

- NOTES:
- PERFORATIONS IN RISER TO BE WITHIN THE TOP 1/2 TO 3/4 OF THE RISER. PERFORATIONS TO BE 1/2" DIA WITH SPACES 8" VERTICALLY & 10" TO 12" HORIZONTALLY ALL AROUND.
 - ANTI-VORTEX DEVICE IS A THIN PLATE ATTACHED VERTICALLY TO THE TOP OF THE RISER, PERPENDICULAR TO THE E OF THE DAM. THE LENGTH OF PLATE = DIAMETER OF THE RISER + 12"; HEIGHT = DIAMETER OF HORIZONTAL PIPE.
 - BASE & RISER TO BE CONCRETE WITH A HEIGHT OF 18" AND A WIDTH & DEPTH OF DIAMETER OF RISER, PLUS 1 FOOT. ELBOW FITTING AT THE BOTTOM OF RISER TO BE SET INTO CONCRETE BASE.

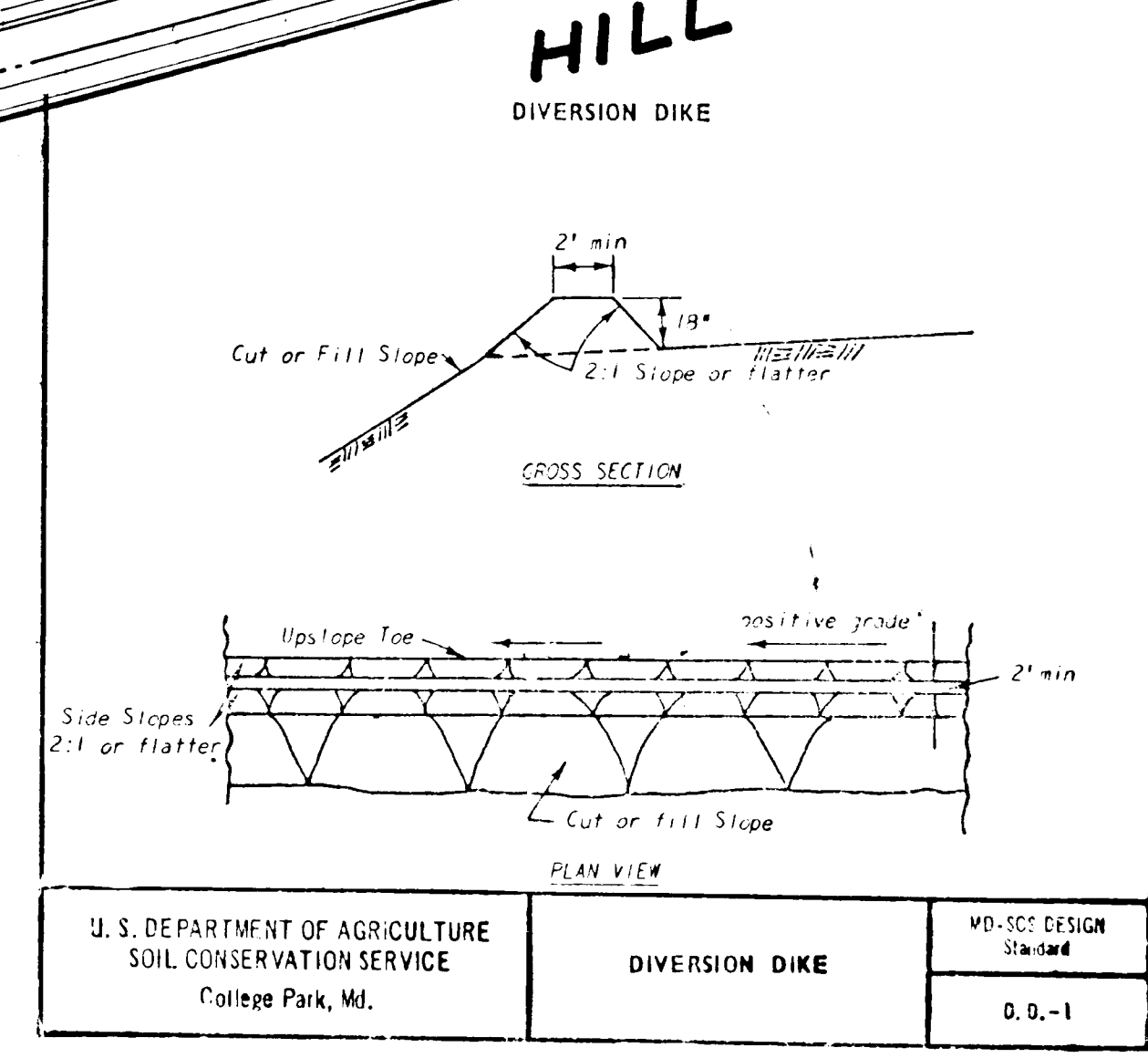
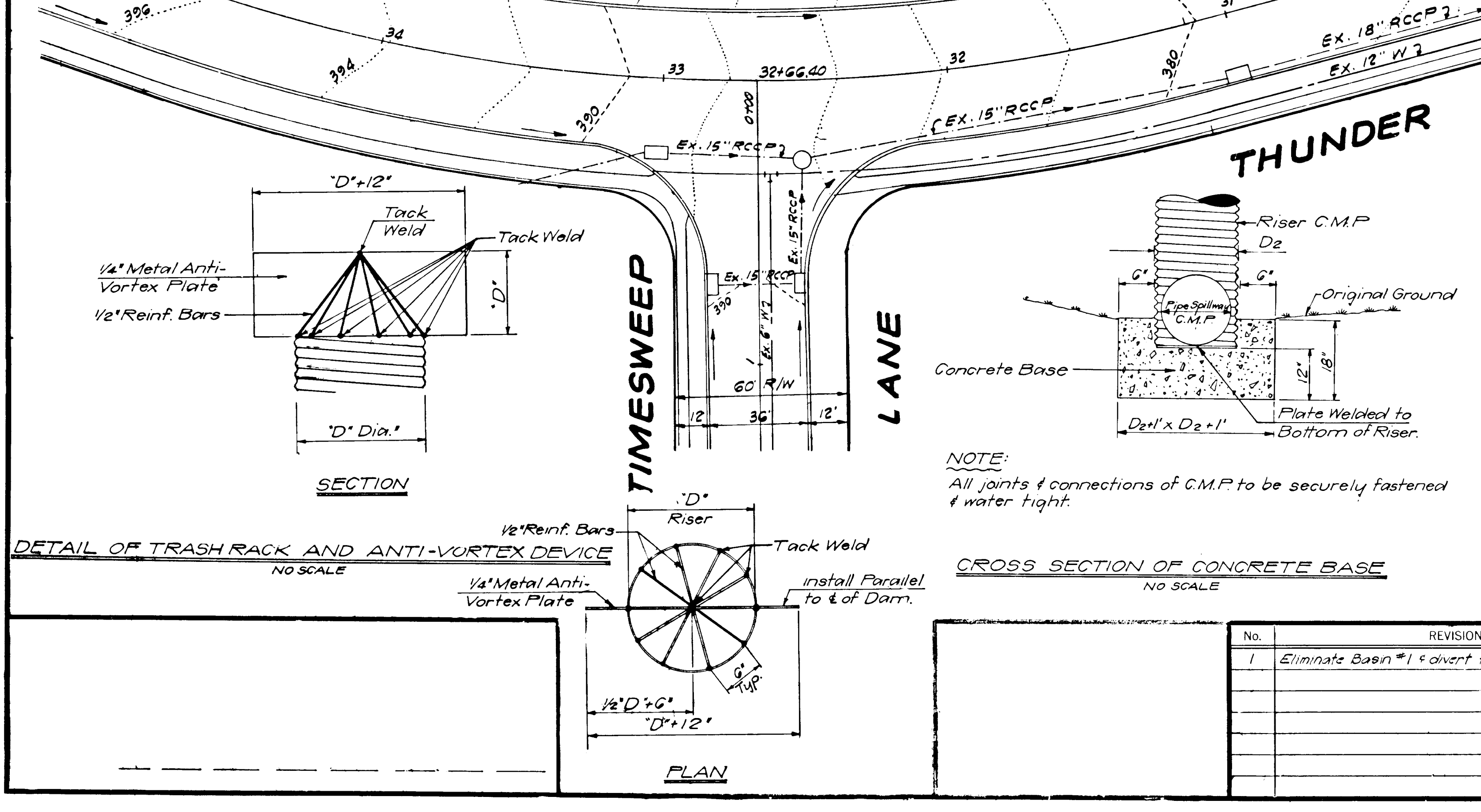
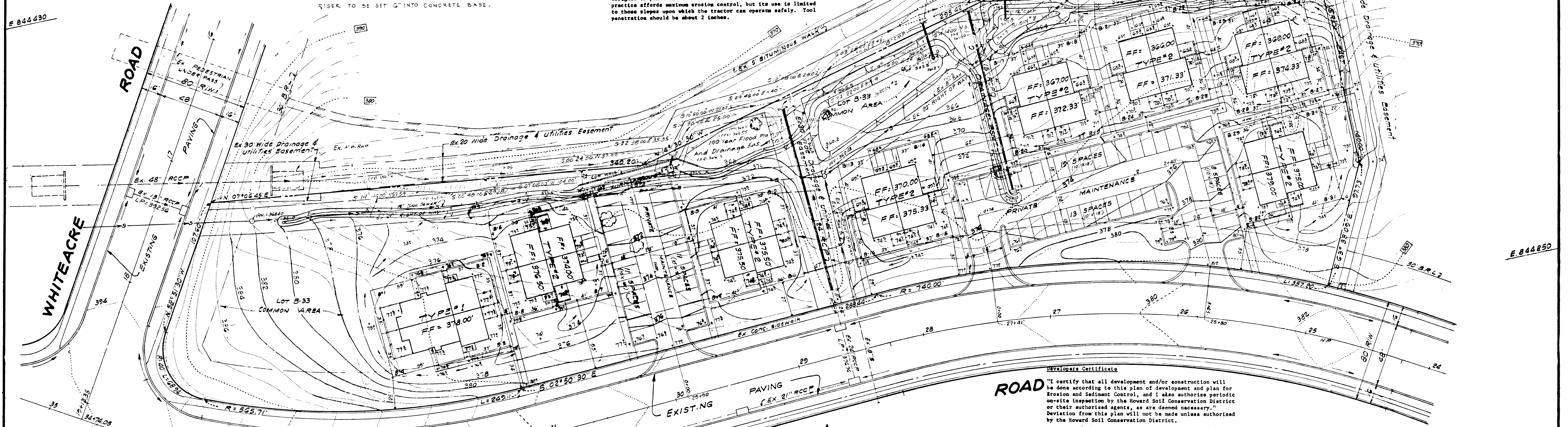
- STABILIZATION NOTES
- I. Temporary Cover on Sediment Control Structures Shall be Carried Out as Follows
- Seedbed Preparation**
 - Apply 2,000 pounds per acre of 46 pounds per 1,000 sq. ft. of pulverized dolomitic limestone and 100 to 800 pounds per acre or 11.5 to 18.4 pounds per 1,000 sq. ft. of 0-20-0, superphosphate, or its equivalent fertilizer. If soils are reasonably uniform, lime and fertilizer according to soil test.
 - Harrow or disc lime and fertilizer into the soil to a depth of at least 3 inches. Continue tillage until a reasonably uniform, fine firm seedbed has been prepared. On sloping land, the final harrowing or discing operation should be as the contour.
 - Seeding** Apply seed (Annual Ryegrass @ 50#/Ac.) uniformly with a cyclone seeder, drill, cultipacker seeder or hydro-seeder (slurry included seed and fertilizer) preferably on a firm, moist seedbed. Normal coverage is from 1/4 to 1/2 inch.
 - Mulching**
 - Mulch materials should be unweathered, unchipped, small grain weed free straw (preferably wheat) at the rate of 1 1/2 to 2 tons per acre, or 70 to 90 pounds per thousand sq. ft.
 - Spread uniformly by hand or mechanically so that approximately 75% of the soil surface will be covered. Few uniform distribution of hand spread mulch, 4/8 wide area into approximately 1,000 square feet sections and place 3 bales, 100 lbs., of mulch for distribution within each section.
 - Mulch anchoring should be accomplished immediately after placement 48 minutes loss by wind or water. This may be done by one of the following methods, depending upon the site of the area, steepness of slopes and costs. On sloping land, practice 3, 4 and 5 below should be done on the contour wherever possible.
 - Mulch Matting** - Staple light weight paper, jute, cotton or plastic matting to the soil surface according to manufacturer's recommendations. Matting is usually available in rolls 4 feet wide and up to 300 feet long.
 - Silt** - With a square pointed spade cut mulch into the surface soil in rows 18 inches apart.
 - Mulch Anchoring Tool** - A tractor drawn implement especially designed to push and anchor mulch into the surface soil. This practice affords maximum erosion control, but its use is limited to those slopes upon which the tractor can operate safely. Tool penetration should be about 2 inches.

- II. Permanent Seeding on All Grassed Areas To Be Carried Out as Follows
- Seedbed Preparation**
 - Apply 2,000 pounds per acre of 46 pounds per 1,000 sq. ft. of pulverized dolomitic limestone, 500 to 1,000 pounds per acre or 11.5 to 23 pounds per 1,000 sq. ft. of 0-20-0, superphosphate, or its equivalent and 1,000 lbs. of 10-10-10 fertilizer or the equivalent.
 - Harrow or disc lime and fertilizer into the soil to a depth of 2-3 inches. Continue tillage until a reasonably uniform fine, firm seedbed has been prepared.
 - Seeding**
 - Apply seed (60% Kentucky 31 Tall Fescue and 40% Kentucky Bluegrass) uniformly with a cyclone seeder, drill, cultipacker seeder, or hydro-seeder (slurry includes seed and fertilizer) on a firm, moist seedbed at a rate of 200#/Ac.
 - Mulching** - See I-C above

- General Sediment Control Notes
- 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.
 - All structural sediment control measures are to remain in place until permission for their removal has been obtained from the Howard Soil Conservation District.
 - Notify the Howard Soil Conservation District at least 24 hours before starting any work. Phone 463-3300 or 466-5000, Ext. 338.
 - Sediment trapped in basins or other traps will be removed upon reaching the specified elevation shown or as directed by the Howard Soil Conservation District, as a part of normal maintenance procedure.
 - Constructed berms, dikes, dams, etc. will be compacted by several passes with the constructing equipment (bulldozer, backhoe or other heavy equipment or by use of a suitable roller).
 - All fill material shall be free of decomposable material.
 - All storm drainage inlets are to be temporarily capped to prevent entry of sediment carrying runoff water until vegetative measures and/or paving is established as planned.

SEDIMENT BASIN TABLE

NO.	AREA	VOLUME	DEPTH
1	375.0	366.5	303.5
2	393.0	391.0	300.5
3	1220.0	2500.0	450.0
4	371.5	363.5	322.5
5	370.5	362.5	321.5
6	363.0	361.0	320.5
7	363.0	360.0	320.0
8	18"	21"	18"
9	12"	15"	12"
10	25"	23"	2.0
11	20"	20"	30"



Developers Certificate

"I 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 inspection 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."

Signature of Developer: *Nick...* Date: 11/20/72

Engineer's Certificate

"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."

Signature of Engineer: *William...* Date: 11/22/72

Sediment Control Sequence of Operation

- Site may be cleared but not grubbed prior to installation of sediment control.
- Initial grading shall be confined to construction of the sediment basins and storm drainage systems necessary for sediment control.
- Sediment control measures shall be constructed prior to grading and maintained during grading operations until site is stabilized.
- Excavated material to be left rough piled throughout period of construction until just prior to stabilization. Stabilization shall immediately follow fine grading.
- Modifications to the sediment control measures may be made in order to maintain the function as shown on the plans.

SITE ANALYSIS

- ZONING = APT (SRA)
- TOTAL AREA = 3.948 ACRES
- NO. OF UNITS ALLOWED = 37
- NO. OF UNITS SHOWN = 32
- NO. OF PARKING SPACES REQUIRED = 64
- NO. OF PARKING SPACES SHOWN = 64
- PROPOSED PUBLIC WATER & SEWER
- NO. OF COMMUNITY LOTS = 17
- NO. OF RESIDENTIAL LOTS = 22 TOTAL = 39 LOTS
- AREA OF LOTS = 1295' TO 2065'
- AREA OF SMALLEST UNIT (EXCLUDING BSMT) = 1130'
- MINIMUM HEIGHT OF BUILDING ALLOWED 34'
- BUILDING MIX: TYPE #2 = 3
- RECORD PLAT REFERENCE RB-17 R-84

APPROVED

PLANNING BOARD OF HOWARD COUNTY

Signature: *James...* Date: 11/23/72

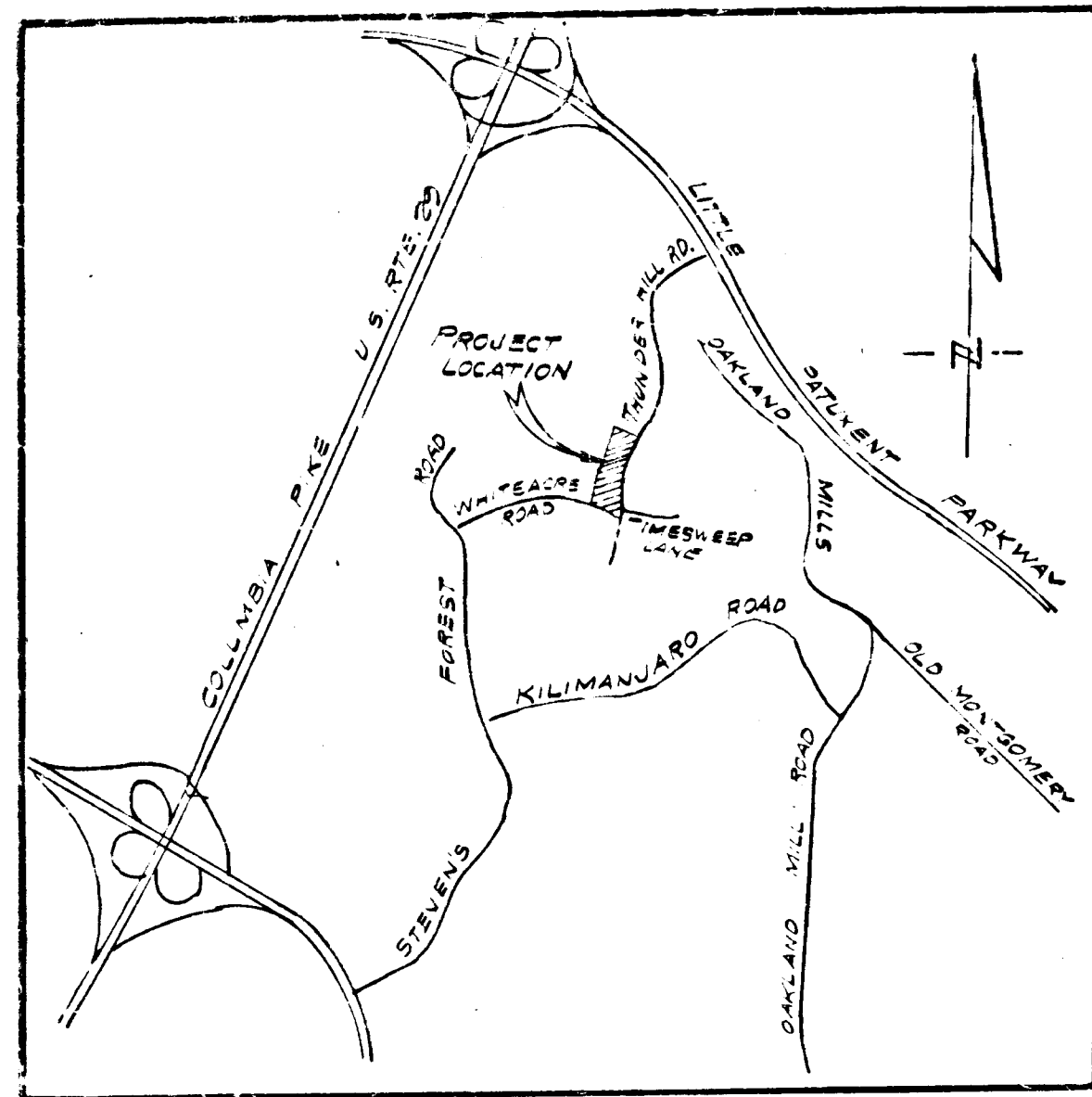
Approved: *James...* Date: 2-23-73

GREENHORNE & O'MARA, INC. ENGINEERS · ARCHITECTS · PLANNERS · SURVEYORS 6715 KENILWORTH AVE., RIVERDALE, MD.

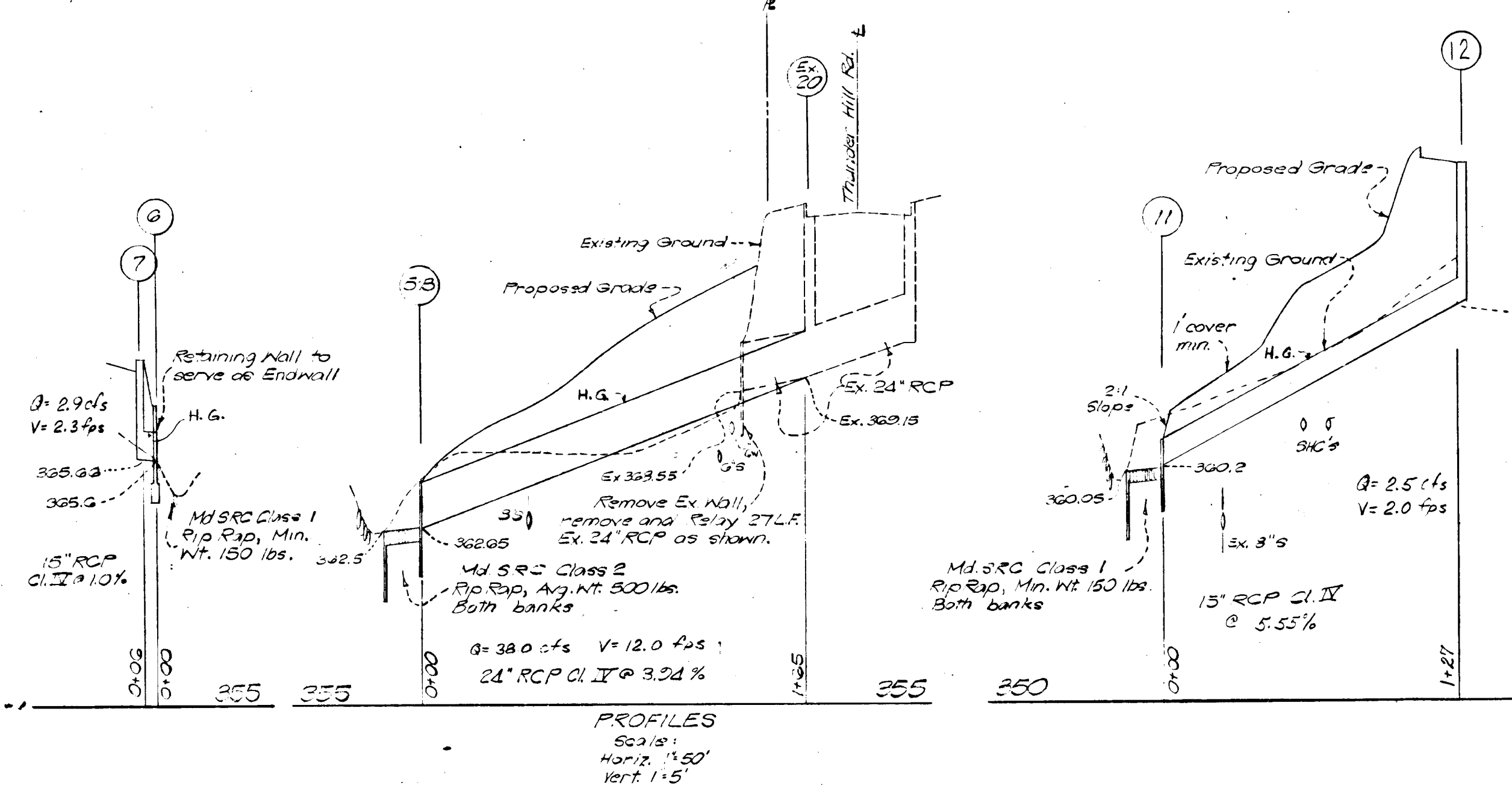
SEDIMENT CONTROL PLAN COLUMBIA VILLAGE OF OAKLAND MILLS SECTION 4 AREA 1 LOT-B-3 THRU LOT-B-33 (A RE-SUBDIVISION OF PARCEL-B) G2 ELECTION DISTRICT HOWARD COUNTY, MARYLAND.

NO.	REVISION	DATE	BY
1	Eliminate Basin #1 & divert to Basin #2	11-21-72	Kifing

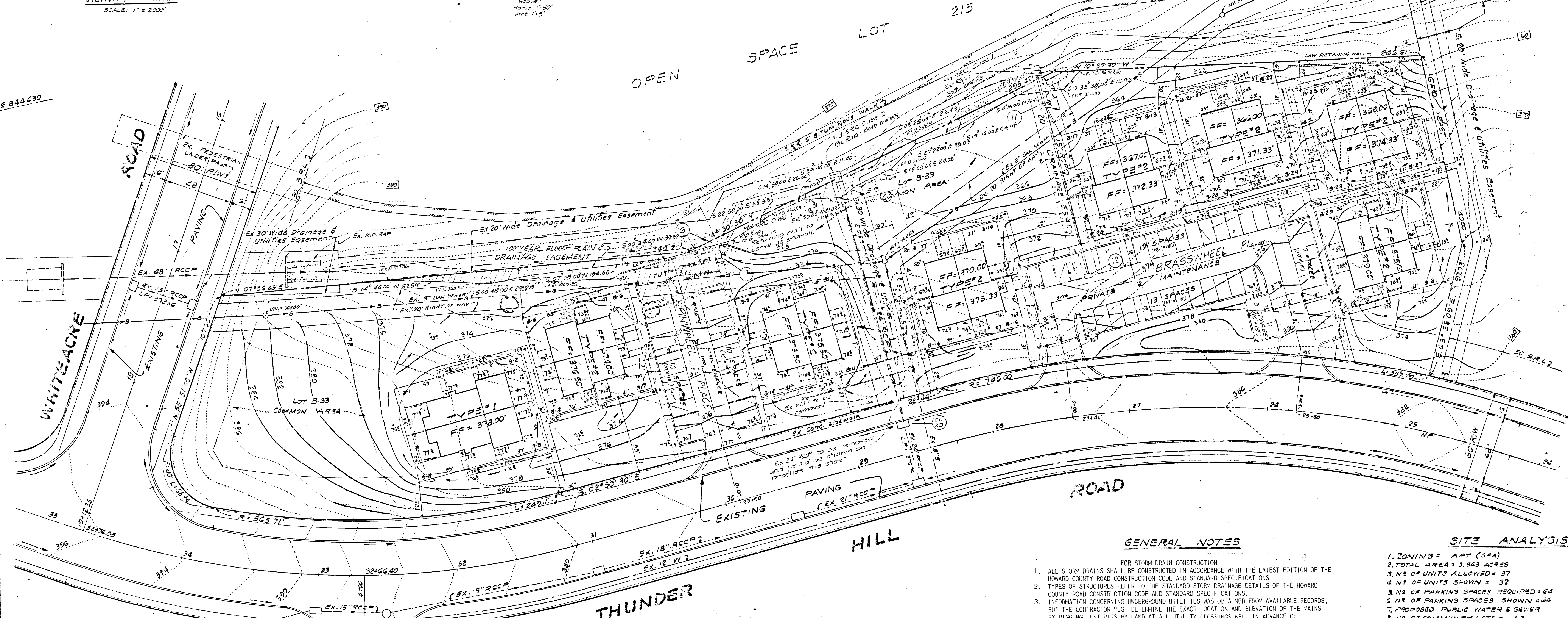
CHK	OWNER DEVELOPER
DESIGN	BASE CONSTRUCTION COMP
TRNG	211 SULLY BLVD. #200
DATE	SCALE 1" = 30'
DATE	SHEET NO. 2 OF 1
DATE	NO. 108
DATE	FILE NO.



VICINITY MAP
SCALE: 1" = 2000'



PROFILES
Scale: 1" = 10'
Horizontal: 1" = 50'
Vertical: 1" = 10'

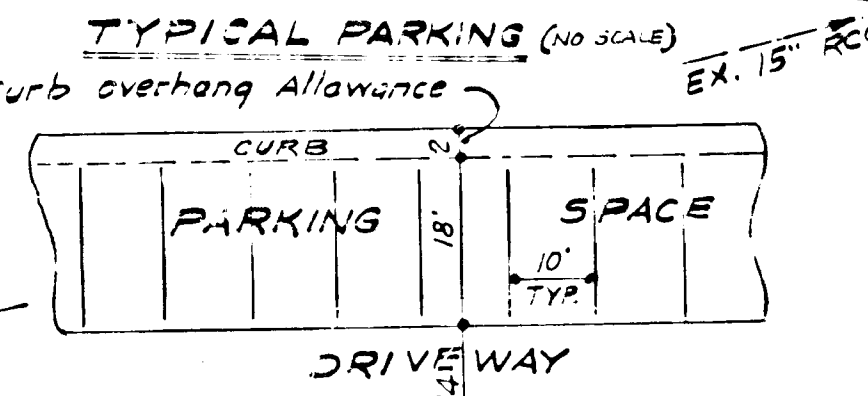


GENERAL NOTES

1. ALL STORM DRAIN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
2. TYPES OF STRUCTURES REFER TO THE STANDARD STORY DRAINAGE DETAILS OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
3. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF THE MAINS BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF CLEARANCES ARE LESS THAN SHOWN ON THIS PLAN OR SIX (6) INCHES, WHICHEVER IS LESS, CONTACT THE ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION.
4. BASE WILL BE PRIMED IN ACCORDANCE WITH C-30-3 AS PROVIDED IN THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
5. TACK COAT IS REQUIRED IN ACCORDANCE WITH C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
6. NO TRAFFIC CONTROL DEVICES ARE REQUIRED IN PARKING LOTS.

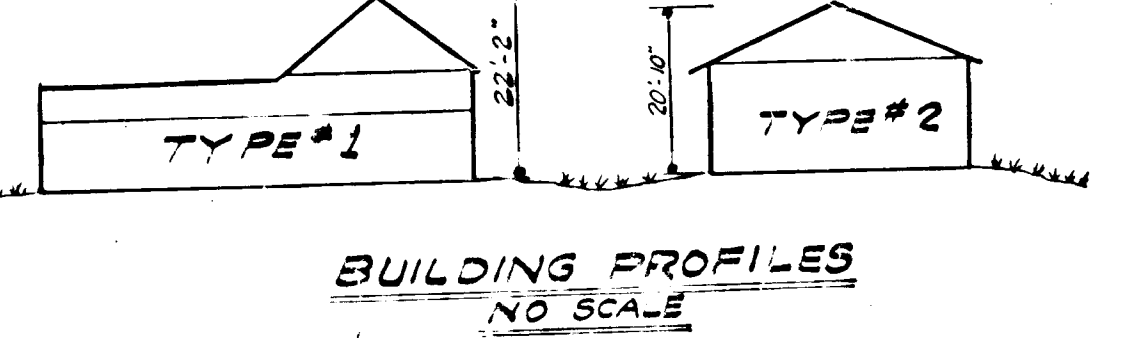
SITE ANALYSIS

1. ZONING = APT (SPA)
2. TOTAL AREA = 3.863 ACRES
3. NO. OF UNITS ALLOWED = 37
4. NO. OF UNITS SHOWN = 32
5. NO. OF PARKING SPACES REQUIRED = 64
6. NO. OF PARKING SPACES SHOWN = 64
7. PROPOSED PUBLIC WATER & SEWER
8. NO. OF COMMUNITY LOTS = 17 TOTAL = 37 LOTS
9. NO. OF RESIDENTIAL LOTS = 32
10. AREA OF LOTS = 1295' TO 2055'
11. THIS AREA SHOWN ON FINAL DEV. PLAN: PHASE-51
12. AREA OF SMALLEST UNIT = 1170'
13. MINIMUM HEIGHT OF BUILDING ALLOWED = 34'
14. BUILDING MIX: TYPE #1 & #2
15. RECORD PLAT REFERENCE: P.B. 17 R-54



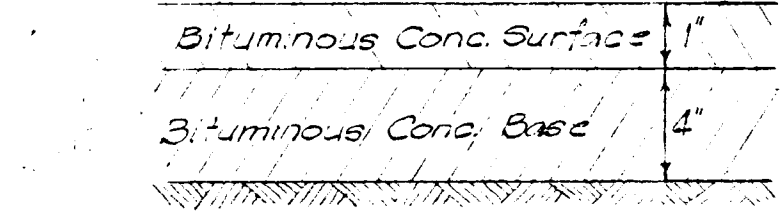
LEGEND

1. EXISTING CONTOURS = [Symbol]
2. PROPOSED CONTOURS = [Symbol]
3. CONTOUR INTERVAL = 2 FT.
4. EXISTING SPOT ELEV. = 397.4
5. DIRECTION OF DRAINAGE = [Symbol]



No.	Type	Sp. Et.	Inv. In.	Fin. Et.	Remarks
5B	C Enshull	362.2	362.2	362.2	Howard Co. Std.
6	Wall	N/A	N/A	N/A	
7	A-S Inlet	370.0	365.26	365.26	
11	C Enshull	362.2	362.2	362.2	
12	E Inlet	375.1	367.25	367.25	

Size	Type	Length
15"	RCCP	133'
24"	RCCP	198'



TYPICAL PAVING SECTION
NO SCALE

APPROVED: [Signature] 3-14-73 DATE

FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

APPROVED: [Signature] 5-15-73 DATE

FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

APPROVED: [Signature] 3-15-73 DATE

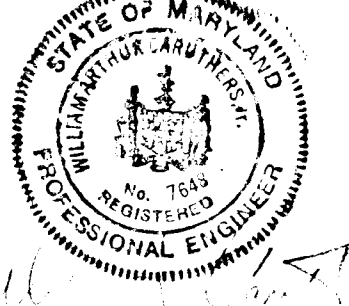
FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
AND STORM DRAINAGE SYSTEMS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

APPROVED: [Signature] 3-8-73 DATE

No.	REVISION	DATE	BY
1	2 Parking Spaces from Pinwheel Pl to Brasswheel Pl	11/15/72	I.R.P.
2	24' Turnaround added to Pinwheel Pl	3-7-73	CKG

GREENHORNE & O'MARA, INC.
ENGINEERS • ARCHITECTS • PLANNERS • SURVEYORS
6715 KENILWORTH AVE., RIVERDALE, MD.

STORM DRAINAGE PLAN
COLUMBIA
VILLAGE OF OAKLAND MILLS
SECTION A AREA 1
LOT B-1 THRU LOT B-33
(A RESUBDIVISION OF PARCEL 11)
C.D. SECTION 133 DISTRICT
HOWARD COUNTY, MARYLAND

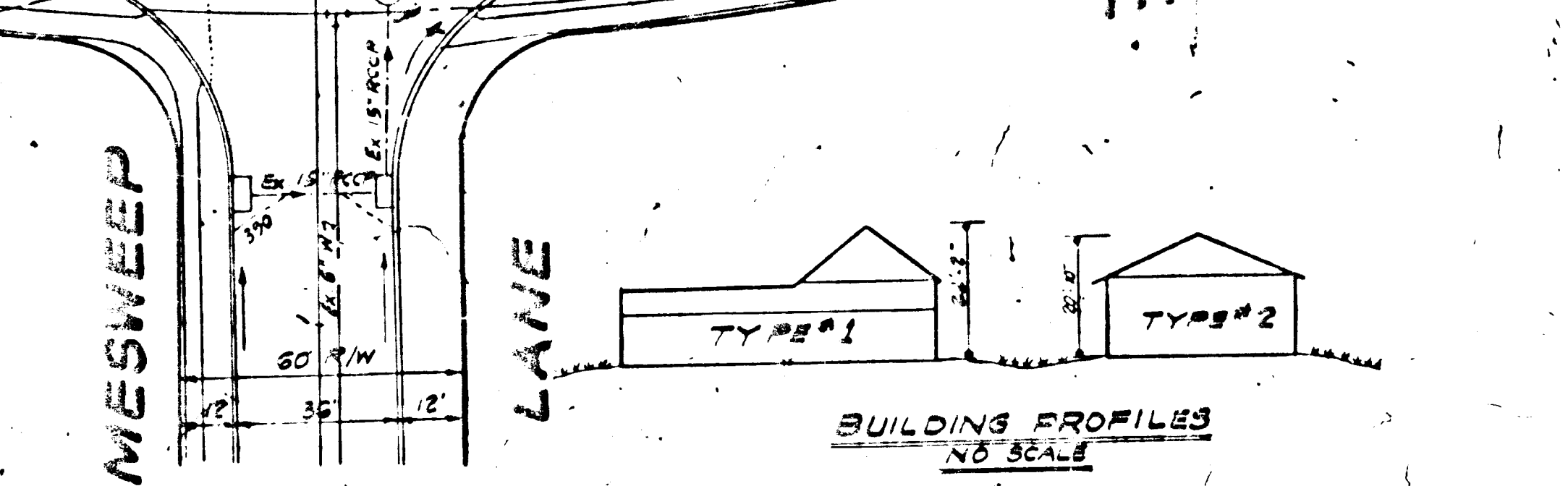
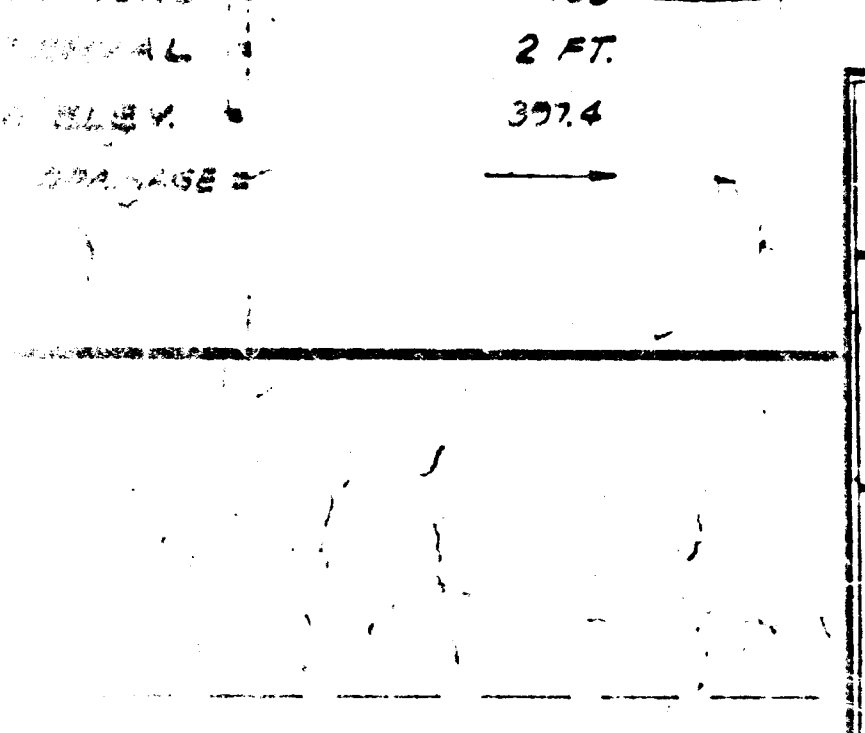
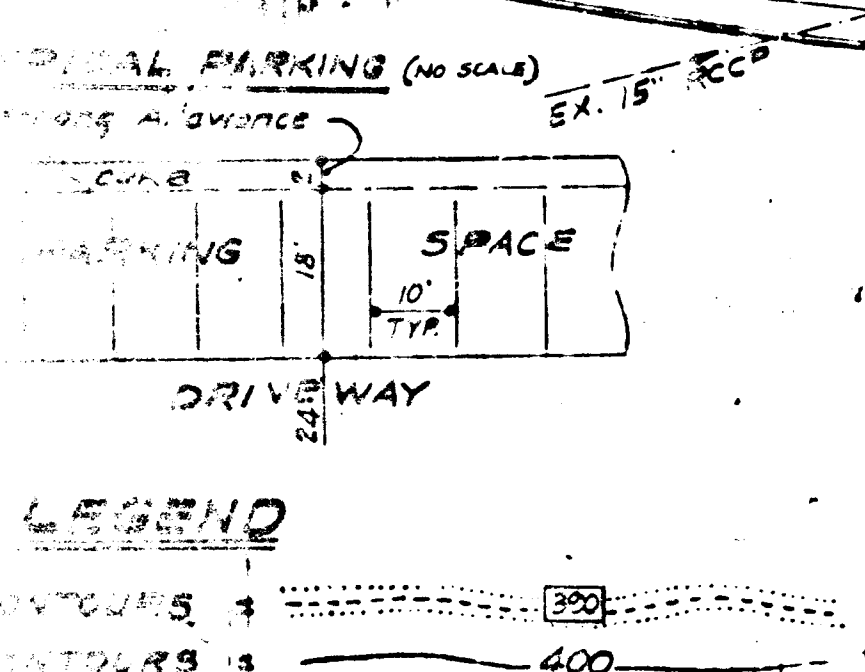
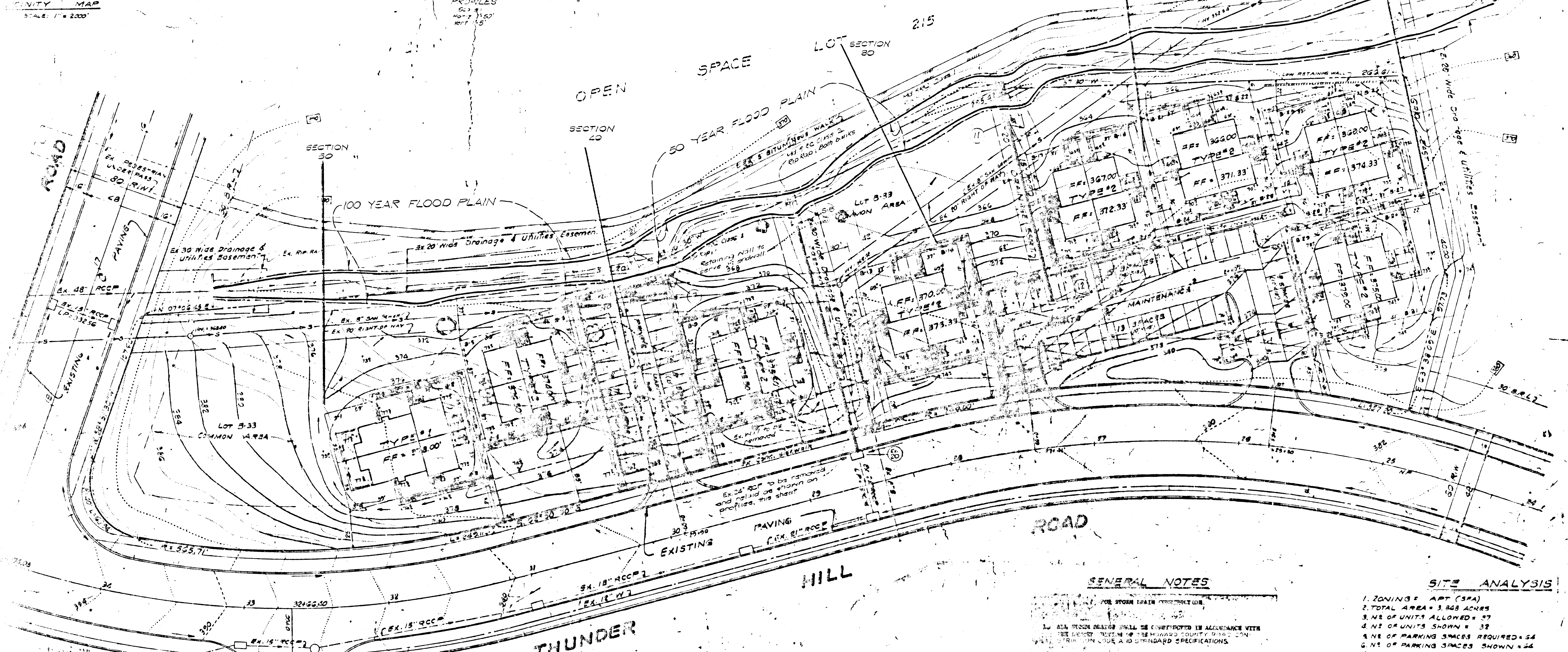
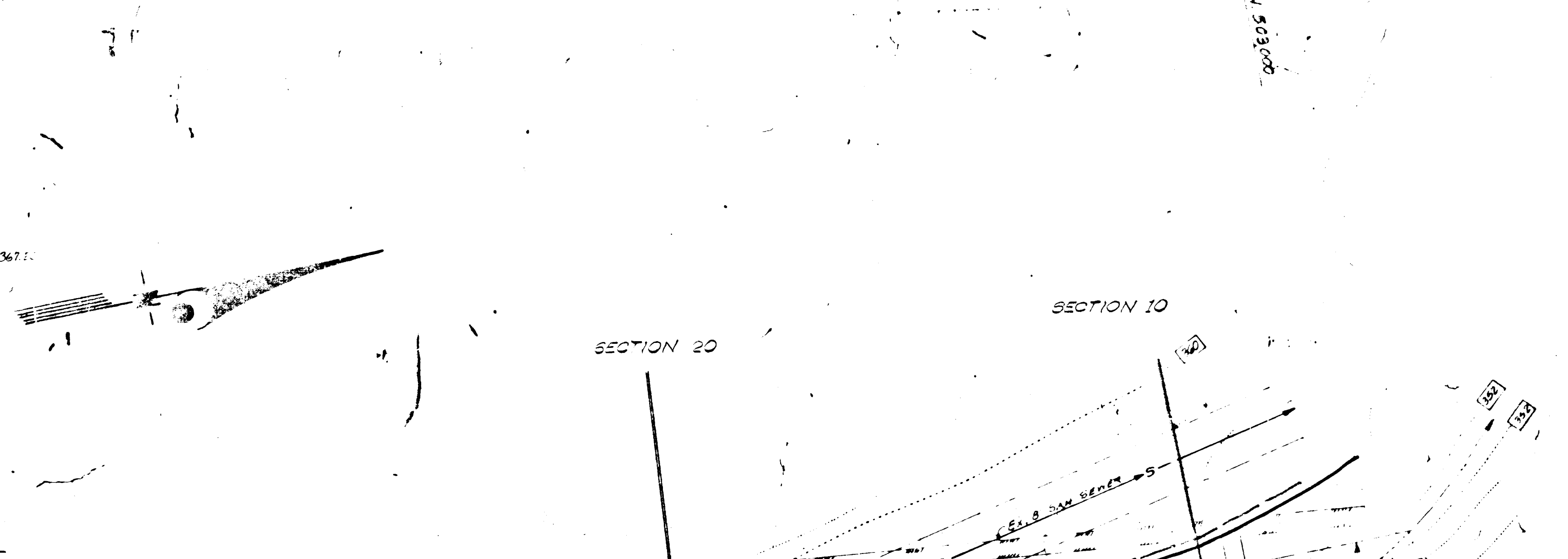
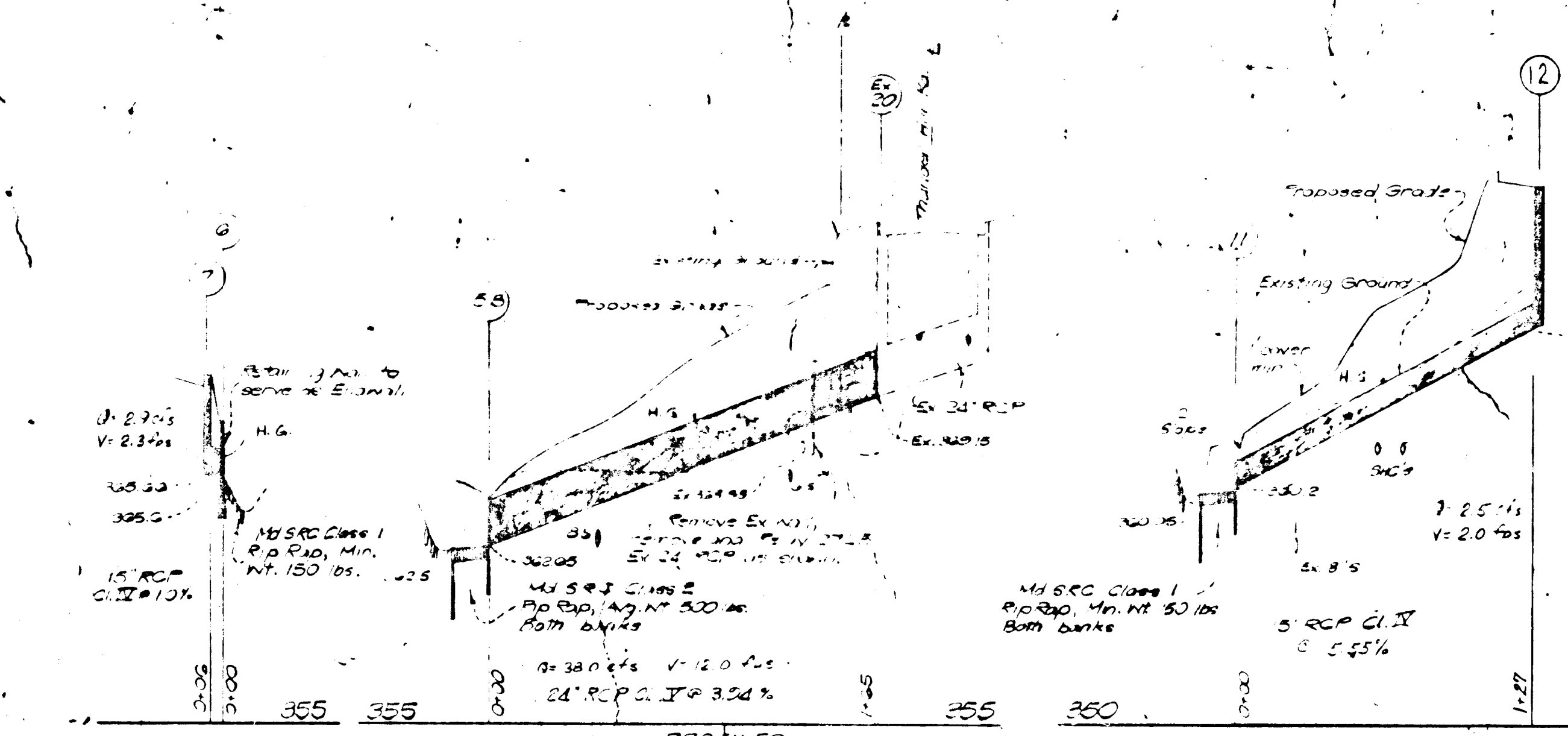
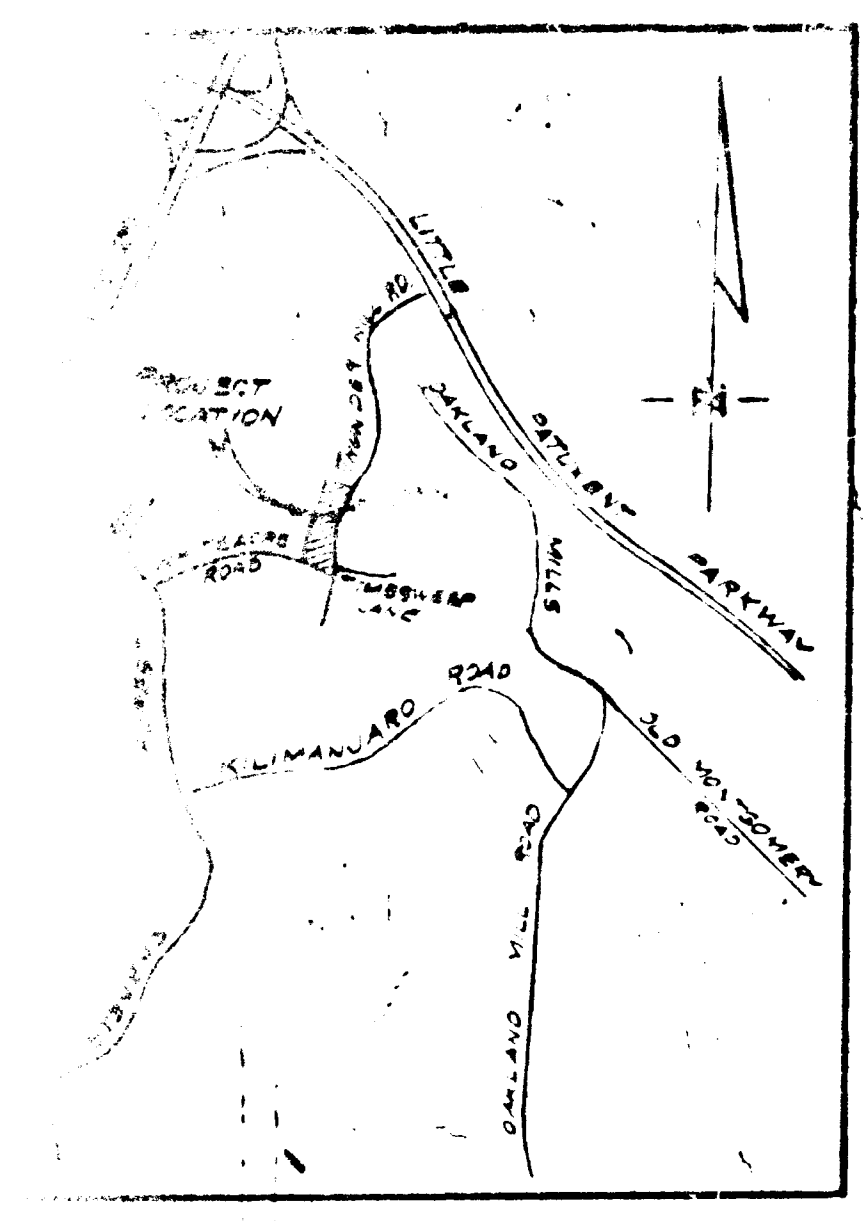


APPROVED
PLANNING BOARD
OF HOWARD COUNTY
9/20/73
[Signature]

FOR PHASE - D (3)

DESIGN	DATE
DRAWN	SCALE 1" = 30'
CHECKED	SHEET NO. 1 OF 1
DATE	3/7

DATE 3/8/73



No.	Desc	Area	Vol	Remarks
59	C Small	3200		Howard Cash
6	Null	0		N/A
7	A Small	3700		
1	C Small	3200		
12	B Small	3700		

No.	Type	Length
5	12" PVC	133'
24	18" PVC	198'

GENERAL NOTES

1. ZONING: APT (SPA)
2. TOTAL AREA: 3.808 ACRES
3. MAX. UNITS ALLOWED: 37
4. NO. OF UNITS SHOWN: 32
5. NO. OF PARKING SPACES REQUIRED: 54
6. NO. OF PARKING SPACES SHOWN: 54
7. PROPOSED PUBLIC WATER & SEWER
8. NO. OF COMMUNITY LOTS: 17
9. NO. OF RESIDENTIAL LOTS: 32
10. TOTAL UNITS: 32
11. THIS AREA SHOWN ON FINAL DEV. PLAN: PHASE-51
12. AREA OF SMALLEST UNIT: 1110 sq ft
13. MINIMUM HEIGHT OF BUILDING ALLOWED: 34'
14. BUILDING MAX. HEIGHT: 34'
15. RECORD PLAT REFERENCE: #BNT 7-54

SITE ANALYSIS

1. ZONING: APT (SPA)
2. TOTAL AREA: 3.808 ACRES
3. MAX. UNITS ALLOWED: 37
4. NO. OF UNITS SHOWN: 32
5. NO. OF PARKING SPACES REQUIRED: 54
6. NO. OF PARKING SPACES SHOWN: 54
7. PROPOSED PUBLIC WATER & SEWER
8. NO. OF COMMUNITY LOTS: 17
9. NO. OF RESIDENTIAL LOTS: 32
10. TOTAL UNITS: 32
11. THIS AREA SHOWN ON FINAL DEV. PLAN: PHASE-51
12. AREA OF SMALLEST UNIT: 1110 sq ft
13. MINIMUM HEIGHT OF BUILDING ALLOWED: 34'
14. BUILDING MAX. HEIGHT: 34'
15. RECORD PLAT REFERENCE: #BNT 7-54

APPROVED: *[Signature]* 3-14-73
 APPROVED: *[Signature]* 5-15-73
 APPROVED: *[Signature]* 3-15-73
 APPROVED: *[Signature]* 3-9-73
 APPROVED: *[Signature]* 3-8-73

No.	REVISION	DATE	BY
1	Placement added	3-7-73	K King

GREENHORNE & O'MARA, INC.
 ENGINEERS • ARCHITECTS • PLANNERS • SURVEYORS
 8715 MERRIMOTT AVE, RIVERDALE, MD.

FLOOD PLAIN STUDY
COLUMBIA
 VILLAGE OF OAKLAND MILLS
 SECTION 4 AREA 1
 LOT 3-1 THRU LOT 3-33
 SUBDIVISION OF PARCEL B-1
 CIV. PLAT ON DISTRICT
 HOWARD COUNTY, MARYLAND, 56P-72-91C

