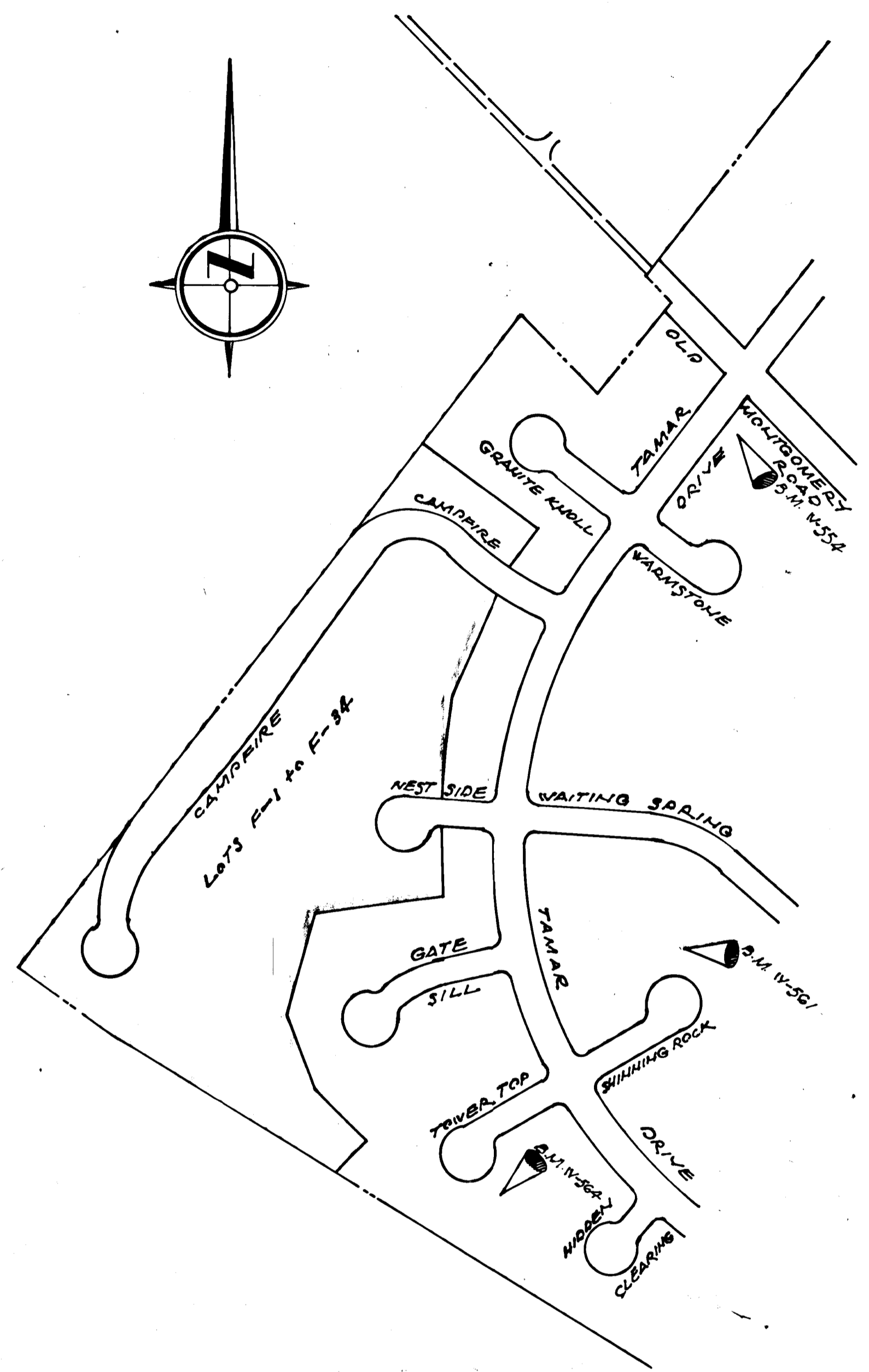
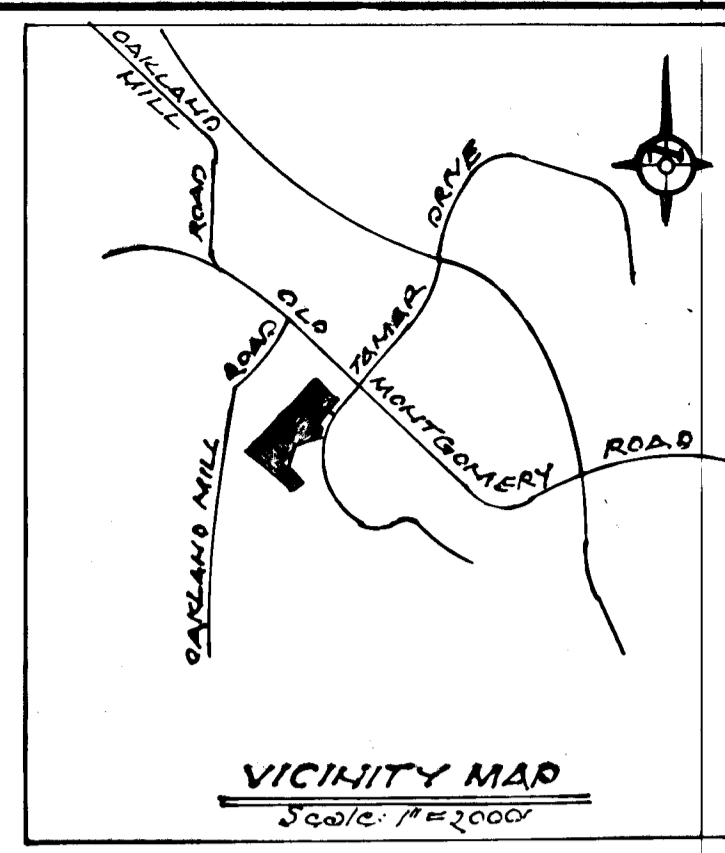


SHEET INDEX	
NO.	DESCRIPTION
1	Title
2	Plan and Profile - Campfire
3	Plan and Profile - Nest Side
4	Storm Drain Profiles and Miscellaneous Details
5	Drainage Area Map
6	100-year Flood Plain
7	Sediment Control Plan



LOCATION PLAN
Scale: 1"=200'

BENCH MARKS

Bench Mark N-554:
Iron pipe 103' left of centerline station
18+05, Tamar Drive. Elevation - 410.65

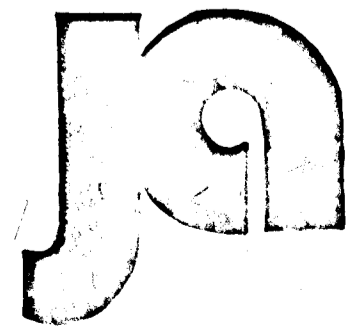
Bench Mark N-561:
Iron pipe 123' right of centerline station
4+85, Waiting Spring. Elevation - 397.55

Bench Mark W-564:
Iron pipe 112' left of centerline station
1+65, Tower Top.

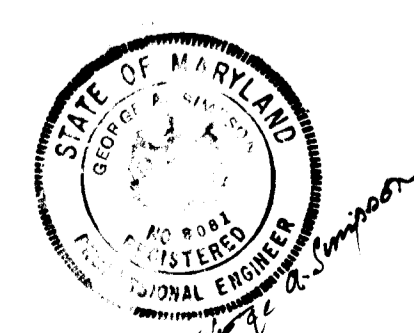
GENERAL NOTES

- All work shall be performed in accordance with the Howard County Road Construction Code and Standard Specifications.
- All utility companies shall be notified at least 24 hours in advance of construction.
- Streets are designed for 35 mph. in accordance with AASHTO standards.
- All storm drainage structures shall be Howard County standards.
- For stakeout details of standard cut-de-jac see Howard County Standard O-33a, page 88a.
- Design speed for the roadways is 25 mph.

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE OCT 1 1976
RBC



JOHN J. ALLEN ASSOCIATES
Civil Engineers • Land Planners • Surveyors
Bethesda, Md. 20014 (301) 656-9550

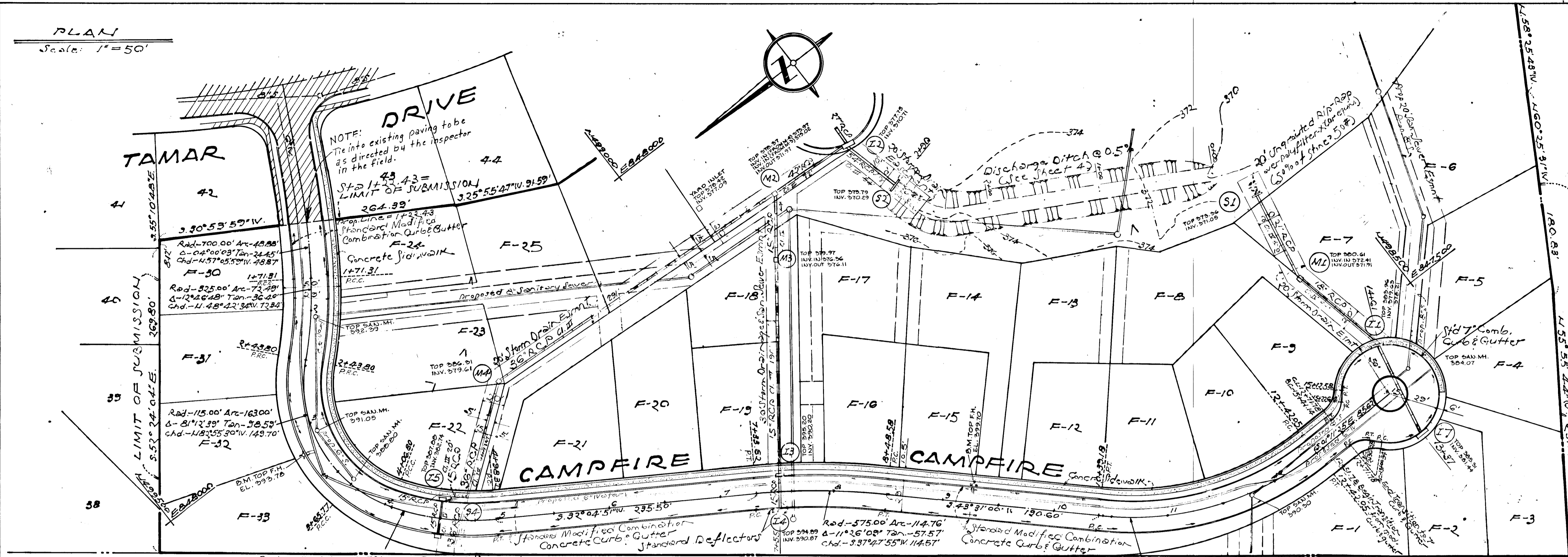


OWNER AND DEVELOPER
Bagley, et al. Employees' Pension Plan
11400 Rockville Pike
Rockville, Maryland 20852
Telephone: (301) 770-2000

DEPARTMENT OF PUBLIC WORKS
Granville P. Wallace 10/27/76
Chief, Bureau of Highways Date
OFFICE OF PLANNING AND ZONING
Robert P. Cline 11/3/76
Chief, Division of Land Development Date

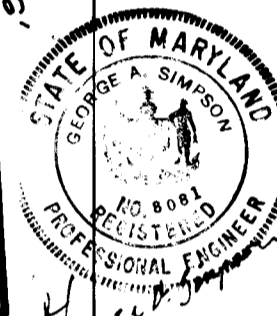
DEVELOPMENT PLANS
LOTS F-1 to F-34 • A RESUBDIVISION OF
PARCEL "F" • SECTION 1 - AREA 2
VILLAGE OF LONGREACH • COLUMBIA
Tax Map 36, Parcel 337, Parcel "F"
6th Election District, Howard County, Maryland

DATE: _____
 BY: _____
 CHECKED: _____
 NO. _____



AS BUILT SURVEY SIGNED & SEALED
 BY WALTER PARK REG. NO. 5539
 8/14/1980

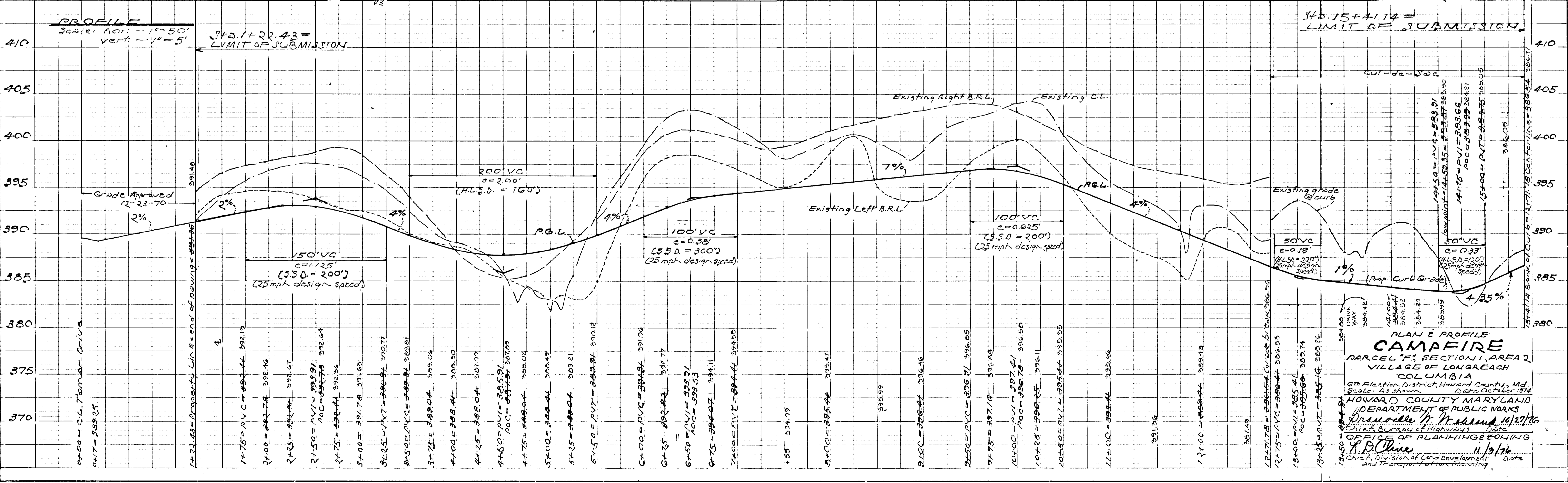
APPROVED
 DIVISION OF LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE Oct 6, 1976
RBC



Plans prepared by:
 John J. Allen Associates
 Civil Engineers-Land Planners-Surveyors
 4801 Montgomery Lane
 Bethesda, Maryland 20814
 Tele. (301) 656-3550

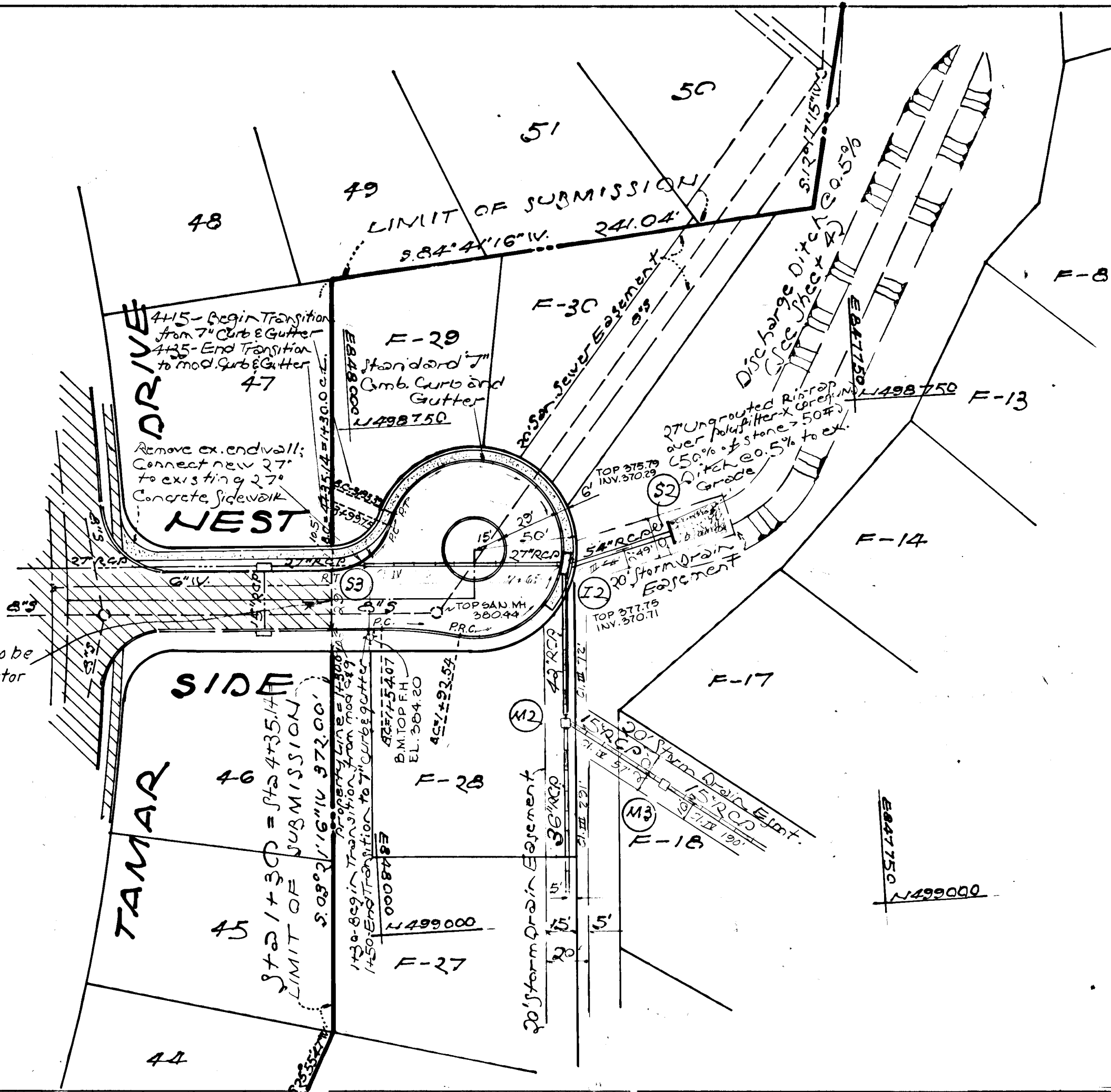
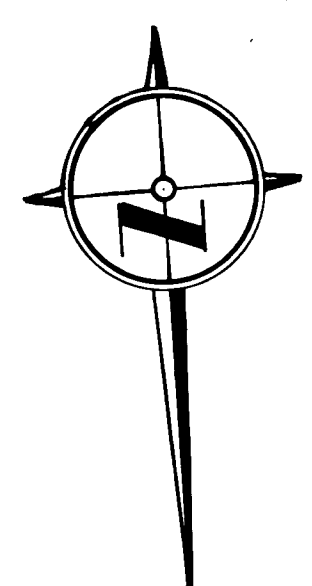
Owner-Developer:
 Bagley, et al.
 Employees Pension Plan
 11400 Rockville Pike
 Rockville, Maryland 20852
 (301) 770-2000

DATE: _____
 BY: _____
 CHECKED: _____
 NO. _____



PLAN & PROFILE
CAMPFIRE
 PARCEL "F", SECTION 1, AREA 2
 VILLAGE OF LONGREACH
 COLUMBIA
 22 Election District, Howard County, Md.
 Scale: As shown Date: October 1976
 HOWARD COUNTY MARYLAND
 DEPARTMENT OF PUBLIC WORKS
Dr. William H. Mahoney 10/27/76
 Chief, Bureau of Planning & Zoning
 OFFICE OF PLANNING & ZONING
 R. P. O'Brien
 Chief, Division of Land Development
 and Transportation Planning

PLAN
Scale: 1"=50'



NOTE:
Tie into existing paving to be as directed by the inspector in the field.

APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE Oct 1, 1976
RDC

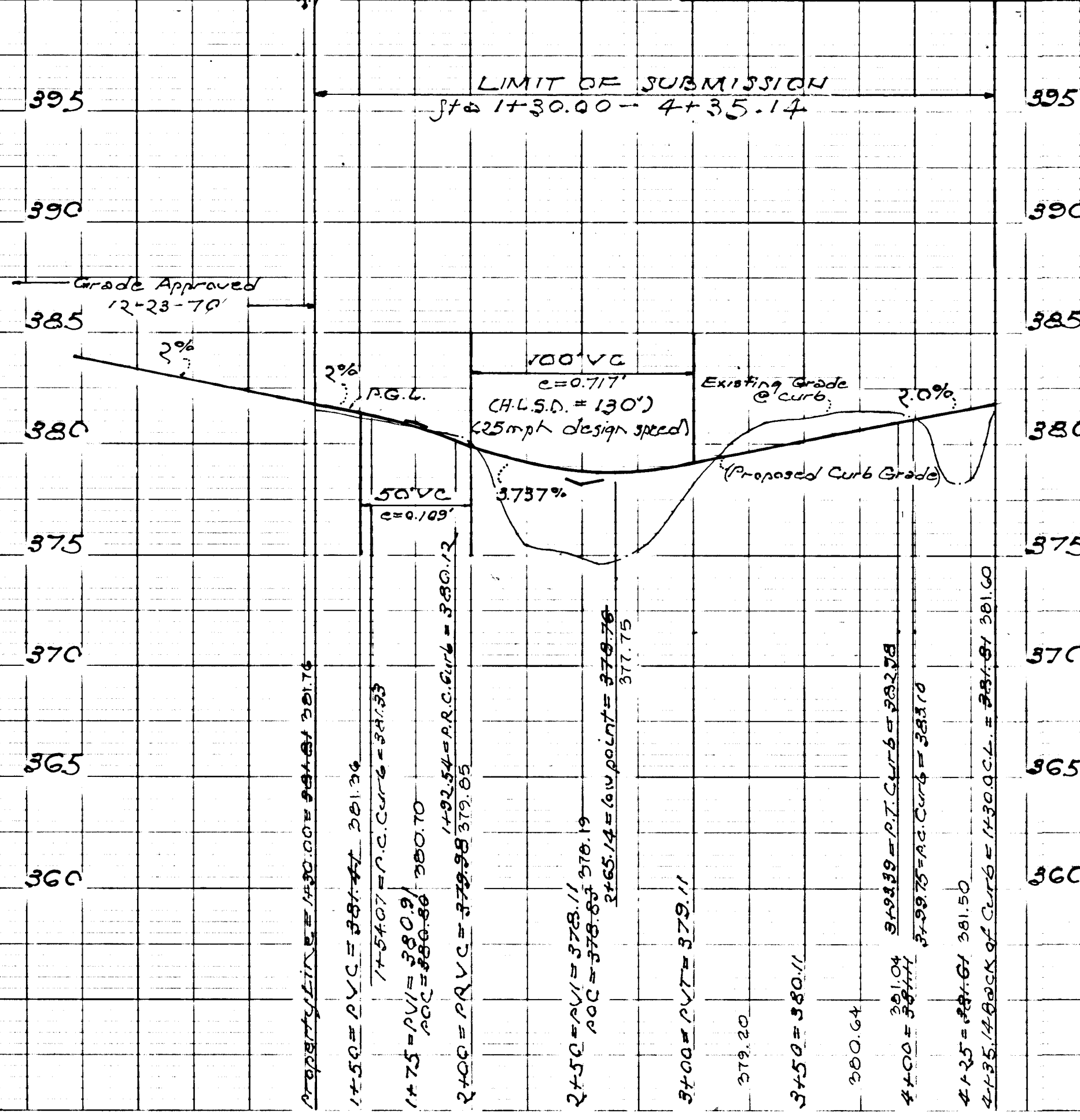


Plans prepared by:
John J. Allen Associates
Civil Engineers, Land Planners, Surveyors
4801 Montgomery Lane
Bethesda, Maryland 20014
Tel - (301) 656-9550

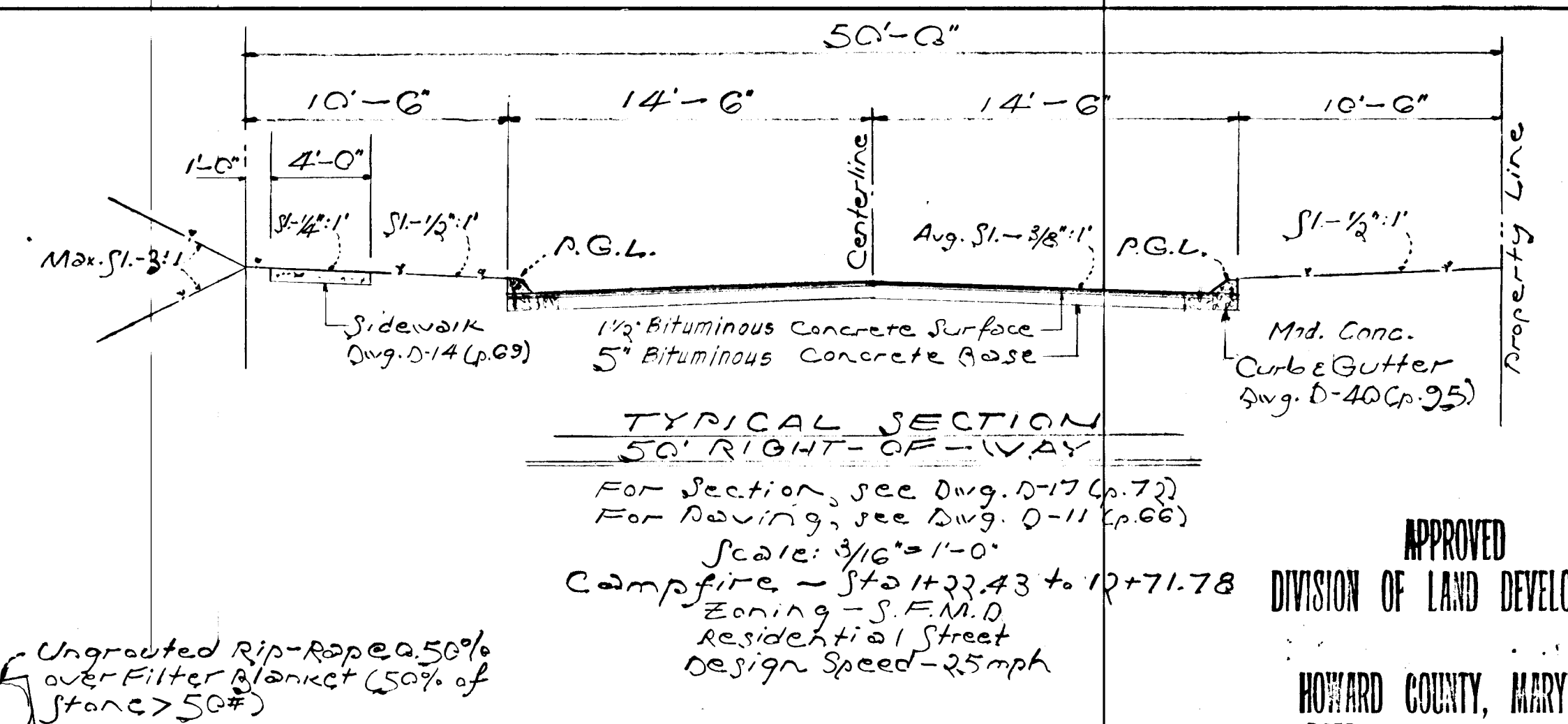
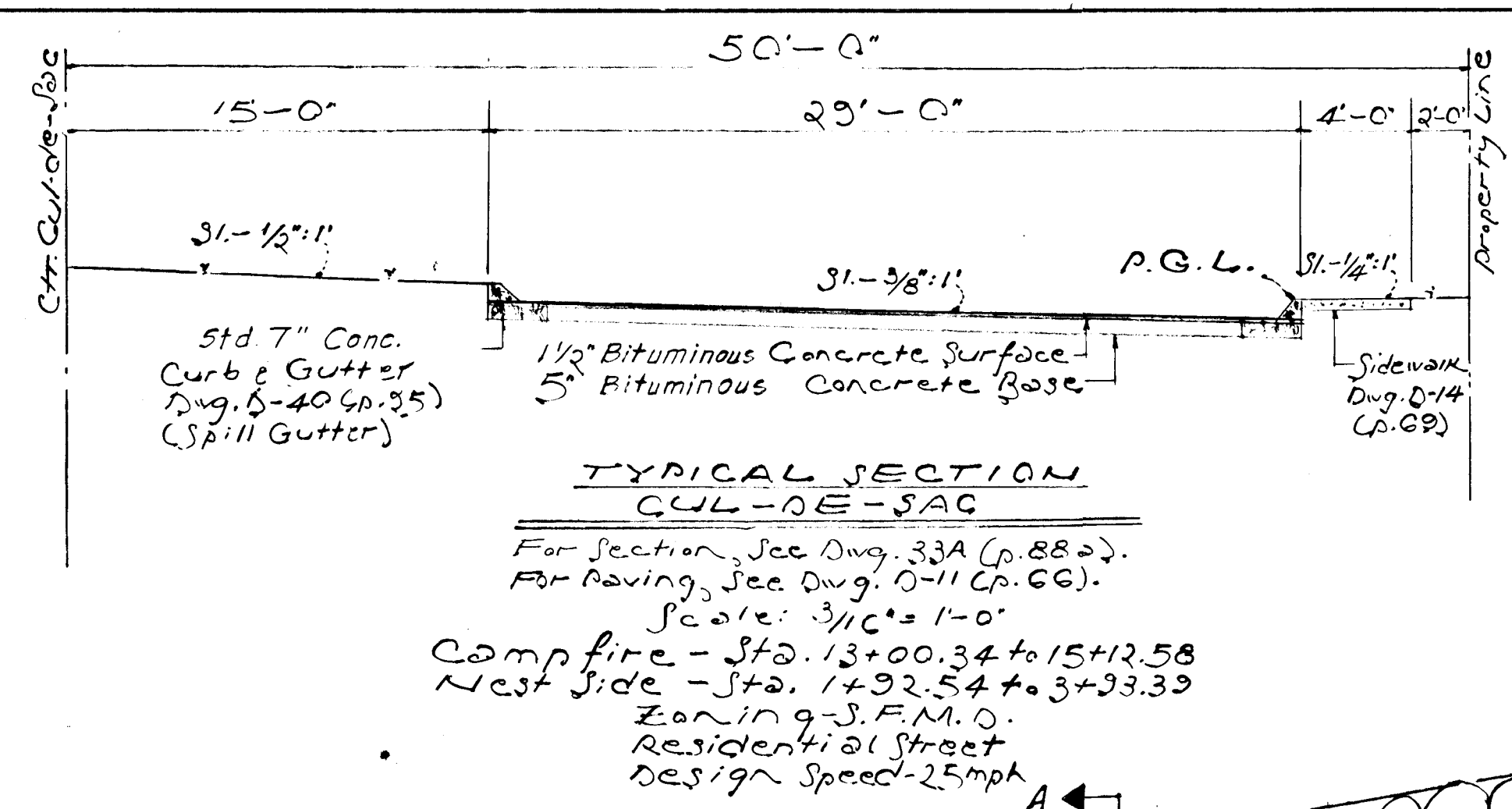
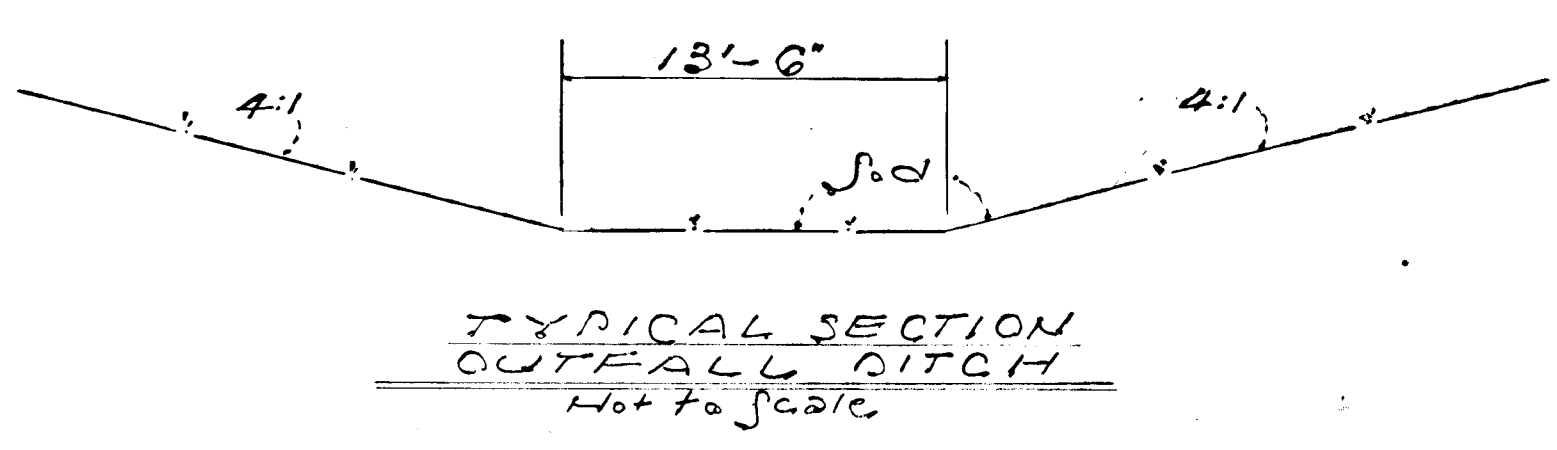
Owner-Developer
Bagley, et al.
Employees' Pension Plan
1400 Rockville Pike
Rockville, Maryland 20852
(301) 770-2000

PROFILE

Scale: hor - 1"=50'
vert - 1"=5'

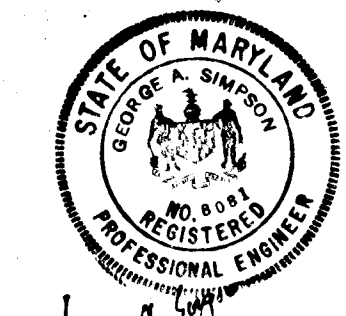
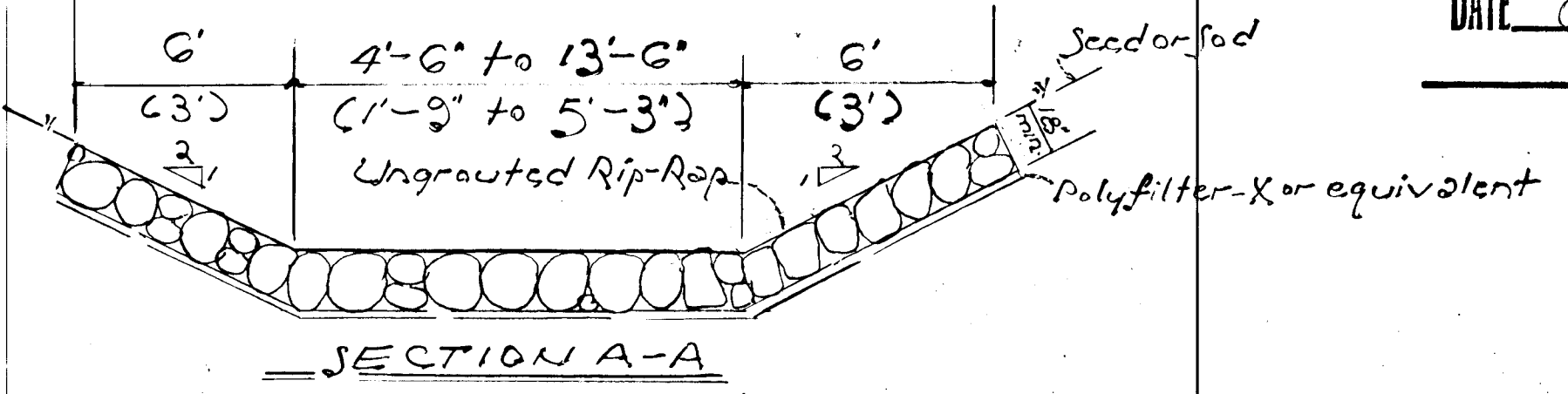
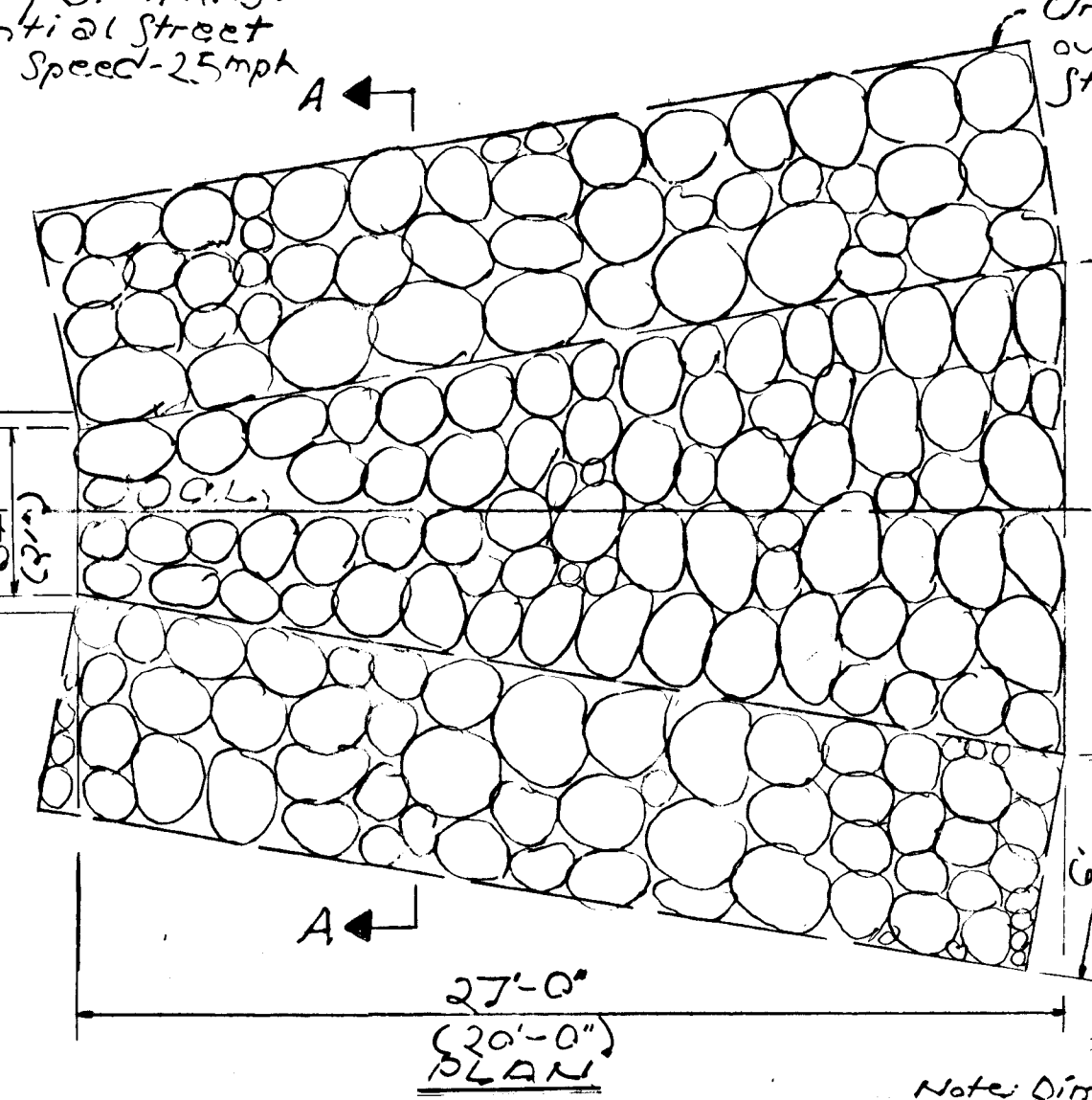
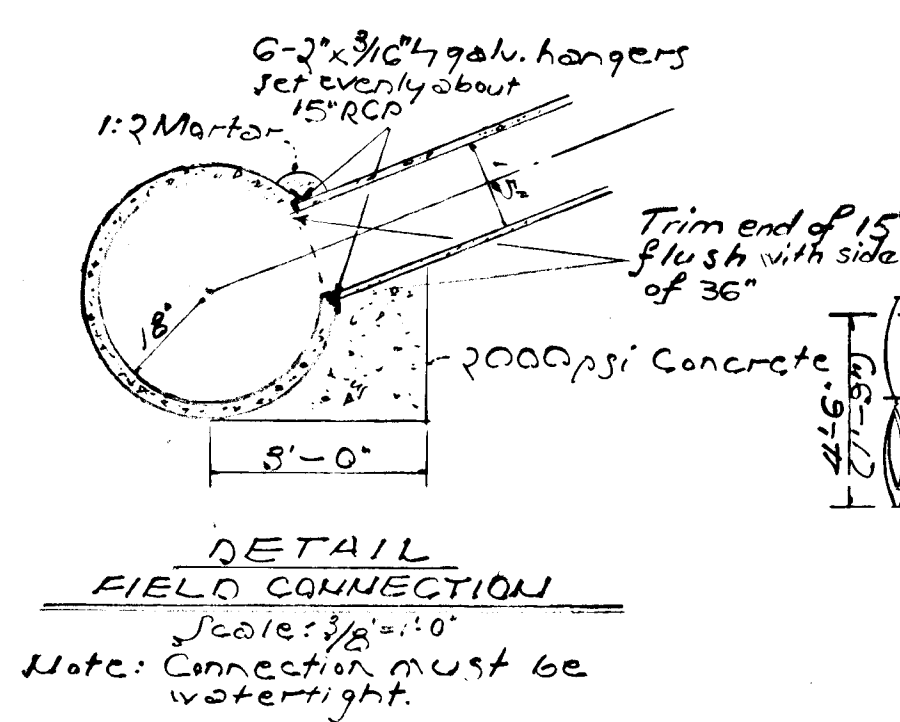


PLAN & PROFILE
NEST SIDE
PARCEL F, SECTION 1, AREA 2
VILLAGE OF LONGREACH
COLUMBIA
6th Election District, Howard County, Md.
Scale: As shown Date: October 1976
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Drummond M. Weiland 10/2/76
Chief, Bureau of Highways Date
OFFICE OF PLANNING & ZONING
Robert D. Olive 11/3/76
Chief, Division of Land Development Date
and Transportation Planning



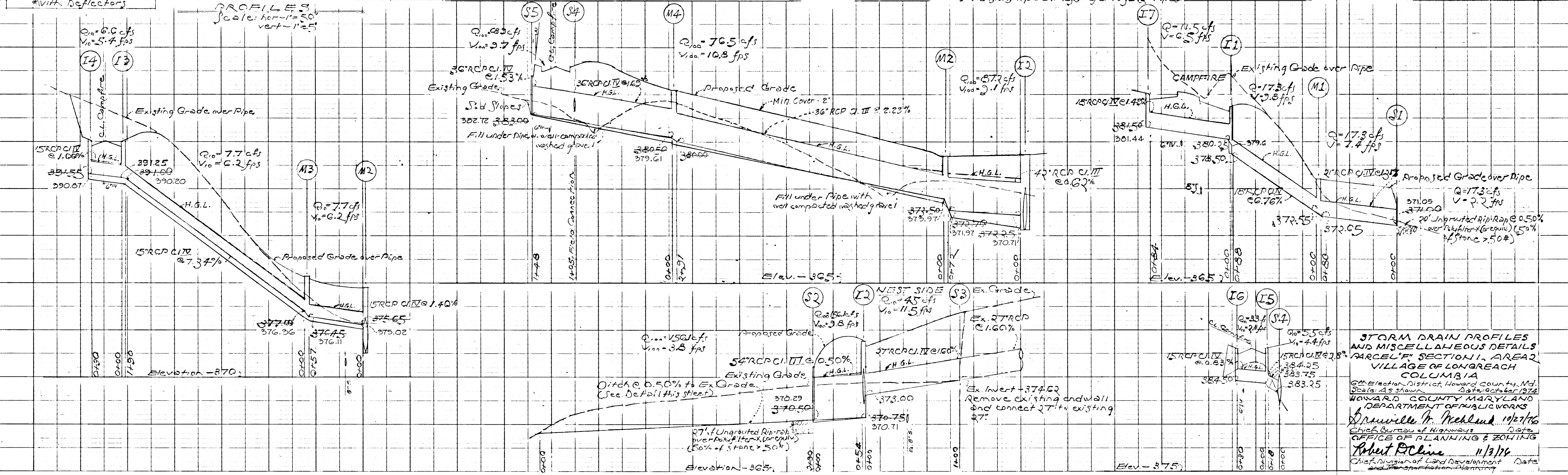
APPROVED
DIVISION OF LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE Oct 1, 1976
ROC

SCHEDULE						
STRUCTURES				PIPE		
NO.	TYPE	TOP ELEV.	INVERT ELEV.	STANDARD	DIA.	LENGTH
S1	C'Endwall	~	377.05	Dwg. D-52 (p.107)	15"	RCP CI. IV 322"
M1	Manhole	381.0	372.50, 372.00	Dvg. D-103 (A15B)	21"	RCP CI. IV 80"
I1	A-10 Inlet	382.87	380.37, 379.60	Dvg. G4-A (p.119A)	27"	RCP CI. IV 100"
S2	C'Endwall	~	370.50	Dvg. D-52 (p.107)	36"	RCP CI. III 291"
I2	A-10 Inlet	378.76	373.00, 370.75	Dvg. G4-A (p.119A)	36"	RCP CI. IV 148"
M2	Manhole	378.50	375.25, 372.70	Dvg. D-103 (A15B)	42"	RCP CI. III 72"
M3	Manhole	380.50	376.25, 375.75	"	"	"
I3	A-5 Inlet	382.20	381.25, 380.00	Dvg. G4-A (p.119A)	18"	RCP CI. IV 172"
I4	B-10 Inlet	382.00	381.50, 380.07	Dvg. G4-B (p.119B)	"	"
I7	A-10 Inlet	382.20	381.50, 380.44	"	"	"
M4	Manhole	382.40	380.50, 380.00	"	"	"
I5	A-5 Inlet	383.00	384.25, 382.74	Dvg. G4-A (p.119A)	"	"
I6	A-5 Inlet	383.75	384.50, 384.55	"	"	"
S5	C'Endwall	~	383.00, 382.72	Dvg. D-52 (p.107)	"	"
S4	Field Conn.	~	383.25	See Detail	"	"
S3	Ex. Endwall	~	374.62	"	"	"



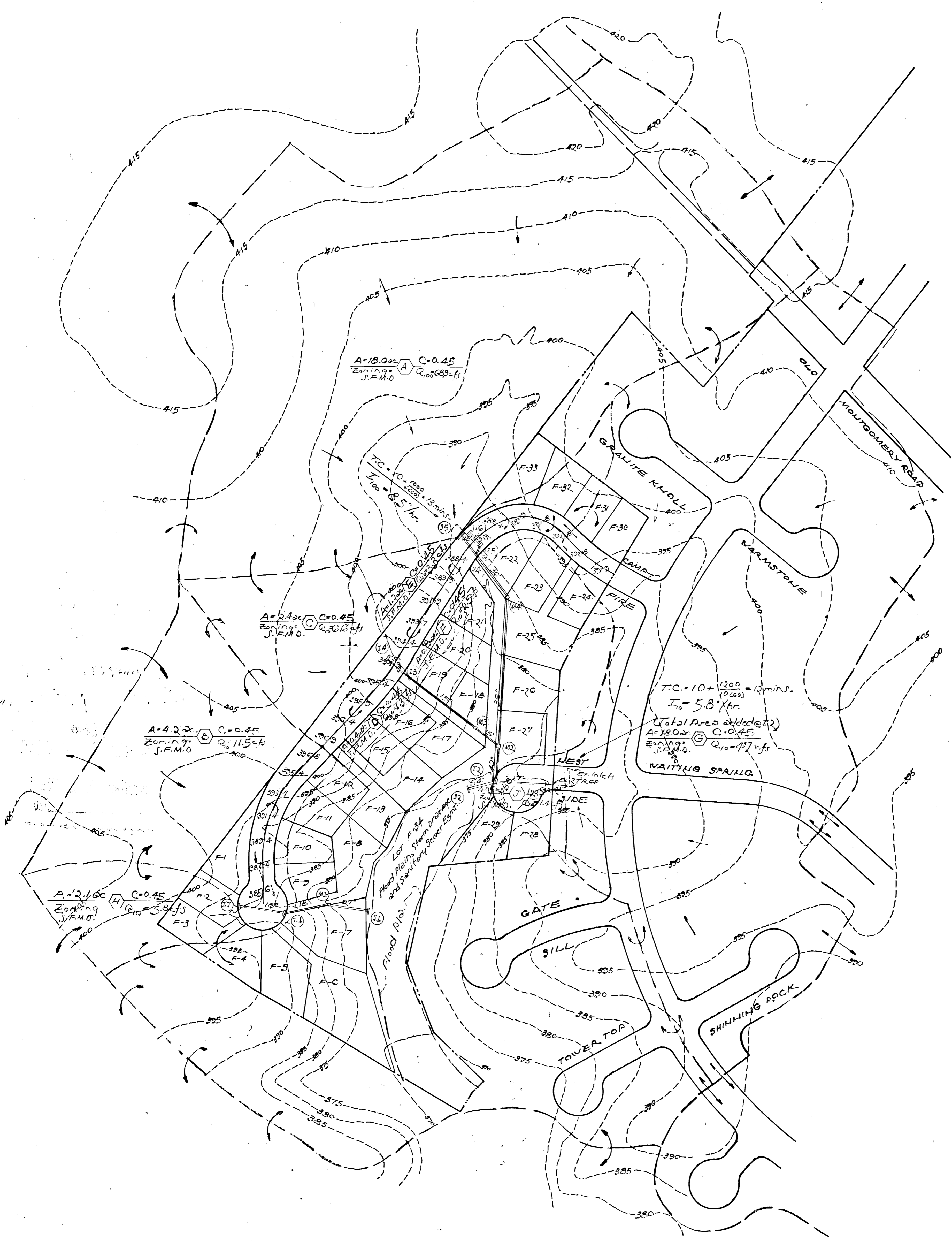
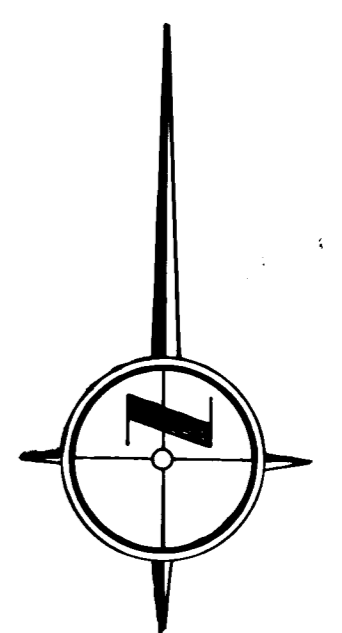
Plans prepared by:
John J. Allen Associates
Civil Engineers, Land Planners, Surveyors
4801 Montgomery Lane
Bethesda, Maryland 20814
Tel. - (301) 656-2550
Owner - Developer
Boyley, et al.
Employees Pension Plan
11400 Rockville Pike
Rockville, Maryland 20852
(301) 770-2000

AS BUILT SURVEY DATED 8/14/80
SIGNED (SEALED BY):
WALTER PARK - Reg. No. 5539



STORM DRAIN PROFILES AND MISCELLANEOUS DETAILS
PARCEL 'F' SECTION 1, AREA 2
VILLAGE OF LONGREACH
COLUMBIA
G.D. Election District, Howard County, Md.
Scale: 2 1/2" = 100' Date: October 1976
HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
S. Newville, Jr. 10/27/76
Chief Bureau of Highways Date
OFFICE OF PLANNING & ZONING
Robert P. Cline 11/3/76
Chief, Division of Land Development Date
and Transportation Planning

AD



- NOTES:
1. Grades shown in right-of-way are proposed street grades.
 2. The off-site drainage areas are predicated on plan prepared by Howard Research and Development Corp., dated 12-19-69.

DRAINAGE AREA MAP
COLUMBIA
VILLAGE OF LONGREACH
PARCEL "F"
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 Scale: 1"=100'
 April 11, 1975

JOHN J. ALLEN ASSOCIATES
 Civil Engineers, Land Planners, Surveyors
 4801 Montgomery Lane
 Bethesda, Maryland 20814
 (301) 656-2550

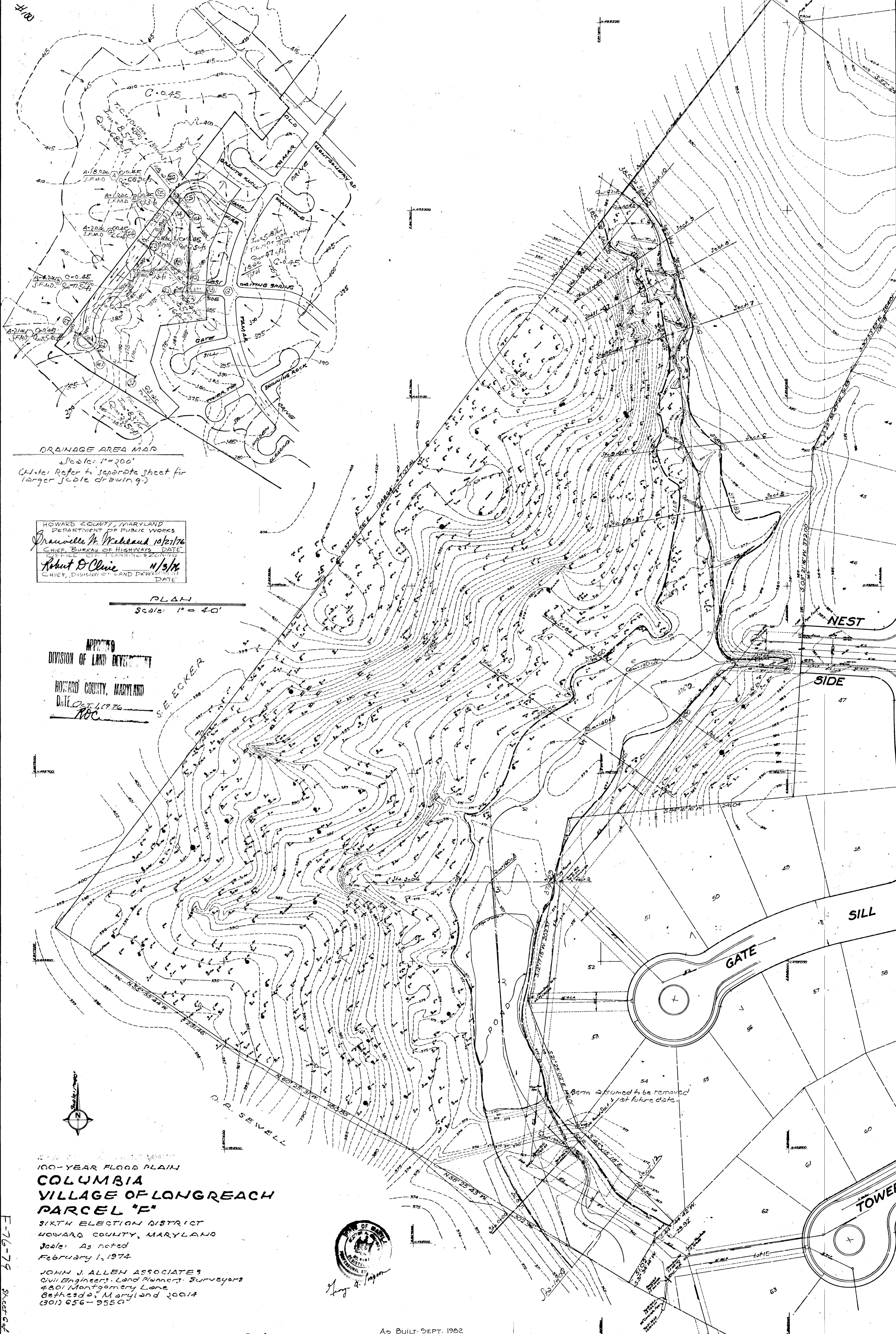


APPROVED
 DIVISION OF LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE Oct 1, 1974
 [Signature]

HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 DIVISION OF LAND DEVELOPMENT
 [Signature]
 DATE 11/19/74

F-76-79
 Sheet 5 of 7

#100



DRAINAGE AREA MAP
 Scale: 1" = 200'
 (Note: Refer to separate sheet for larger scale drawing.)

HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 Dr. Wallace H. McLeod 10/21/76
 CHIEF, BUREAU OF HIGHWAYS DATE
 OFFICE OF PLANNING & ZONING
 Robert D. Clive 11/3/76
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

PLAN
 Scale: 1" = 40'

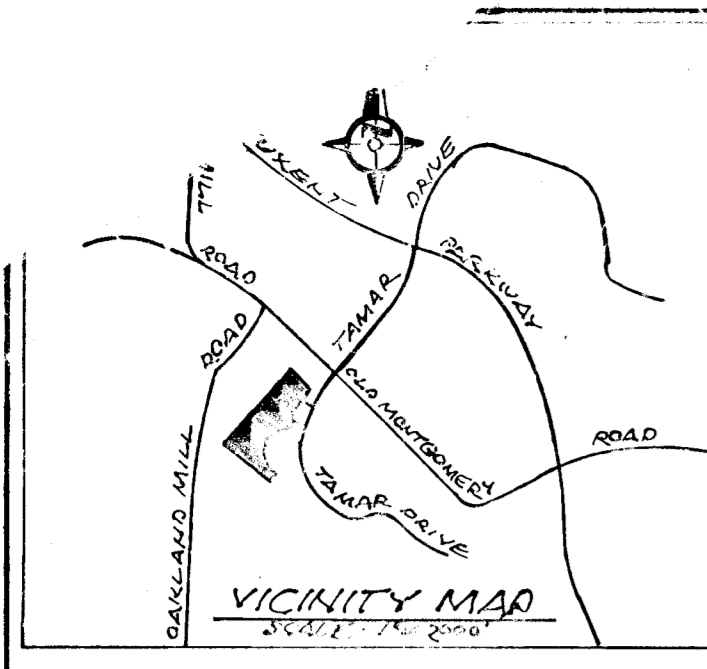
APPROVED
 DIVISION OF LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE Oct 4 1976
 ABC



100-YEAR FLOOD PLAIN
COLUMBIA
VILLAGE OF LONGREACH
PARCEL "F"
 SIXTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 Scale: As noted
 February 1, 1974
 JOHN J. ALLEN ASSOCIATES
 Civil Engineers, Land Planners, Surveyors
 4801 Montgomery Lane
 Bethesda, Maryland 20814
 (301) 656-9550



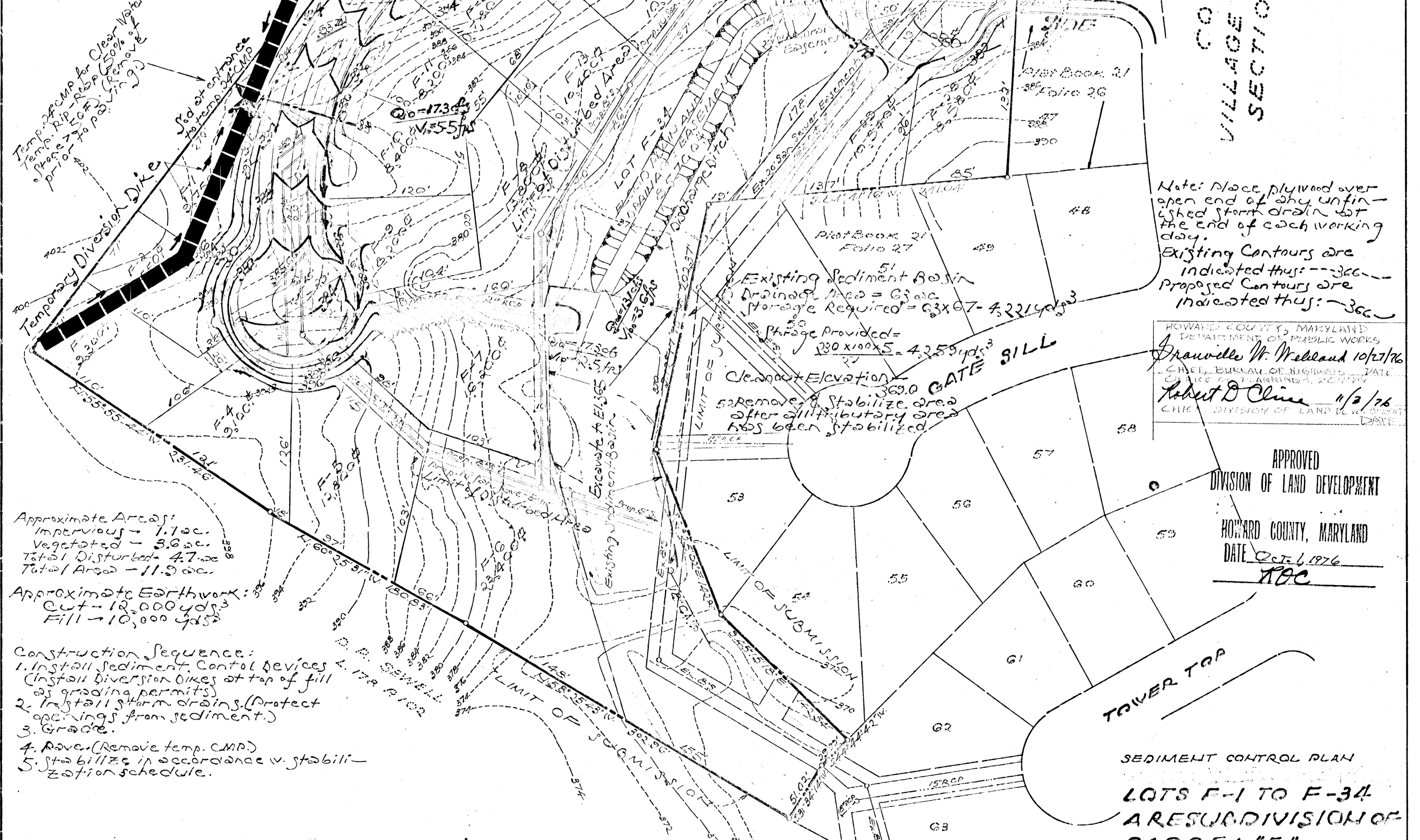
E-76-79 Sheet 6 of 7



STABILIZATION SCHEDULE:
 1. Semi-permanent Seeding - Harrow or disc seed bed. Apply pulverized dolomitic lime @ 46#/1000 ft². Seed w. Kentucky 31 tall fescue @ 1.37# per 1000 ft². Mulch w. unweathered, small-grain straw (preferably wheat straw) @ 63-92# per 1000 ft² anchor with anchoring tool or liquid asphalt @ 11.1 gals. per 1000 ft² or emulsified asphalt @ 4.5 gals. per 1000 ft².
 2. Mulching Only - As above, but without seed, lime, and fertilizer.
 3. Sod - Prepare soil as above with lime and fertilizer. Use certified Maryland Sod. Lay with staggered joints. Reg. or Tamp.
 Note: For final stabilization, equal amount (1.37# per 1000 ft²) of Kentucky Bluegrass may be added to above seed mixture.

GENERAL NOTES:

1. Topographic and boundary survey by John J. Allen Associates.
2. Dominant soils, per Sheet 25, Soils Survey, Howard County, Maryland, are Brandywine Loam and Glenville Silt Loam.
3. All erosion and sediment control measures are to be constructed and maintained in accordance with applicable published "Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas."
4. Point of construction ingress and egress will be protected, as shown, to prevent tracking of mud onto public ways.
5. All sediment will be prevented from entering any storm drainage system (i.e. through use of sand bags, gravel, boards, capping, or other applicable and acceptable method).
6. Structural measures such as berms, dikes, traps, basins, etc. will be installed and stabilized according to this plan, prior to any other grading, clearing, or disturbance of the existing surface of the site.
7. All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Howard Soil Conservation District, phone 465-3180, or 465-5000, ext. 328.
8. Notify the Howard Soil Conservation District at least 24 hours before starting any work. Phone 465-3180, or 465-5000 ext. 328.
9. On-site inspection and maintenance of all sediment control measures, including cleanout of sediment traps and berms, and proper establishment of all planned vegetative measures will be the responsibility of the Developer or his representative on the site, on a continuing day-to-day basis.
10. All fill material shall be free of organic material.
11. Constructed berms, dikes, etc. will be compacted by several passes with the constructing equipment (bulldozer, backhoe, or other heavy equipment) or by use of a suitable roller.
12. Areas not covered by paving or sidewalk shall be stabilized with semi-permanent seeding and sodded side slopes. If grading is done in non-planting season, stabilize by mulching only until ensuing planting season, then seed or sod. See Stabilization Schedule.
13. Proposed grades are shown thus: $\text{---}36\text{---}$
14. Install storm drain system prior to or concurrent with street grading.
15. Prevent clear-water from crossing disturbed areas.



Note: Place plywood over open end of any unfinished storm drain at the end of each working day.
 Existing Contours are indicated thus: $\text{---}36\text{---}$
 Proposed Contours are indicated thus: $\text{---}36\text{---}$

HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS
 Rowville W. Welland 10/27/76
 CHIEF, BUREAU OF HIGHWAYS, DATE
 CHECKED BY: 10/27/76
 Robert D. Clina 11/2/76
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED
 DIVISION OF LAND DEVELOPMENT
 HOWARD COUNTY, MARYLAND
 DATE: OCT 1, 1976
 ABC

Approximate Areas:
 Impervious - 1.1 ac.
 Vegetated - 3.8 ac.
 Total Disturbed - 47.0 ac.
 Total Area - 11.9 ac.

Approximate Earthwork:
 Cut - 18,000 yds³
 Fill - 10,000 yds³

Construction Sequence:

1. Install sediment control devices & install diversion dikes at top of fill as grading permits.
2. Install storm drains (protect openings from sediment).
3. Grade.
4. Pave (Remove temp. C&D).
5. Stabilize in accordance w. stabilization schedule.

Developer's Certificate:
 I hereby certify that all development and/or construction will be done according to this plan of development and plan for erosion and sediment control, and I also authorize, periodic on-site inspections by the Howard Soil Conservation District or their authorized agents, as are deemed necessary. Deviation from this plan will not be made unless authorized by the Howard Soil Conservation District.
 3/17/77
 Royce A. Simpson, President
 Employees Pension Plan

Reviewed for Howard Soil Conservation District and meets technical requirements
 Eric V. Hanson 10/22/76
 DISTRICT ENGINEER
 This development plan is approved for soil erosion and sediment control by the Howard Soil Conservation District.
 Robert W. Zehn 10/22/76
 DISTRICT ENGINEER

Engineer's Certificate:
 I hereby 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 requirements of the Howard Soil Conservation District.
 17 March 1976
 Jerry A. Simpson
 CIVIL ENGINEER

Owner-Developer:
 Bagley, et al.
 Employees Pension Plan
 11400 ROCKVILLE PIKE
 ROCKVILLE, MARYLAND 20852
 (301) 770-2000

SEDIMENT CONTROL PLAN
 LOTS F-1 TO F-34
 A RESUBDIVISION OF
 PARCEL "F"
 SECTION 1 - AREA 2
 VILLAGE OF LONGREACH
 COLUMBIA
 Tax Map 86, Parcel 337
 Parcel "F"
 6-TH ELECTION DISTRICT
 Howard County, Maryland
 Scale: 1"=50'
 January 1975
 JOHN J. ALLEN ASSOCIATES
 Civil Engineers, Land Planners, Surveyors
 4801 Montgomery Lane
 Bethesda, Maryland 20814
 (301) 656-8860