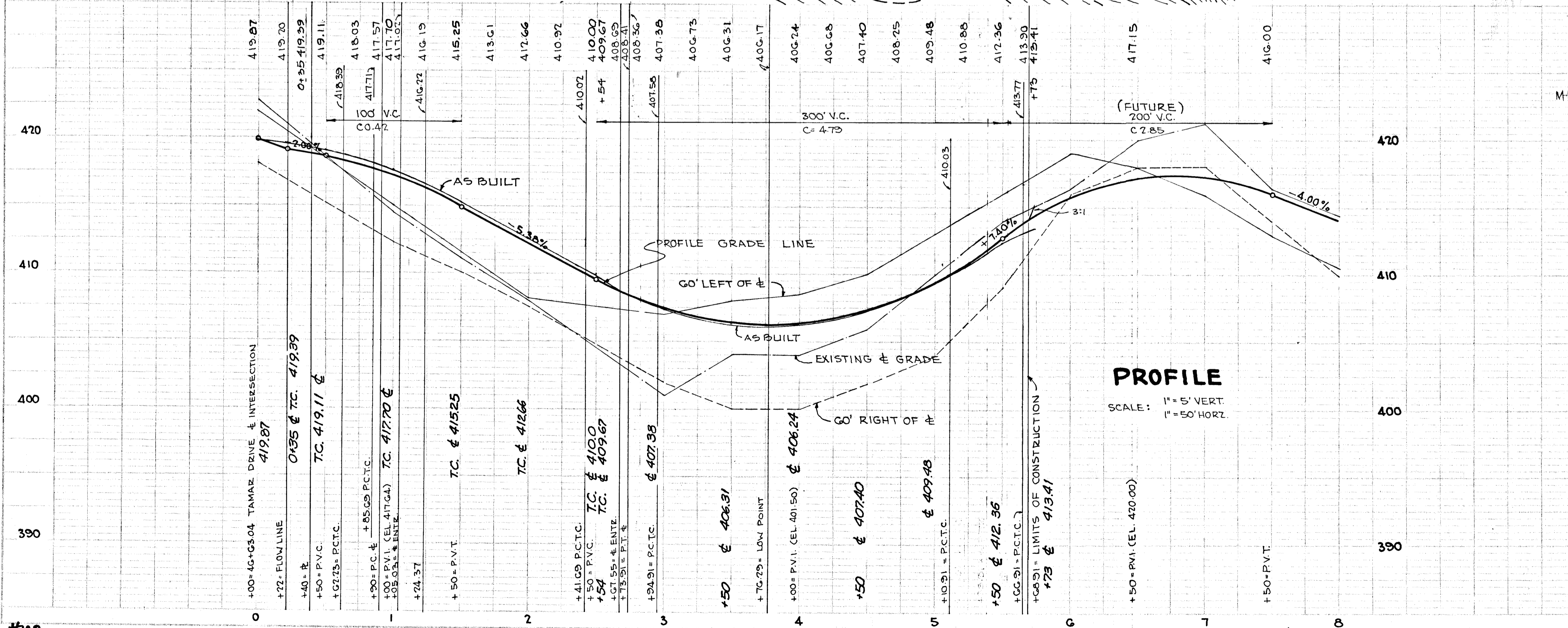
DES. BY	SCALE AS SHOWN	DWG. NO. 3 OF 5
REVISED 3-7-72	DATE 3-23-71	C.C.F. NO.
CHK. BY	APPROVED	

NOTE
 AS BUILT INFORMATION VERIFIED BY
 WALTER PARK MD. LAND SURVEYOR
 No. 5539



STORM DRAINAGE STRUCTURE SCHEDULE

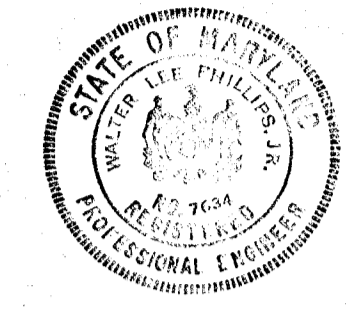
NO.	TYPE	LOCATION	INV. IN	INV. OUT	T.C.P. ELEV.	REMARKS
M-1	STD. MANHOLE	SEE PLAN & PROFILE	409.52 (P. 15)	408.37	418.00	HD. CO. STD. DWG. D-103 P. 158
G-1	STD. K INLET GRATE	SEE PLAN & PROFILE	409.66 (P. 15)	409.66	413.04	HD. CO. STD. DWG. D-95 P. 150
M-2	STD. MANHOLE	SEE PLAN & PROFILE	403.35	403.10	410.26	HD. CO. STD. DWG. D-103 P. 158
I-2	A-10 INLET W=3'-8"	@ STA. 3+76.29 - 24.50 LT	398.82	396.85	406.02	HD. CO. STD. DWG. D-64-A P. 119-A
M-3	STD. MANHOLE	@ STA. 3+16.23 - 23.34 RT.	395.34	393.83	405.51	HD. CO. STD. DWG. D-103 P. 158
M-4	STD. MANHOLE	SEE PLAN & PROFILE	385.12	385.07	392.47	HD. CO. STD. DWG. D-103 P. 158
E-2	EX. ENDWALL	SEE PLAN & PROFILE		388.83	389.31	HD. CO. STD. DWG.
E-1	END OF PIPE	SEE PLAN & PROFILE		399.45		
I-3	EX. INLET	@ STA. 3+10 - 24 RT.		402.85	406.45	



NO.	DATE	REVISION
1	5/21/80	CHANGE M-5 TO E-1, I-3 TO M-3; REVISE PLAN, PROFILE, & STRUCT. SCHED. FROM E-1 DOWNSTREAM & FROM M-3 DOWNHILL

APPROVED
 OFFICE OF PLANNING
 AND ZONING OF
 HOWARD COUNTY
 DATE: MAY 1 1972
J. K. J.

AS-BUILT APRIL 16, 1974
 F 71-65C



Walter L. Phillips 3/29/71 DATE
 WALTER L. PHILLIPS, REG. PROF. ENGR. # TG34

WALTER L. PHILLIPS
 901 W. BROAD STREET
 FALLS CHURCH, VIRGINIA

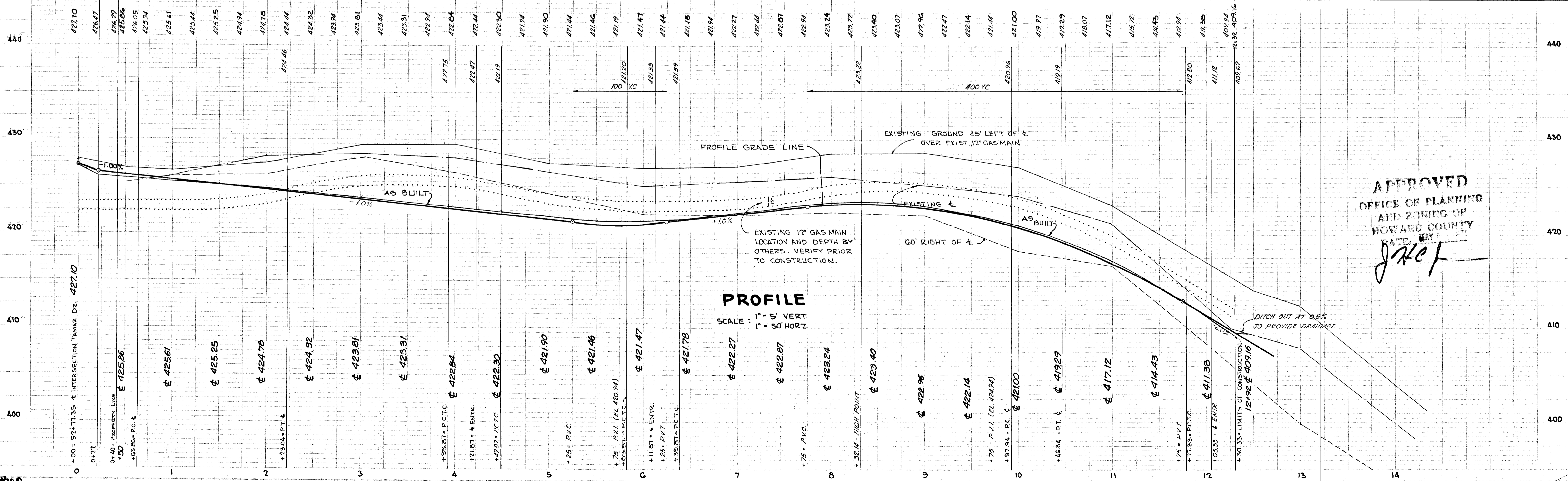
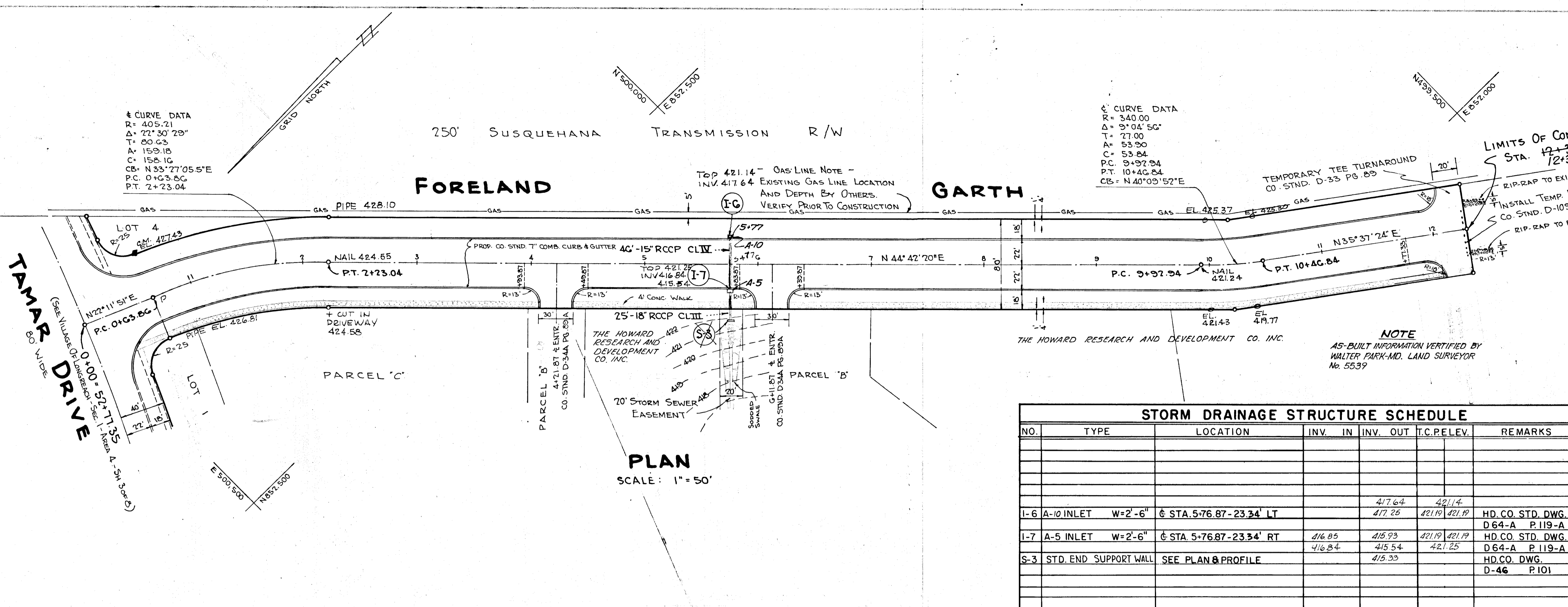
REV. DATE	REV. NO.	REVISED DESCRIPTION
4-13-71		H2D COMMENTS

COLUMBIA
 MARYLAND
 6TH ELECTION DIST. HOWARD COUNTY, MD.
 OWNER AND DEVELOPER
 HOWARD RESEARCH AND DEVELOPMENT CORP.
 COLUMBIA, MARYLAND

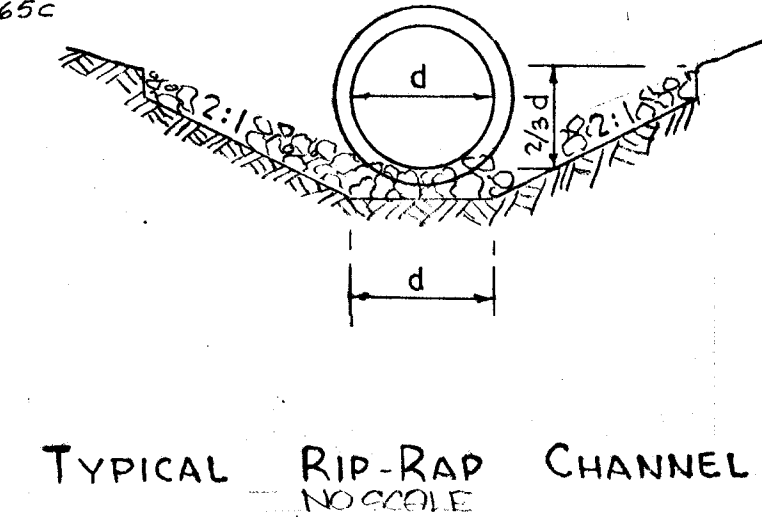
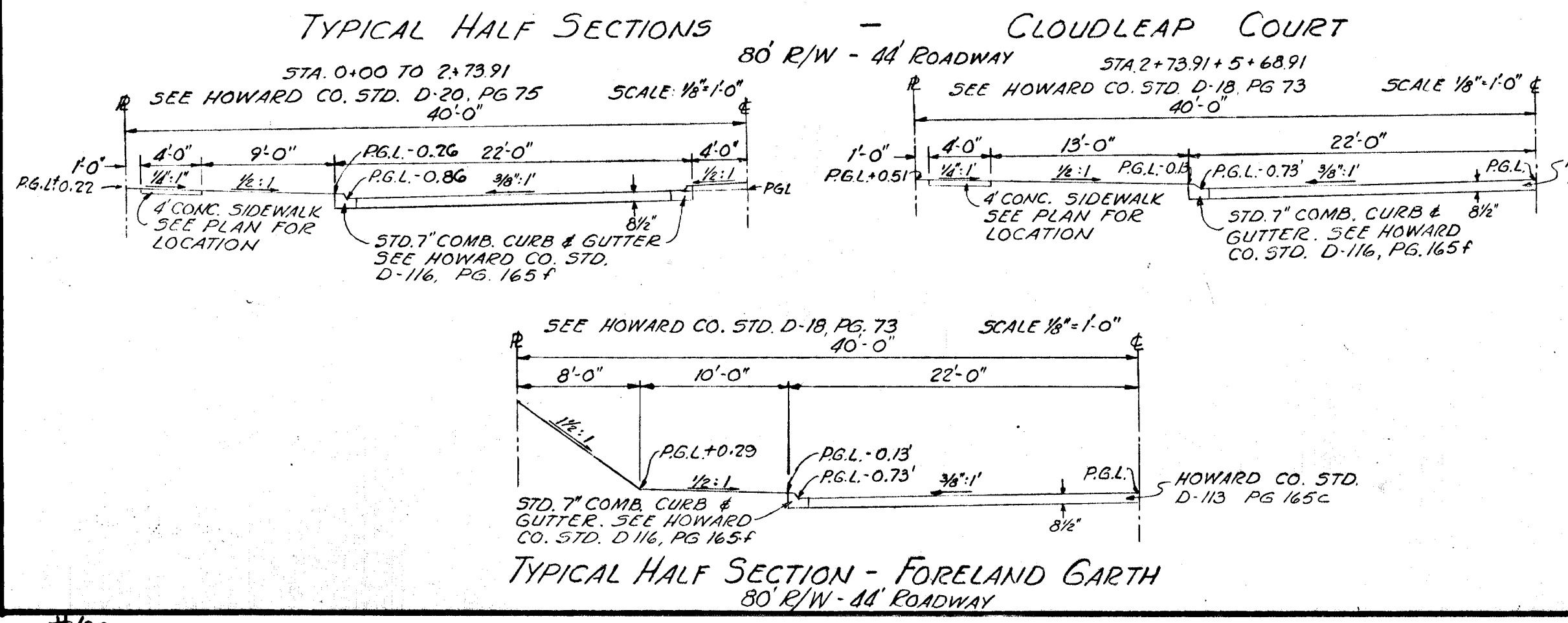
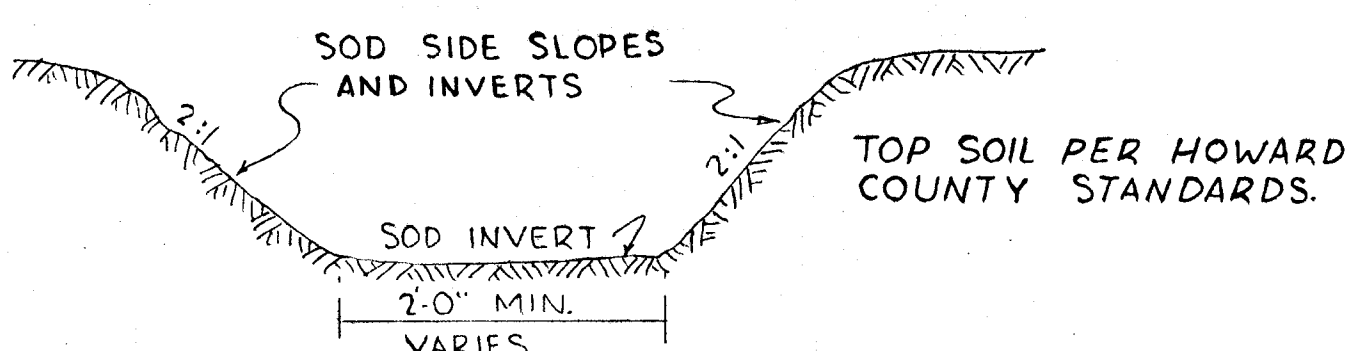
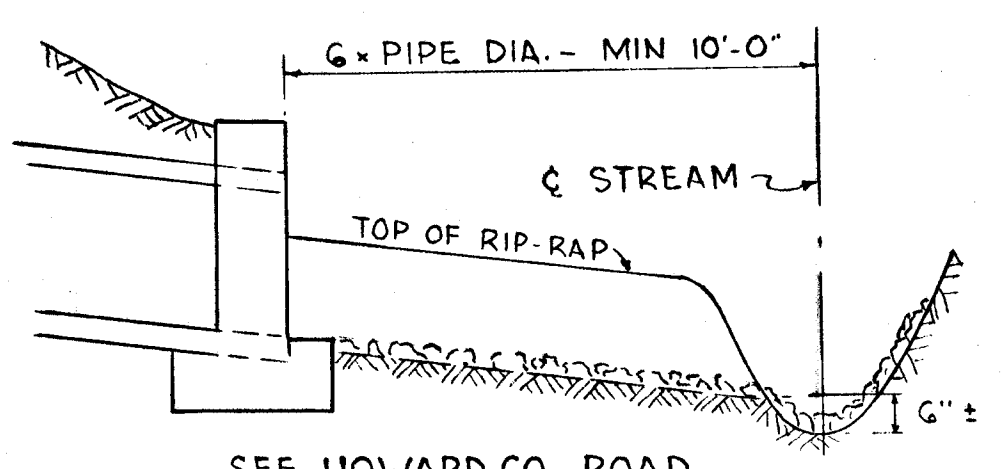
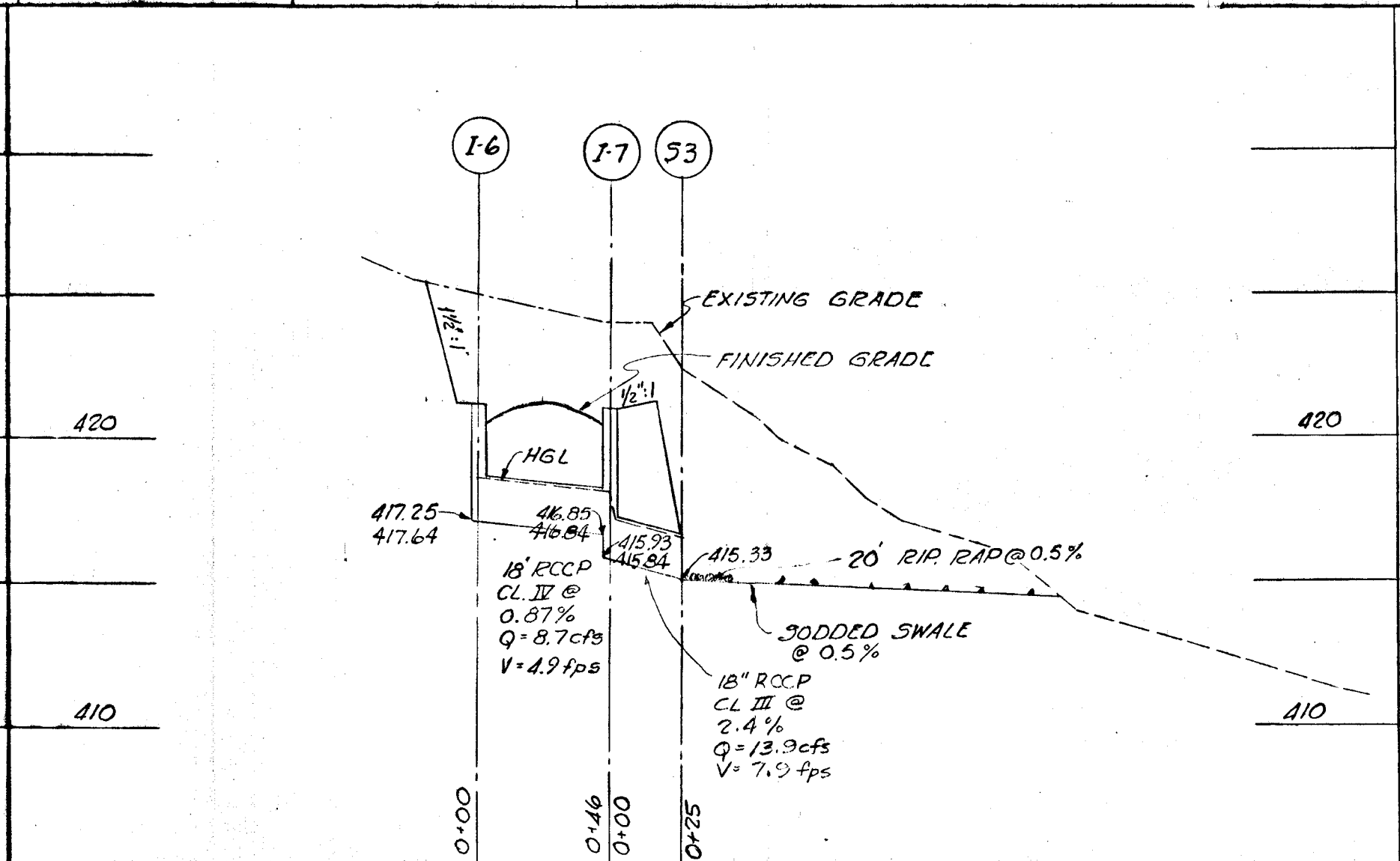
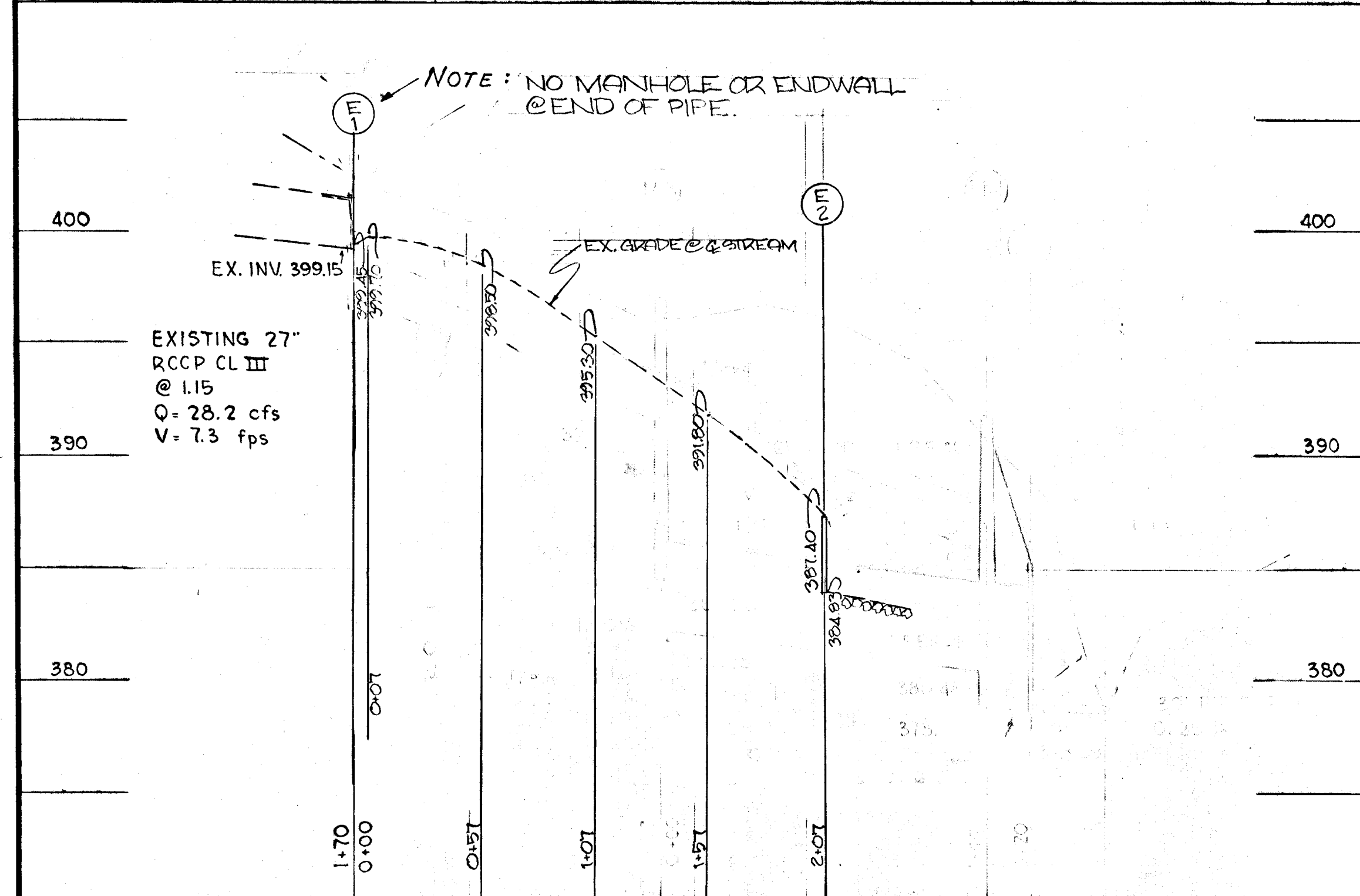
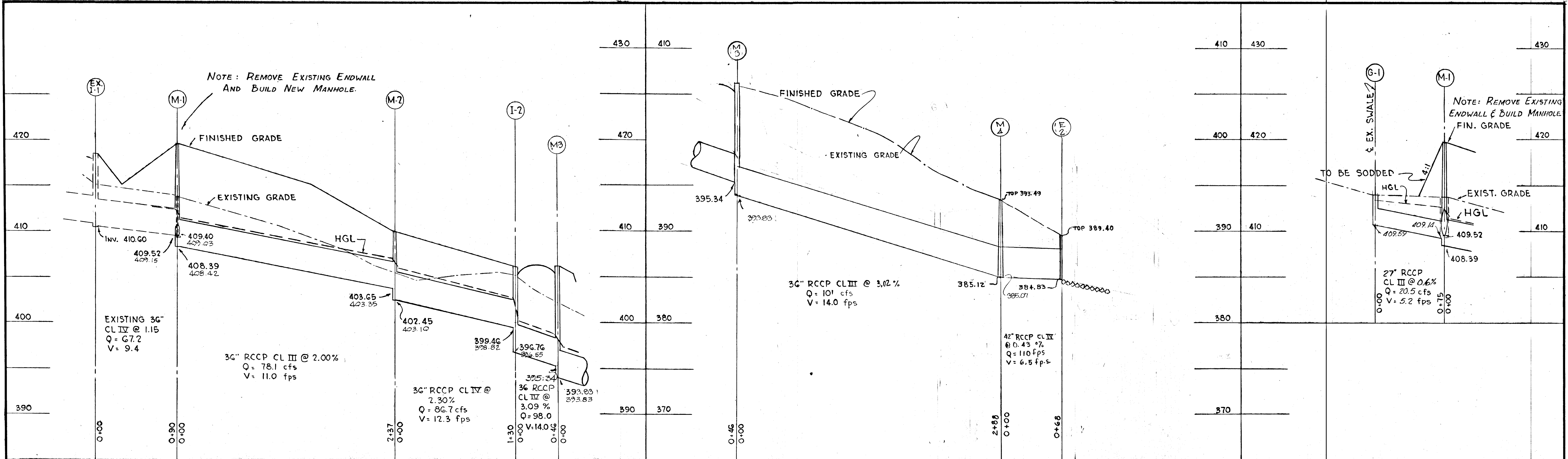
PROJECT AREA
 VILLAGE OF LONGREACH
 SECTION 1 AREA 5

PROJECT TITLE
 PLAN & PROFILE
FORELAND GARTH

DES. BY	SCALE AS SHOWN	DWG. NO. 4 OF 5
REVISED 3-7-72	DATE 3-23-71	C.C.F. NO.
CHK. BY	APPROVED	



APPROVED
 OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY
 DATE: MAY 1 1972
J. K. E.



APPROVED
OFFICE OF PLANNING AND ZONING OF HOWARD COUNTY
DATE: MAY 1971

NOTE: EXISTING DITCH APPROACHING PROPOSED ENDWALL TO BE TRIMMED IN ACCORDANCE WITH ARTICLE C-G OF THE HOWARD CO. ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.

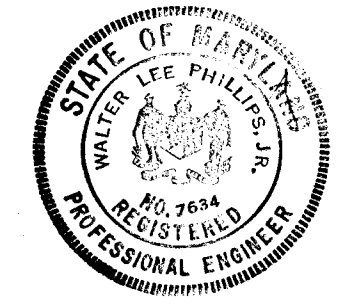
NO.	DATE	REVISION
1	5/21/70	CHANGE M-5 TO E-1, I-3 TO M-3; REVISE PLAN, PROFILE & STRUCTURE SCHEDULE FROM E-1 TO M-3; REVISE FROM M-3 DRAWING

DES BY	SCALE 1" = 5' VERT. 1" = 50' HORIZ.	DWG. NO. 5 OF 5
REVISED 3-7-72	DATE 3-30-71	C.C.F. NO.
CHK BY	APPROVED	

DEPARTMENT OF PUBLIC WORKS
APPROVED: *W. N. Nebelund* 4/15/72
CHIEF BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING & ZONING

APPROVED: _____
CHIEF, DIVISION OF LAND DEVELOPMENT & TRANSPORTATION PLANNING DATE



Walter L. Phillips 3/30/71
WALTER L. PHILLIPS REG. PROF. ENGR. # TGS4 DATE

901 W. BROAD STREET
FALLS CHURCH, VIRGINIA

4-15-71 HRD COMMENTS

REV. DATE REV. NO. REVISION DESCRIPTION

COLUMBIA
MARYLAND
6TH ELECTION DIST. HOWARD COUNTY, MD.
OWNER AND DEVELOPER
HOWARD RESEARCH AND DEVELOPMENT CORP.
COLUMBIA, MARYLAND

PROJECT AREA
VILLAGE OF LONGREACH
SECTION 1 AREA 5

PROJECT TITLE
DRAINAGE PROFILES & DETAILS